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GENERAL STATISTICS BRANCH

DEPARTMENT OF TRADE AND COMMERCE, CANADA

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# THE CANADA YEAR BOOK 1938

THE OFFICIAL STATISTICAL ANNUAL OF THE RESOURCES,  
HISTORY, INSTITUTIONS, AND SOCIAL AND ECONOMIC  
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## PREFACE.

The Canada Year Book had its beginning in the first year of the Dominion when the semi-official "Year Book and Almanac of British North America"—being (to quote its sub-title) "an Annual Register of political, vital and trade statistics, customs tariffs, excise and stamp duties, and all public events of interest in Upper and Lower Canada, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland, and West Indies"—was founded. Subsequently the title was changed to "The Year Book and Almanac of Canada,—an annual statistical abstract of the Dominion and a register of legislation and of public men in British North America". It was published annually from 1867 to 1879.

In 1886, after the passing of a general Statistics Act, the "Statistical Abstract and Record of Canada" was instituted as an official book of reference respecting the institutions, population, finance, trade, and general conditions of the Dominion. The work was prepared in the General Statistical Office of the Department of Agriculture and was continued annually until 1904 under the direction of Dr. George Johnson, F.S.S. To use Dr. Johnson's words, the main feature of the Statistical Abstract was "the collection into one book of the information of various kinds scattered through the blue books issued by the several Departments". He goes on to say, "This book has become the *vade mecum* of public men . . . in Canada as well as in all other civilized countries". In 1905, the General Statistical Office was amalgamated with the Census Office. The Year Book was remodelled by Dr. Archibald Blue, Chief Officer, and continued as "The Canada Year Book, Second Series".

In the re-organization of statistics which followed the report of the Royal Commission on Statistics of 1912, and the establishment of the Dominion Bureau of Statistics in 1918, the improvement of the Year Book was made a primary object and this progress has been continued down to the present time.

With the growth of the administrative functions of government and the consequent increase in the content and variety of the statistical data made available, it is becoming difficult to keep the size of the Year Book within convenient limits and the policy has been adopted of replacing material which is unchanged from year to year by adequate references to earlier editions, but every care is taken to keep the framework intact and well balanced. Some of the space thus saved is given to necessary revisions, additions, important new material, and special features, among the chief of which in the current edition are the following: In Chapter I, which treats of Physiography, a revised article on the Geology of Canada appears at pp. 16-27; Part III—Seismology—last published in the 1931 Year Book is brought up to date this year; and a special article, "The Flora of Canada", prepared by John Adams, M.A. (Cantab.), Division of Botany, Experimental Farm, Ottawa, appears at pp. 30-59 as Part IV. In Part VII, which deals with Climate and Meteorology, a new section and tables on Times of Sunrise and Sunset in Canada are given.

At pp. 78-90, an additional Part on Historic Sites and Monuments in Canada is added to Chapter II. A section on the Government of Canada's Arctic Territory has been added to Chapter III at pp. 92-93, and at pp. 110 to 119 the provincial legislatures from 1924 to the present are tabulated, tying-in with the series from Confederation to 1923 published in the 1924 Year Book.

A special feature of Chapter VIII—Agriculture—this year is the article appearing at pp. 223-230 dealing with the Prairie Farm Rehabilitation Program inaugurated

by the Dominion Government to alleviate the conditions brought about by the incidence of the recent agricultural crisis in the West, and to provide for permanent improvements in areas suffering from drought and soil-drifting.

All the space that could be spared in Chapter XIX—Labour and Wages—has been given to a summary review of Labour Legislation in Canada, which appears at pp. 787-796, and to an extended treatment of Mothers' Allowances by individual provinces.

In addition to the special features mentioned, some progress has been made in filling in the new framework of Chapter XVIII—Transportation and Communications—as it was recast last year, but unfortunately certain of the statistical series are not yet complete. The section of Chapter XXI—Public Finance—which deals with Capital Investments in Canada and Canadian Investments Abroad, has been completely revised and a new series of historical statistics on a comparable basis, which entirely replaces all earlier figures, is now presented for the years 1926 to 1935 at pp. 896-899. In Chapter XXIII—Currency and Banking—the tables concerning Loan and Trust Companies have been recast, statistics regarding Small Loans Companies separated therefrom, and a separate section on Small Loans Companies added: the business of these companies has now reached considerable proportions and, in view of the special legislation governing their incorporation and operation, this separation is desirable. The review of life insurance given in Chapter XXIII has been rounded out by the inclusion of text and tables covering the business of Canadian companies abroad and Chapter XXV—Education—has been recast, both in regard to textual treatment and tabular presentations.

The list of special articles appearing in past editions from 1922 to 1937 will be found at p. vi, immediately preceding the Map of Canada.

In addition to the above-noted features, all parts of the volume have been carefully revised and brought up to date by the most competent authorities; the latest information appearing to the date of going to press is included.

In the absence of the Editor, S. A. Cudmore, B.A. (Tor.), M.A. (Oxon.), F.S.S., F.R.Econ. Soc., (seconded to the Government of Palestine), the present volume has been edited by A. E. Millward, B.A., B.Com., assisted by W. H. Lancelot, and R. F. Clarke, M.C., D.L.S., of the editorial staff of the General Statistics Branch of the Bureau. Charts, graphs and layouts except as otherwise credited have been made by, or under the supervision of, J. W. Delisle, Senior Draughtsman of the Dominion Bureau of Statistics.

Grateful acknowledgments are hereby tendered to the numerous officials of the Dominion and Provincial Governments, and other individuals, who have assisted in the collection of information. Credit is apportioned to the various persons and services concerned by means of footnotes to those chapters and sections that have been contributed, or in the compilation of which co-operation has been received.

While every care has been taken in preparation, there are doubtless imperfections and, with a view to the improvements of future editions, the Dominion Statistician will be glad to hear of any errors that may have escaped notice, and to receive suggestions with regard to omissions or to method of treatment.

R. H. COATS,  
Dominion Statistician.

DOMINION BUREAU OF STATISTICS,  
OTTAWA, June 1, 1938.

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THE  
STATISTICAL SUMMARY  
OF THE  
PROGRESS OF CANADA  
1871-1937.

# STATISTICAL SUMMARY OF THE PROGRESS OF CANADA.

Area of the Dominion of Canada in square miles: Land, 3,466,556; Fresh Water, 228,307; Total, 3,694,863.

Note.—Dashes in this table indicate that comparable data or estimates are not available for the years so indicated.

| Item.   | 1871.       | 1881.       | 1891.       | 1901.               | 1906.                |
|---|-------------|-------------|-------------|---------------------|----------------------|
| <b>Population—1, 2</b>                            |             |             |             |                     |                      |
| 1 Prince Edward Island..... No.                   | 94,021      | 108,891     | 109,078     | 103,250             | 96,000               |
| 2 Nova Scotia.....                                | 387,800     | 440,572     | 450,396     | 450,574             | 465,000              |
| 3 New Brunswick.....                              | 285,594     | 321,523     | 321,263     | 331,120             | 334,000              |
| 4 Quebec.....                                     | 1,191,516   | 1,359,027   | 1,488,535   | 1,648,868           | 1,784,000            |
| 5 Ontario.....                                    | 1,620,851   | 1,926,922   | 2,114,321   | 2,182,047           | 2,209,000            |
| 6 Manitoba.....                                   | 25,228      | 62,200      | 152,506     | 255,211             | 360,000              |
| 7 Saskatchewan.....                               | —           | —           | —           | 91,279              | 258,000              |
| 8 Alberta.....                                    | —           | —           | —           | 73,022              | 185,000              |
| 9 British Columbia.....                           | 36,247      | 49,459      | 98,173      | 178,657             | 279,000              |
| 10 Yukon.....                                     | —           | —           | —           | 27,219              | 18,000               |
| 11 Northwest Territories.....                     | 48,000      | 56,446      | 98,967      | 20,129              | 13,000               |
| Canada.....                                       | 3,689,267   | 4,324,810   | 4,833,239   | 5,371,315           | 6,007,000            |
| <b>Vital Statistics—3</b>                         |             |             |             |                     |                      |
| 12 Births (live)..... No.                         | —           | —           | —           | —                   | —                    |
| 13 Rates per 1,000.....                           | —           | —           | —           | —                   | —                    |
| Deaths, all causes..... No.                       | —           | —           | —           | —                   | —                    |
| 14 Rates per 1,000.....                           | —           | —           | —           | —                   | —                    |
| 15 Diseases of the heart?..... No.                | —           | —           | —           | —                   | —                    |
| 16 Cancer.....                                    | —           | —           | —           | —                   | —                    |
| 17 Disease of the arteries?.....                  | —           | —           | —           | —                   | —                    |
| 18 Tuberculosis (all forms)?.....                 | —           | —           | —           | —                   | —                    |
| 19 Pneumonia.....                                 | —           | —           | —           | —                   | —                    |
| 20 Nephritis.....                                 | —           | —           | —           | —                   | —                    |
| 21 Marriages.....                                 | —           | —           | —           | —                   | —                    |
| 22 Rates per 1,000.....                           | —           | —           | —           | —                   | —                    |
| Divorces..... No.                                 | 4           | 7           | 10          | 19                  | 37                   |
| <b>Immigration (calendar years)—</b>              |             |             |             |                     |                      |
| 23 From United Kingdom..... No.                   | —           | 17,033      | 22,042      | 11,810 <sup>a</sup> | 86,790 <sup>a</sup>  |
| 24 From United States.....                        | —           | 21,822      | 52,516      | 17,987 <sup>a</sup> | 52,796 <sup>a</sup>  |
| From Other Countries.....                         | —           | 9,138       | 7,607       | 19,352 <sup>a</sup> | 44,472 <sup>a</sup>  |
| Totals.....                                       | 27,773      | 47,991      | 82,165      | 49,149 <sup>a</sup> | 184,063 <sup>a</sup> |
| <b>Agriculture—</b>                               |             |             |             |                     |                      |
| 25 Area of occupied farms..... acre               | 36,046,401  | 45,358,141  | 58,997,995  | 63,422,338          | —                    |
| 26 Improved lands.....                            | 17,335,818  | 21,899,181  | 27,729,352  | 30,166,038          | —                    |
| 27 Gross value of agricultural production..... \$ | —           | —           | —           | —                   | —                    |
| <b>Field Crops—10</b>                             |             |             |             |                     |                      |
| 28 Wheat..... acre                                | 1,644,781   | 2,366,554   | 2,701,213   | 4,224,542           | —                    |
| bu.   | 16,723,873  | 32,350,269  | 42,223,372  | 55,572,308          | —                    |
| \$  | 16,993,265  | 38,820,323  | 31,667,529  | 30,122,039          | —                    |
| 29 Oats..... acre                                 | —           | —           | 3,961,350   | 5,307,656           | —                    |
| bu.   | 42,489,453  | 70,463,131  | 85,428,202  | 151,497,407         | —                    |
| \$  | 15,960,310  | 23,967,665  | 31,702,717  | 51,509,118          | —                    |
| 30 Barley..... acre                               | —           | —           | 808,464     | 871,800             | —                    |
| bu.   | 11,496,038  | 16,844,868  | 17,222,795  | 22,224,396          | —                    |
| \$  | 8,170,735   | 11,791,408  | 8,611,397   | 8,889,746           | —                    |
| 31 Corn..... acre                                 | —           | —           | 196,101     | 360,758             | —                    |
| bu.   | 3,802,830   | 9,025,142   | 10,711,380  | 25,875,919          | —                    |
| \$  | 2,283,145   | 5,415,085   | 5,034,348   | 11,902,923          | —                    |
| 32 Potatoes..... acre                             | 403,102     | 464,289     | 450,190     | 448,743             | —                    |
| bu.   | 47,530,187  | 55,308,790  | 53,490,857  | 55,362,635          | —                    |
| \$  | 15,211,774  | 13,288,510  | 21,396,342  | 13,840,668          | —                    |
| 33 Hay and clover..... acre                       | 3,656,410   | 4,456,349   | 5,031,548   | 6,543,423           | —                    |
| ton   | 3,818,641   | 5,055,810   | 7,693,753   | 8,943,715           | —                    |
| \$  | 38,868,900  | 40,446,480  | 60,245,557  | 85,026,315          | —                    |
| Total Areas, Field Crops..... acre                | —           | —           | 15,662,811  | 19,765,740          | —                    |
| Total Values, Field Crops..... \$                 | 111,116,606 | 155,277,427 | 194,766,934 | 237,882,235         | —                    |

<sup>1</sup> Estimates of population since the 1931 Census are subject to adjustment as later data are made available.  
<sup>2</sup> Figures for 1937 are subject to revision.  
<sup>3</sup> Revised in accordance with the Labrador Award of the Privy Council, Mar. 1, 1927.  
<sup>4</sup> Includes Canadian Navy.  
<sup>5</sup> Exclusive of the Territories.  
<sup>6</sup> For these causes of death the comparability between the figures for the year 1926 and those for the years

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

Area of the Dominion of Canada in square miles: Land, 3,466,556; Fresh Water, 228,307; Total, 3,694,863.

NOTE.—Dashes in this table indicate that comparable data or estimates are not available for the years so indicated.

| 1911.       | 1916.       | 1921.                    | 1926.                   | 1931.                   | 1935. <sup>1</sup>        | 1936. <sup>1</sup>      | 1937. <sup>1,2</sup>    |
|-------------|-------------|--------------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|
| 93,738      | 92,000      | 88,615                   | 87,000                  | 88,038                  | 89,000                    | 92,000                  | 93,000                  |
| 492,338     | 505,000     | 523,837                  | 515,000                 | 512,846                 | 527,000                   | 537,000                 | 542,000                 |
| 351,889     | 368,000     | 387,876                  | 396,000                 | 408,219                 | 429,000                   | 435,000                 | 440,000                 |
| 2,005,776   | 2,154,000   | 2,360,665 <sup>3</sup>   | 2,603,000               | 2,874,255               | 3,062,000                 | 3,096,000               | 3,135,000               |
| 2,527,222   | 2,713,000   | 2,933,662                | 3,164,000               | 3,431,683               | 3,673,000                 | 3,690,000               | 3,711,000               |
| 461,394     | 554,000     | 610,118                  | 639,000                 | 700,139                 | 711,000                   | 711,000                 | 717,000                 |
| 492,432     | 645,000     | 757,510                  | 821,000                 | 921,785                 | 931,000                   | 931,000                 | 939,000                 |
| 374,295     | 496,000     | 588,454                  | 608,000                 | 731,605                 | 764,000                   | 772,000                 | 778,000                 |
| 392,480     | 456,000     | 524,582                  | 606,000                 | 694,263                 | 735,000                   | 750,000                 | 751,000                 |
| 8,512       | 7,000       | 4,157                    | 4,000                   | 4,230                   | 4,000                     | 4,000                   | 4,000                   |
| 6,507       | 8,000       | 7,988                    | 8,000                   | 9,723                   | 10,000                    | 10,000                  | 10,000                  |
| 7,206,643   | 8,001,000   | 8,788,483 <sup>3</sup>   | 9,451,000               | 10,376,786              | 10,935,000                | 11,028,000              | 11,120,000              |
| -           | -           | -                        | 232,750                 | 240,473                 | 221,451                   | 220,371                 | -                       |
| -           | -           | -                        | 24.7                    | 23.2                    | 20.3                      | 20.0                    | -                       |
| -           | -           | -                        | 107,454                 | 104,517                 | 105,567                   | 107,050                 | -                       |
| -           | -           | -                        | 11.4                    | 10.1                    | 9.7                       | 9.7                     | -                       |
| -           | -           | -                        | 11,415                  | 13,734                  | 16,009                    | 16,424                  | -                       |
| -           | -           | -                        | 7,614                   | 9,578                   | 11,150                    | 11,064                  | -                       |
| -           | -           | -                        | 4,981                   | 5,957                   | 8,302                     | 9,112                   | -                       |
| -           | -           | -                        | 7,929                   | 7,616                   | 6,597                     | 6,768                   | -                       |
| -           | -           | -                        | 8,427                   | 7,011                   | 7,411                     | 7,313                   | -                       |
| -           | -           | -                        | 5,138                   | 5,168                   | 6,176                     | 6,402                   | -                       |
| -           | -           | -                        | 66,658                  | 66,591                  | 76,893                    | 80,904                  | -                       |
| -           | -           | -                        | 7.1                     | 6.4                     | 7.0                       | 7.3                     | -                       |
| 57          | 67          | 548                      | 608                     | 692                     | 1,376                     | 1,526                   | 1,870                   |
| 144,076     | 8,596       | 43,772                   | 48,819                  | 7,678                   | 2,103                     | 2,197                   | 2,859                   |
| 112,028     | 41,779      | 23,888                   | 20,944                  | 15,195                  | 5,291                     | 4,876                   | 5,553                   |
| 76,184      | 5,539       | 24,068                   | 66,219                  | 4,657                   | 3,883                     | 4,870                   | 6,087                   |
| 331,288     | 55,914      | 91,728                   | 135,982                 | 27,530                  | 11,277                    | 11,643                  | 15,101                  |
| 108,908,715 | -           | 140,837,903              | -                       | 163,119,231             | -                         | -                       | -                       |
| 48,733,823  | -           | 70,796,548               | -                       | 85,733,309              | -                         | -                       | -                       |
| -           | -           | 1,386,126,000            | 1,714,477,000           | \$39,881,000            | \$52,431,000 <sup>4</sup> | 1,079,571,000           | 1,051,698,000           |
| 8,864,514   | 15,369,709  | 17,835,734               | 22,395,649              | 26,355,136              | 24,115,700                | 25,604,800              | 25,570,200              |
| 132,077,347 | 262,781,000 | 226,508,411              | 407,136,000             | 321,325,000             | 281,935,000               | 219,218,000             | 182,410,000             |
| 104,810,825 | 344,096,400 | 374,178,601              | 442,231,000             | 123,550,000             | 173,065,000               | 205,327,000             | 182,384,000             |
| 8,656,179   | 10,996,487  | 13,879,257               | 12,741,340              | 12,837,736              | 14,096,200                | 13,287,700              | 13,045,500              |
| 245,393,425 | 410,211,000 | 364,989,218              | 383,416,000             | 328,278,000             | 394,348,000               | 271,778,000             | 266,442,000             |
| 86,796,130  | 210,957,500 | 180,939,587              | 184,098,000             | 77,070,000              | 93,409,000                | 116,267,000             | 114,065,000             |
| 1,283,094   | 1,802,996   | 2,043,009                | 3,947,462               | 3,791,395               | 3,895,800                 | 4,437,600               | 4,331,400               |
| 28,843,510  | 42,770,000  | 42,956,049               | 99,987,100              | 67,382,600              | 83,975,000                | 71,922,600              | 83,124,000              |
| 14,053,097  | 35,024,000  | 33,514,070               | 52,059,000              | 17,465,000              | 24,465,000                | 49,512,000              | 41,984,000              |
| 293,951     | 173,000     | 204,775                  | 209,725                 | 131,829                 | 167,700                   | 164,400                 | 165,600                 |
| 14,417,999  | 6,282,000   | 10,822,278               | 7,815,000               | 5,449,000               | 7,765,000                 | 6,083,000               | 5,415,000               |
| 5,774,039   | 6,747,000   | 7,081,140                | 7,780,000               | 2,274,000               | 3,494,000                 | 4,258,000               | 3,303,000               |
| 464,504     | 472,992     | 534,621                  | 523,112                 | 591,804                 | 800,800                   | 502,100                 | 531,200                 |
| 55,461,473  | 63,297,000  | 62,230,062               | 46,937,000 <sup>4</sup> | 52,305,000 <sup>4</sup> | 38,070,000 <sup>4</sup>   | 39,614,000 <sup>4</sup> | 42,547,000 <sup>4</sup> |
| 27,426,763  | 50,932,300  | 44,638,547               | 69,204,000              | 23,356,000              | 30,854,000                | 46,125,000              | 27,145,000              |
| 3,289,407   | 7,821,257   | 8,678,883                | 9,516,125               | 9,114,457               | 8,697,600                 | 8,784,100               | 8,693,300               |
| 10,400,367  | 14,527,000  | 8,829,915                | 14,058,000              | 14,539,600              | 14,060,000                | 13,803,000              | 13,030,000              |
| 90,115,531  | 168,547,900 | 174,110,386              | 170,473,000             | 110,110,000             | 107,133,000               | 105,703,000             | 97,307,000              |
| 30,556,168  | 38,930,333  | 47,553,418               | 56,097,836              | 58,862,306              | 57,016,400                | 58,146,850              | 57,826,700              |
| 384,513,795 | 886,494,900 | 933,045,936 <sup>1</sup> | 1,104,983,100           | 435,966,400             | 512,176,900               | 612,300,400             | 553,923,100             |

1931, 1935, and 1936 is not exact owing to changes in classification.

<sup>1</sup> Fiscal year.<sup>2</sup> Revised

since the publication of the 1937 Year Book.

<sup>3</sup> The figures for the decennial census years 1871-1921 are for the next preceding years; those for 1871 are for the four original provinces only.<sup>4</sup> See Monthly Bulletin of Agricultural Statistics for May, 1921, for particulars of the values of field crops for the years 1871, 1881 and 1901.

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

| Item.   | 1871.                  | 1881.                   | 1891.                | 1901.                | 1906.                    |
|---|------------------------|-------------------------|----------------------|----------------------|--------------------------|
| <b>Live Stock and Poultry—</b>                      |                        |                         |                      |                      |                          |
| 1 Horses..... No.                                   | 836,743                | 1,059,358               | 1,470,572            | 1,577,493            | -                        |
| 2 Milk cows..... No.                                | 1,251,209              | 1,595,800               | 1,857,112            | 2,408,677            | -                        |
| 3 Other cattle..... No.                             | 1,373,081              | 1,919,189               | 2,263,474            | 3,167,774            | -                        |
| 4 Sheep..... No.                                    | 3,155,509              | 3,048,678               | 2,563,781            | 2,510,239            | -                        |
| 5 Swine..... No.                                    | 1,366,083              | 1,207,619               | 1,733,850            | 10,490,594           | -                        |
| 6 All poultry..... No.                              | -                      | -                       | 14,105,102           | 2,353,828            | -                        |
|   | \$                     | -                       | -                    | 16,445,702           | -                        |
|   | \$                     | -                       | -                    | 17,922,658           | -                        |
|   | \$                     | -                       | -                    | 5,723,880            | -                        |
| Total Values, Live Stock and Poultry..... \$        | -                      | -                       | -                    | 274,374,916          | -                        |
| <b>Dairying—</b>                                    |                        |                         |                      |                      |                          |
| 7 Total milk production..... '000 lb.               | -                      | -                       | -                    | 6,806,554            | -                        |
| 8 Cheese, factory..... lb.                          | -                      | 54,574,856              | 97,418,855           | 220,833,269          | 204,788,553 <sup>4</sup> |
| 9 Butter, creamery..... lb.                         | -                      | 5,487,486               | 9,741,830            | 22,321,430           | 29,507,639 <sup>4</sup>  |
| 10 Butter, home-made..... lb.                       | -                      | 1,365,912               | 3,084,364            | 36,008,739           | 45,930,294 <sup>4</sup>  |
| 11 Other dairy products <sup>1</sup> ..... lb.      | -                      | 341,478                 | 913,591              | 7,240,972            | 10,949,062 <sup>4</sup>  |
|   | \$                     | 102,545,169             | 111,577,210          | 105,345,076          | -                        |
|   | \$                     | -                       | -                    | 21,384,644           | -                        |
|   | \$                     | -                       | -                    | 15,623,907           | -                        |
| Total Values, Dairy Products \$                     | -                      | 22,743,930              | 30,315,214           | 66,470,953           | -                        |
| <b>Furs—</b>  |                        |                         |                      |                      |                          |
| 12 Pelts taken..... No.                             | -                      | -                       | -                    | -                    | -                        |
| 13 Value of animals on fur farms.. \$               | -                      | -                       | -                    | -                    | -                        |
| <b>Forestry—</b>                                    |                        |                         |                      |                      |                          |
| 14 Primary forest production..... \$                | -                      | -                       | -                    | -                    | -                        |
| 15 Lumber production..... M ft. b.m.                | -                      | -                       | -                    | -                    | -                        |
| 16 Total Sawmill Products..... \$                   | -                      | -                       | -                    | -                    | -                        |
| 17 Pulp and paper products..... \$                  | -                      | -                       | -                    | -                    | -                        |
| 18 Exports of wood, wood products and paper..... \$ | -                      | -                       | 25,351,035           | 33,099,915           | 45,716,702               |
| 19 Fisheries..... \$                                | 7,573,199              | 15,817,162              | 18,977,874           | 25,737,153           | 26,279,455               |
| <b>Mineral Production—</b>                          |                        |                         |                      |                      |                          |
| 20 Gold <sup>1</sup> ..... oz.                      | 105,187                | 63,524                  | 45,018               | 1,167,216            | 556,415                  |
| 21 Silver..... oz.                                  | 2,174,412              | 1,313,153               | 930,614              | 24,138,503           | 11,502,120               |
| 22 Copper..... lb.                                  | -                      | 355,083 <sup>2</sup>    | 414,533              | 5,539,192            | 8,473,379                |
| 23 Lead..... lb.                                    | -                      | 347,271 <sup>2</sup>    | 400,549              | 3,265,354            | 5,659,455                |
| 24 Zinc..... lb.                                    | -                      | 3,260,424 <sup>2</sup>  | 9,529,401            | 37,827,019           | 55,609,888               |
| 25 Nickel..... lb.                                  | -                      | 366,708 <sup>2</sup>    | 1,226,703            | 6,096,581            | 10,720,474               |
| 26 Iron..... lb.                                    | -                      | 204,800 <sup>2</sup>    | 88,065               | 51,906,953           | 54,608,217               |
| 27 Coal..... short ton                              | 1,063,742 <sup>2</sup> | 2,616 <sup>2</sup>      | 3,857                | 2,249,387            | 3,080,187                |
| 28 Natural gas..... M cu. ft.                       | 1,763,423 <sup>2</sup> | -                       | -                    | 788,000 <sup>2</sup> | 1,154                    |
| 29 Petroleum, crude..... bbl.                       | -                      | -                       | -                    | 36,011 <sup>2</sup>  | 23,800                   |
| 30 Asbestos..... short ton                          | -                      | 830,477 <sup>2</sup>    | 4,035,347            | 9,189,047            | 21,400,955               |
| 31 Cement..... bbl.                                 | -                      | 498,286 <sup>2</sup>    | 2,421,208            | 4,594,523            | 8,948,834                |
| Totals, Mineral Production <sup>3</sup>             | 1,063,742 <sup>2</sup> | 22,167 <sup>2</sup>     | 21,331               | 244,979              | 534,295                  |
|   | 1,763,423 <sup>2</sup> | 1,537,106               | 3,577,749            | 6,486,325            | 9,762,001                |
|   | -                      | 2,688,621               | 7,019,455            | 12,699,453           | 19,732,019               |
|   | -                      | -                       | 150,000 <sup>2</sup> | 339,476              | 583,523                  |
|   | -                      | 368,987                 | 755,298              | 622,392              | 569,753                  |
|   | -                      | -                       | 1,010,211            | 1,008,275            | 761,760                  |
|   | -                      | -                       | 9,279                | 40,217               | 82,185                   |
|   | -                      | -                       | 999,878              | 1,259,759            | 2,000,143                |
|   | -                      | 69,843 <sup>2</sup>     | 93,479               | 450,394              | 2,128,374                |
|   | -                      | 81,969 <sup>2</sup>     | 108,561              | 660,030              | 3,170,859                |
|   | -                      | -                       | -                    | -                    | -                        |
|   | -                      | 10,221,255 <sup>2</sup> | 18,976,616           | 65,797,911           | 79,250,697               |

<sup>1</sup>The figures for 1937 are subject to revision.  
<sup>2</sup>The figures for the next preceding years. In the Censuses of 1881 and 1891 values only were given of factory butter and cheese, and quantities have been calculated by reckoning cheese at 10 cents per lb. and butter at 1 cents.

<sup>3</sup>Revised since the publication of the 1937 Year Book.

<sup>4</sup>1907.

<sup>5</sup>Previous

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

| 1911.       | 1916.                    | 1921.       | 1926.       | 1931.       | 1935.                    | 1936.       | 1937. <sup>1</sup> |    |
|-------------|--------------------------|-------------|-------------|-------------|--------------------------|-------------|--------------------|----|
| 2,598,958   | 3,246,430                | 3,624,262   | 3,398,114   | 3,113,909   | 2,931,337                | 2,891,540   | 2,882,990          | 1  |
| 381,915,505 | 418,686,000              | 440,502,040 | 245,119,000 | 155,908,000 | 189,341,000              | 208,170,000 | 206,957,000        | 2  |
| 2,595,255   | 2,835,552                | 3,324,653   | 3,839,191   | 3,371,923   | 3,849,200                | 3,885,300   | 3,940,400          | 3  |
| 109,575,526 | 198,896,000              | 203,555,836 | 201,236,000 | 143,616,000 | 134,000,000              | 143,316,000 | 156,467,000        | 4  |
| 3,930,828   | 3,763,155                | 5,194,831   | 4,731,688   | 4,601,108   | 4,971,400                | 4,955,300   | 4,900,100          | 5  |
| 86,278,490  | 204,477,000              | 139,590,484 | 148,742,000 | 114,201,000 | 107,152,000              | 112,247,000 | 123,731,000        | 6  |
| 2,174,300   | 2,935,023                | 3,303,906   | 3,142,476   | 3,637,118   | 3,309,100                | 3,327,100   | 3,339,900          | 7  |
| 10,701,691  | 20,927,000               | 20,704,509  | 31,417,000  | 18,596,000  | 17,055,000               | 18,077,000  | 18,741,000         | 8  |
| 3,634,778   | 3,484,982                | 3,404,730   | 4,359,582   | 4,699,831   | 3,549,200                | 4,145,000   | 3,963,300          | 9  |
| 26,986,621  | 60,700,000               | 36,893,244  | 60,958,000  | 32,773,000  | 41,778,000               | 45,488,000  | 48,802,000         | 10 |
| 31,793,261  | -                        | 50,325,248  | 50,108,516  | 65,468,000  | 56,768,800               | 59,329,400  | 57,510,100         | 11 |
| 14,653,773  | -                        | 31,750,247  | 51,037,000  | 43,138,000  | 40,292,000               | 40,366,000  | 42,954,000         | 12 |
| 630,111,606 | -                        | 872,996,360 | 747,509,000 | 508,232,000 | 529,618,000              | 567,664,000 | 597,652,000        | 13 |
| 9,806,741   | -                        | 10,976,235  | 13,407,340  | 15,772,852  | 10,527,913 <sup>2</sup>  | 16,998,410  | 17,188,618         | 14 |
| 199,904,205 | 192,908,597              | 149,201,856 | 171,731,631 | 113,956,639 | 100,427,390              | 119,123,483 | 128,444,300        | 15 |
| 21,537,124  | 35,512,022               | 39,100,872  | 28,807,841  | 12,824,095  | 10,570,309               | 15,658,813  | 17,845,300         | 16 |
| 64,480,302  | 82,564,130               | 111,691,718 | 177,209,287 | 225,955,246 | 240,918,799              | 250,931,777 | 246,387,300        | 17 |
| 15,597,807  | 26,960,355               | 63,625,203  | 61,753,390  | 50,198,878  | 52,228,133               | 57,062,100  | 60,217,300         | 18 |
| 137,110,200 | -                        | 103,487,506 | 95,000,000  | 103,310,000 | 114,161,899 <sup>3</sup> | 114,026,000 | 113,084,000        | 19 |
| 30,269,497  | -                        | 50,180,932  | 28,553,771  | 21,450,000  | 19,237,000 <sup>4</sup>  | 20,926,000  | 23,722,000         | 20 |
| 35,927,420  | -                        | -           | 158,490,971 | 106,916,119 | 111,451,981 <sup>5</sup> | 117,267,791 | 123,618,527        | 21 |
| 103,381,854 | -                        | -           | 277,304,979 | 101,389,692 | 193,487,423 <sup>6</sup> | 211,421,764 | 228,403,127        | 22 |
| -           | -                        | -           | 2,930,407   | 3,680,148   | 4,060,356                | 4,926,413   | 4,596,713          | 23 |
| -           | -                        | -           | 10,151,594  | 15,072,244  | 11,803,217               | 12,843,841  | 15,494,883         | 24 |
| -           | -                        | -           | 5,977,545   | 11,153,838  | 8,497,237                | 9,381,825   | 9,837,818          | 25 |
| 4,918,202   | 3,490,550                | 168,054,024 | 204,436,328 | 141,123,930 | 115,461,779              | 134,804,228 | -                  | 26 |
| 75,830,954  | 58,365,349               | 82,448,585  | 101,071,260 | 2,497,553   | 2,973,169                | 3,412,151   | -                  | 27 |
| -           | 115,884,905 <sup>7</sup> | 116,891,191 | 135,182,592 | 45,977,843  | 47,911,256               | 61,965,540  | -                  | 28 |
| -           | 92,074,684 <sup>8</sup>  | 149,216,005 | 215,370,274 | 62,709,253  | 65,905,132               | 80,343,291  | -                  | 29 |
| -           | -                        | -           | -           | 174,733,954 | 162,951,282              | 185,144,603 | -                  | 30 |
| 56,334,695  | 83,116,282               | 284,561,478 | 278,674,960 | 230,604,474 | 160,932,790              | 181,831,748 | 223,918,470        | 31 |
| 20,965,142  | 35,860,708               | 34,931,935  | 56,360,633  | 30,517,306  | 34,427,854               | 39,165,055  | -                  | 32 |
| 473,159     | 930,492                  | 926,329     | 1,754,228   | 2,693,892   | 3,284,890                | 3,748,028   | 4,065,872          | 33 |
| 9,781,077   | 19,234,970               | 19,148,920  | 36,263,110  | 58,093,396  | 115,598,279              | 131,293,421 | 143,314,561        | 34 |
| 32,559,044  | 25,459,741               | 13,543,198  | 22,371,924  | 20,562,247  | 16,618,568               | 18,334,487  | 22,038,032         | 35 |
| 17,355,272  | 16,717,121               | 8,485,355   | 13,894,531  | 6,141,943   | 10,767,148               | 8,273,864   | 10,180,371         | 36 |
| 56,648,011  | 117,150,028              | 47,020,820  | 133,094,942 | 292,304,390 | 418,997,700              | 421,027,732 | 531,041,878        | 37 |
| 6,886,989   | 31,897,150               | 5,953,555   | 17,490,300  | 24,114,065  | 32,311,960               | 39,514,101  | 69,099,734         | 38 |
| 23,784,969  | 41,497,615               | 66,079,592  | 283,801,265 | 267,342,482 | 339,105,079              | 383,180,909 | 411,221,232        | 39 |
| 827,717     | 3,532,692                | 3,828,742   | 19,240,661  | 7,260,183   | 10,624,772               | 14,993,869  | 21,013,404         | 40 |
| 1,877,479   | 23,864,760               | 53,089,356  | 149,938,105 | 237,245,451 | 320,649,859              | 333,182,736 | 370,418,073        | 41 |
| 108,105     | 2,991,623                | 2,471,310   | 11,110,413  | 6,059,249   | 9,936,090                | 11,045,007  | 18,137,894         | 42 |
| 34,638,744  | 82,958,564               | 19,233,090  | 65,714,294  | 65,666,320  | 138,516,240              | 169,739,593 | 224,790,974        | 43 |
| 10,239,023  | 29,035,498               | 6,752,571   | 14,374,183  | 15,267,453  | 35,345,163               | 43,876,525  | 59,507,176         | 44 |
| 819,228     | 1,043,979                | 583,829     | 757,317     | 420,038     | 599,875                  | 678,231     | 893,855            | 45 |
| 11,233,388  | 14,483,995               | 15,057,493  | 16,478,311  | 12,243,211  | 13,888,006               | 15,229,182  | 15,775,432         | 46 |
| 26,467,046  | 38,817,481               | 72,451,656  | 59,875,094  | 41,207,682  | 41,963,110               | 45,791,934  | 48,063,559         | 47 |
| -           | 25,407,458               | 14,077,601  | 19,208,209  | 25,874,723  | 24,910,789               | 28,113,348  | 29,599,198         | 48 |
| 1,917,678   | 3,958,029                | 4,594,164   | 7,557,174   | 9,026,754   | 9,363,141                | 10,702,243  | 11,738,822         | 49 |
| 291,062     | 198,123                  | 187,540     | 304,444     | 1,542,573   | 1,446,620                | 1,500,374   | 2,978,268          | 50 |
| 357,073     | 392,284                  | 641,533     | 1,311,665   | 4,211,674   | 3,492,188                | 3,421,767   | 5,376,981          | 51 |
| 127,414     | 154,149                  | 92,761      | 104,299     | 121,467     | 7,210,467                | 301,287     | 410,026            | 52 |
| 2,945,108   | 5,298,869                | 4,906,230   | 10,000,423  | 4,812,886   | 7,054,614                | 9,958,183   | 14,505,791         | 53 |
| 5,692,915   | 5,369,560                | 5,732,885   | 8,707,021   | 10,161,658  | 3,648,089                | 4,508,718   | 6,168,971          | 54 |
| 7,644,537   | 6,547,728                | 14,195,143  | 13,013,283  | 15,826,243  | 5,580,043                | 6,908,192   | 9,095,867          | 55 |
| 103,220,994 | 177,201,534              | 171,923,342 | 240,437,123 | 230,434,726 | 312,344,457              | 301,919,372 | 456,793,260        | 56 |

to 1931 this item does not include skim milk and buttermilk.

<sup>6</sup> 1917.<sup>7</sup> As from 1932 the values<sup>12</sup> Includes other items not specified.<sup>8</sup> 1887.<sup>9</sup> 1898.<sup>10</sup> 1899.<sup>11</sup> 1874.<sup>12</sup> 1892.



## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

|   | Item.   | 1871.       | 1881.       | 1891.                    | 1901.       | 1906.       |
|---|---|-------------|-------------|--------------------------|-------------|-------------|
| <b>Central Electric Stations—</b>         |   |             |             |                          |             |             |
| 1   | Power houses..... No.                           | -           | -           | 80                       | 58          | 157         |
| 2   | Capital invested..... \$                        | -           | -           | 4,113,771                | 11,891,025  | 80,393,445  |
| 3   | Kilowatt hours generated <sup>2</sup> ..... No. | -           | -           | -                        | -           | -           |
| 4   | Customers.....                                  | -           | -           | -                        | -           | -           |
| <b>Water Power—</b>                       |   |             |             |                          |             |             |
| 5   | Turbine H.P. installed..... No.                 | -           | -           | 71,219                   | 238,902     | 608,002     |
| <b>Manufactures—</b>                      |   |             |             |                          |             |             |
| 6   | Employees..... No.                              | 187,942     | 254,935     | 272,033                  | 339,173     | 383,920     |
| 7   | Capital..... \$                                 | 77,964,020  | 165,302,623 | 353,213,000 <sup>3</sup> | 446,516,487 | 833,916,155 |
| 8   | Salaries and wages..... \$                      | 40,851,009  | 59,429,002  | 79,234,311               | 112,249,350 | 162,155,573 |
| 9   | Values of materials used in..... \$             | 124,907,846 | 179,915,593 | 250,759,202 <sup>4</sup> | 266,527,858 | -           |
| 10  | Products—                                       |             |             |                          |             |             |
|   | Gross..... \$                                   | 221,617,773 | 309,676,068 | 368,696,723              | 481,053,375 | 706,446,578 |
|   | Net..... \$                                     | 96,709,927  | 129,757,475 | 117,937,431              | 214,525,517 | -           |
| <b>Construction—</b>                      |   |             |             |                          |             |             |
| 11  | Values of contracts awarded... \$               | -           | -           | -                        | -           | -           |
| <b>Wholesale and Retail Trade—</b>        |   |             |             |                          |             |             |
| <b>Wholesale—</b>                         |   |             |             |                          |             |             |
| 12  | Establishments..... No.                         | -           | -           | -                        | -           | -           |
| 13  | Employees.....                                  | -           | -           | -                        | -           | -           |
| 14  | Net sales..... \$                               | -           | -           | -                        | -           | -           |
| <b>Retail—</b>                            |   |             |             |                          |             |             |
| 15  | Stores..... No.                                 | -           | -           | -                        | -           | -           |
| 16  | Employees, full-time.....                       | -           | -           | -                        | -           | -           |
| 17  | Net sales..... \$                               | -           | -           | -                        | -           | -           |
| <b>Retail Services—</b>                   |   |             |             |                          |             |             |
| 18  | Establishments..... No.                         | -           | -           | -                        | -           | -           |
| 19  | Employees, full-time.....                       | -           | -           | -                        | -           | -           |
| 20  | Receipts..... \$                                | -           | -           | -                        | -           | -           |
| <b>External Trade (fiscal years)—</b>     |   |             |             |                          |             |             |
| 21  | Exports <sup>1</sup> ..... \$                   | 57,630,024  | 83,944,701  | 88,671,738               | 177,431,386 | 235,483,956 |
| 22  | Imports <sup>1</sup> ..... \$                   | 84,214,388  | 90,488,329  | 111,533,954              | 177,930,919 | 283,740,280 |
|   | Totals, External Trade..... \$                  | 141,844,412 | 174,433,030 | 200,205,692              | 355,362,305 | 519,224,236 |
| 23  | Total exports to British Empire..... \$         | -           | -           | 47,137,203               | 100,748,097 | 138,421,222 |
| 24  | Exports to United Kingdom..... \$               | 21,732,556  | 42,637,219  | 43,243,784               | 92,857,525  | 127,456,465 |
| 25  | Total imports from British Empire..... \$       | -           | -           | 44,337,052               | 46,653,228  | 83,789,934  |
| 26  | Imports from United Kingdom..... \$             | 48,498,202  | 42,885,142  | 42,018,943               | 42,820,334  | 69,183,915  |
| 27  | Exports to United States..... \$                | 29,104,358  | 34,038,431  | 37,743,430               | 67,983,073  | 83,546,306  |
| 28  | Imports from United States..... \$              | 27,185,586  | 36,338,701  | 52,038,477               | 107,377,006 | 169,250,452 |
| <b>Exports, Domestic, by Chief Items—</b> |   |             |             |                          |             |             |
| 29  | Wheat..... bu.                                  | 1,748,977   | 2,523,673   | 2,108,210                | 9,739,758   | 40,399,402  |
|   | \$  | 1,981,917   | 2,593,820   | 1,583,084                | 6,871,939   | 33,658,391  |
| 30  | Wheat flour..... bbl.                           | 306,339     | 429,728     | 296,784                  | 1,118,700   | 1,532,014   |
|   | \$  | 1,009,849   | 2,173,108   | 1,388,678                | 4,015,226   | 6,179,825   |
| 31  | Oats..... bu.                                   | 542,386     | 2,926,532   | 200,569                  | 8,155,063   | 2,700,303   |
|   | \$  | 231,227     | 1,191,873   | 129,917                  | 2,490,591   | 1,083,347   |
| 32  | Hay..... ton                                    | 23,487      | 168,381     | 65,083                   | 252,977     | 206,714     |
|   | \$  | 290,217     | 1,813,208   | 559,489                  | 2,097,882   | 1,529,941   |
| 33  | Bacon and hams, shoulders, and sides..... cwt.  | 103,444     | 103,547     | 75,541                   | 1,055,495   | 1,029,079   |
|   | \$  | 1,018,918   | 758,334     | 628,469                  | 11,778,446  | 12,086,868  |
| 34  | Butter..... lb.                                 | 15,439,266  | 17,049,491  | 3,768,101                | 16,335,528  | 24,031,525  |
|   | \$  | 3,065,234   | 3,573,034   | 602,175                  | 3,295,063   | 7,075,539   |
| 35  | Cheese..... lb.                                 | 8,271,436   | 49,255,523  | 106,202,140              | 105,920,367 | 215,834,543 |
|   | \$  | 1,109,906   | 5,510,443   | 9,508,800                | 20,696,951  | 24,433,169  |
| 36  | Gold, raw..... \$                               | 163,037     | 767,318     | 554,126                  | 24,445,156  | 12,991,916  |
| 37  | Silver..... oz.                                 | -           | -           | -                        | 4,022,019   | 7,261,527   |
|   | \$  | 595,261     | 34,494      | 238,367                  | 2,420,750   | 4,310,528   |
| 38  | Copper <sup>12</sup> ..... lb.                  | 6,246,000   | 39,604,000  | 10,964,498               | 26,345,776  | 44,282,348  |
|   | \$  | 120,121     | 150,412     | 505,196                  | 2,659,261   | 7,148,633   |

<sup>1</sup> The figures for 1937 are subject to revision.<sup>2</sup> In thousands.<sup>3</sup> The statistics of manufactures in 1871 and 1881 include works employing fewer than 5 hands; those of 1891, 1901, 1911 and 1916 are for works employing only 5 hands and over except in the case of butter and cheese factories, flour and grist mills, electric light plants, lumber, lath and shingle mills, brick and tile works, and fish canneries. The figures shown are for the preceding years in each case. From 1922 statistics are exclusive of construction, hand trades, repair and custom work. Figures for 1925-35 include non-ferrous metal smelting not included in earlier years.<sup>4</sup> Includes all establishments irrespective of the number of employees.

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

| 1911.         | 1916.         | 1921.         | 1926.         | 1931.                      | 1935.                      | 1936.                      | 1937. <sup>1</sup>      |    |
|---------------|---------------|---------------|---------------|----------------------------|----------------------------|----------------------------|-------------------------|----|
| 266           | 307           | 510           | 595           | 559                        | 566                        | 561                        | -                       | 1  |
| 110,838,746   | 248,573,546   | 484,669,451   | 756,220,068   | 1,229,988,951              | 1,459,821,168              | 1,483,116,649              | -                       | 2  |
| -             | -             | 5,614,132     | 12,063,445    | 16,330,867                 | 23,283,036                 | 25,402,282                 | -                       | 3  |
| -             | -             | 973,212       | 1,337,562     | 1,632,792                  | 1,694,703                  | 1,740,793                  | -                       | 4  |
| 1,363,134     | 2,222,169     | 2,754,157     | 4,549,383     | 6,666,337                  | 7,909,115                  | 7,945,590                  | 8,112,751               | 5  |
| 515,203       | -             | 456,076       | 581,539       | 557,426                    | 582,874                    | 594,359                    | -                       | 6  |
| 1,247,583,009 | 1,958,705,230 | 3,190,026,358 | 3,981,509,590 | 4,961,312,408              | 4,688,991,853              | 3,271,263,531              | -                       | 7  |
| 241,008,416   | 283,311,505   | 518,785,137   | 653,850,935   | 624,545,561                | 590,326,904                | 612,071,434                | -                       | 8  |
| 601,509,018   | 791,943,433   | 1,365,893,685 | 1,728,624,192 | 1,223,880,011              | 1,420,885,153              | 1,624,213,996              | -                       | 9  |
| 1,165,975,539 | 1,381,547,225 | 2,576,037,029 | 3,221,269,231 | 2,608,461,862              | 2,807,337,381              | 3,002,403,814              | -                       | 10 |
| 564,466,621   | 589,603,792   | 1,209,143,344 | 1,406,574,164 | 1,390,409,237              | 1,302,179,099              | 1,289,592,672              | -                       | 11 |
| 345,425,000   | 90,311,000    | 240,133,300   | 372,947,900   | 315,482,000                | 160,305,000                | 162,588,000                | 224,056,700             | 11 |
| -             | -             | -             | -             | 13,140 <sup>2</sup>        | -                          | -                          | -                       | 12 |
| -             | -             | -             | -             | 90,564 <sup>2</sup>        | -                          | -                          | -                       | 13 |
| -             | -             | -             | -             | 3,325,210,300 <sup>2</sup> | -                          | -                          | -                       | 14 |
| -             | -             | -             | -             | 125,003 <sup>2</sup>       | -                          | -                          | -                       | 15 |
| -             | -             | -             | -             | 238,683 <sup>2</sup>       | -                          | -                          | -                       | 16 |
| -             | -             | -             | -             | 2,755,569,900 <sup>2</sup> | 2,053,099,000 <sup>2</sup> | 2,202,202,000 <sup>2</sup> | -                       | 17 |
| -             | -             | -             | -             | 42,223 <sup>2</sup>        | -                          | -                          | -                       | 18 |
| -             | -             | -             | -             | 55,257 <sup>2</sup>        | -                          | -                          | -                       | 19 |
| -             | -             | -             | -             | 240,455,900 <sup>2</sup>   | -                          | -                          | -                       | 20 |
| 274,316,553   | 741,610,638   | 1,189,163,701 | 1,320,568,147 | 799,742,667                | 756,625,925                | 849,030,417                | 1,081,181,908           | 21 |
| 452,724,003   | 508,201,134   | 1,240,158,882 | 927,328,732   | 906,612,695                | 522,431,153                | 522,719,063                | 671,875,506             | 22 |
| 727,041,156   | 1,249,811,772 | 2,429,322,583 | 2,247,896,879 | 1,706,355,362              | 1,279,057,078              | 1,411,749,480              | 1,733,057,472           |    |
| 148,967,442   | 482,529,733   | 403,452,219   | 598,567,995   | 292,864,396                | 358,199,478                | 399,311,479                | 495,598,105             | 23 |
| 132,156,924   | 451,852,399   | 312,844,871   | 508,237,560   | 219,246,499                | 290,885,237                | 321,556,708                | 407,996,698             | 24 |
| 129,467,647   | 105,229,977   | 266,002,088   | 208,820,128   | 204,898,426                | 156,186,471                | 177,721,310                | 198,155,842             | 25 |
| 109,934,753   | 77,404,361    | 213,973,562   | 163,731,210   | 149,497,392                | 111,682,490                | 117,874,822                | 129,507,885             | 26 |
| 104,115,823   | 201,106,488   | 542,322,967   | 480,199,723   | 349,660,563                | 304,721,354                | 360,302,426                | 435,014,544             | 27 |
| 275,824,265   | 370,880,549   | 856,176,820   | 608,618,542   | 584,407,018                | 303,639,972                | 319,479,594                | 303,720,662             | 28 |
| 45,802,115    | 157,745,469   | 129,215,157   | 249,679,470   | 217,343,037                | 165,701,983                | 179,124,180                | 227,996,513             | 29 |
| 45,821,134    | 172,896,445   | 130,952,138   | 364,364,388   | 177,419,790                | 132,441,685                | 148,076,075                | 223,481,009             |    |
| 3,049,046     | 6,400,214     | 6,017,032     | 10,084,974    | 7,218,188                  | 4,936,827                  | 4,858,947                  | 4,771,007               | 30 |
| 13,854,790    | 35,767,044    | 66,520,490    | 69,687,598    | 32,876,234                 | 18,386,040                 | 19,382,617                 | 21,587,038              |    |
| 5,431,662     | 26,816,322    | 14,321,048    | 43,058,283    | 3,258,501                  | 12,873,595                 | 12,739,083                 | 8,142,122               | 31 |
| 2,144,846     | 14,637,849    | 14,152,033    | 24,237,692    | 1,146,266                  | 4,915,135                  | 4,520,822                  | 3,176,469               |    |
| 326,132       | 255,407       | 179,398       | 368,787       | 156,722                    | 102,355                    | 58,558                     | 204,592                 | 32 |
| 2,723,291     | 5,849,426     | 4,210,504     | 3,711,840     | 1,590,657                  | 1,137,587                  | 613,215                    | 1,521,953               |    |
| 598,745       | 1,536,617     | 982,338       | 1,263,760     | 121,770                    | 1,276,051                  | 1,201,012                  | 1,757,048               | 33 |
| 8,526,332     | 27,090,113    | 31,492,407    | 28,590,301    | 2,914,273                  | 19,968,575                 | 19,407,285                 | 28,801,291              |    |
| 3,142,682     | 3,441,183     | 9,739,414     | 23,303,965    | 1,162,900                  | 446,000                    | 7,691,100                  | 5,140,000               | 34 |
| 744,288       | 1,018,769     | 5,125,831     | 8,773,125     | 386,419                    | 104,758                    | 1,795,784                  | 1,183,633               |    |
| 181,895,724   | 168,961,583   | 133,620,340   | 148,333,500   | 79,590,400                 | 60,213,000                 | 58,544,900                 | 80,739,100              | 35 |
| 20,739,507    | 26,690,500    | 37,146,722    | 33,718,587    | 12,989,729                 | 6,480,947                  | 6,789,588                  | 11,236,543              |    |
| 5,344,465     | 16,870,394    | 3,038,779     | 25,908,094    | 17,832,608                 | 3,725,211 <sup>11</sup>    | 4,802,029 <sup>11</sup>    | 6,497,281 <sup>11</sup> | 36 |
| 33,731,010    | 27,794,566    | 13,331,050    | 18,382,415    | 24,695,827                 | 11,006,242                 | 20,191,018                 | 16,187,592              | 37 |
| 17,269,168    | 14,298,351    | 11,127,432    | 12,365,576    | 8,927,216                  | 5,857,637                  | 12,473,900                 | 7,243,750               |    |
| 55,075,432    | 111,046,300   | 36,167,900    | 61,090,600    | 62,997,100                 | 33,161,100                 | 37,897,300                 | 52,172,900              | 38 |
| 5,576,063     | 14,670,073    | 4,336,972     | 7,037,206     | 5,629,512                  | 1,454,256                  | 2,024,180                  | 3,963,652               |    |

<sup>1</sup> See footnote 1 to p. 405 of this volume.<sup>2</sup> Census figures for calendar year 1930.<sup>3</sup> Estimated<sup>4</sup> on basis of intercensal survey of larger establishments.<sup>5</sup> Revised since the publication of the 1937 Year Book.<sup>6</sup> Exports of domestic merchandise only.<sup>7</sup> Imports of merchandise for home consumption.<sup>8</sup> Exclusive of exports of domestic gold bullion which, valued at the average current market price, amounted to \$96,725,931 in 1935, \$83,414,854 in 1936, and \$76,667,269 in 1937.<sup>9</sup> Copper,

fine, contained in ore, matte, regulus, etc.

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

|   | Item.   | 1871.                    | 1881.       | 1891.       | 1901.       | 1906.         |
|---|---|--------------------------|-------------|-------------|-------------|---------------|
| <b>Exports, Domestic, by Chief Items—concluded.</b> |   |                          |             |             |             |               |
| 1   | Nickel..... lb.   | —                        | —           | 5,352,043   | 9,537,558   | 23,950,841    |
|   | \$  | —                        | —           | 240,499     | 953,365     | 2,166,936     |
| 2   | Coal..... ton   | 318,287                  | 420,055     | 833,654     | 1,888,538   | 1,820,511     |
|   | \$  | 662,451                  | 1,123,091   | 2,916,465   | 5,307,060   | 4,643,198     |
| 3   | Asbestos..... ton   | —                        | —           | 7,022       | 26,715      | 57,075        |
|   | \$  | —                        | —           | 513,909     | 864,573     | 1,578,137     |
| 4   | Wood-pulp..... cwt.   | —                        | —           | —           | —           | —             |
|   | \$  | —                        | —           | 280,619     | 1,937,207   | 3,478,150     |
| 5   | Newsprint paper..... cwt.                                       | —                        | —           | —           | —           | —             |
|   | \$  | —                        | —           | —           | —           | —             |
| <b>Exports, Domestic, by Classes—</b>               |   |                          |             |             |             |               |
| 6   | Vegetable products (except chemicals, fibres and wood). \$      | —                        | —           | 13,742,557  | 25,541,567  | 55,828,292    |
| 7   | Animals and their products (except chemicals and fibres) \$     | —                        | —           | 36,399,140  | 68,465,332  | 84,570,644    |
| 8   | Fibres, textiles and textile products..... \$                   | —                        | —           | 872,628     | 1,880,539   | 2,602,903     |
| 9   | Wood, wood products and paper \$                                | —                        | —           | 25,351,055  | 33,099,915  | 45,716,762    |
| 10  | Iron and its products..... \$                                   | —                        | —           | 556,527     | 3,778,897   | 4,705,296     |
| 11  | Non-ferrous metals and their products..... \$                   | —                        | —           | 1,618,955   | 33,395,096  | 28,455,786    |
| 12  | Non-metallic minerals and their products (except chemicals). \$ | —                        | —           | 3,988,554   | 7,350,444   | 7,817,475     |
| 13  | Chemicals and allied products. \$                               | —                        | —           | 851,211     | 791,855     | 1,784,800     |
| 14  | All other commodities..... \$                                   | —                        | —           | 5,291,051   | 3,121,741   | 4,002,038     |
|   | Totals, Exports, Domestic.. \$                                  | 57,630,024               | 83,944,701  | 88,671,738  | 177,431,336 | 235,483,966   |
| <b>Imports for Consumption—</b>                     |   |                          |             |             |             |               |
| 15  | Vegetable products (except chemicals, fibres and wood). \$      | —                        | —           | 24,212,140  | 38,036,146  | 50,307,968    |
| 16  | Animals and their products (except chemicals and fibres) \$     | —                        | —           | 8,080,562   | 14,022,596  | 23,616,535    |
| 17  | Fibres, textiles and textile products..... \$                   | —                        | —           | 28,670,141  | 37,284,752  | 50,292,868    |
| 18  | Wood, wood products and paper \$                                | —                        | —           | 5,293,465   | 8,196,901   | 14,341,947    |
| 19  | Iron and its products..... \$                                   | —                        | —           | 15,142,615  | 29,855,930  | 49,456,940    |
| 20  | Non-ferrous metals and their products..... \$                   | —                        | —           | 3,810,626   | 7,167,318   | 17,583,430    |
| 21  | Non-metallic minerals and their products (except chemicals). \$ | —                        | —           | 14,139,024  | 21,255,403  | 33,757,284    |
| 22  | Chemicals and allied products \$                                | —                        | —           | 3,667,810   | 5,684,899   | 8,209,169     |
| 23  | All other commodities..... \$                                   | —                        | —           | 8,777,245   | 10,320,568  | 27,184,539    |
|   | Totals, Imports..... \$   | 34,214,358               | 90,488,329  | 111,533,954 | 177,930,919 | 283,740,250   |
| <b>Steam Railways—</b>                              |   |                          |             |             |             |               |
| 24  | Miles in operation..... No.                                     | 2,695                    | 7,331       | 13,838      | 18,140      | 21,423        |
| 25  | Capital..... \$   | 257,035,182 <sup>1</sup> | 284,419,293 | 632,061,440 | 816,110,837 | 1,065,881,029 |
| 26  | Passengers..... No.   | 5,190,419                | 6,943,671   | 13,222,547  | 18,335,729  | 27,939,782    |
| 27  | Freight..... ton  | 5,670,836 <sup>2</sup>   | 12,065,323  | 21,753,021  | 36,999,371  | 57,966,713    |
| 28  | Earnings..... \$  | 19,470,539 <sup>3</sup>  | 27,987,509  | 48,192,099  | 72,808,749  | 125,322,865   |
| 29  | Expenses..... \$  | 15,775,532 <sup>3</sup>  | 20,121,418  | 34,960,449  | 50,368,726  | 87,129,434    |
| <b>Electric Railways—</b>                           |   |                          |             |             |             |               |
| 30  | Miles in operation..... No.                                     | —                        | —           | —           | 553         | 814           |
| 31  | Capital..... \$   | —                        | —           | —           | —           | —             |
| 32  | Passengers..... No.   | —                        | —           | —           | 120,934,656 | 237,655,074   |
| 33  | Freight..... ton  | —                        | —           | —           | 287,926     | 506,024       |
| 34  | Earnings..... \$  | —                        | —           | —           | 5,768,283   | 10,966,871    |
| 35  | Expenses..... \$  | —                        | —           | —           | 3,435,162   | 6,675,037     |
| <b>Road Transportation—</b>                         |   |                          |             |             |             |               |
| 36  | Highways, total mileage.....                                    | —                        | —           | —           | —           | —             |
| 37  | Capital expenditure on..... \$                                  | —                        | —           | —           | —           | —             |
| 38  | Motor vehicles registered..... No.                              | —                        | —           | —           | —           | 1,447         |
| 39  | Total provincial revenue from licences and operation..... \$    | —                        | —           | —           | —           | —             |
| <b>Canals—</b>                                      |   |                          |             |             |             |               |
| 40  | Passengers carried..... No.                                     | 100,377                  | 118,136     | 146,336     | 190,428     | 256,500       |
| 41  | Freight..... ton  | 3,955,621                | 2,853,230   | 2,902,526   | 5,665,259   | 10,523,185    |

<sup>1</sup> The figures for 1937 are subject to revision.<sup>2</sup> 1876.<sup>3</sup> 1875.<sup>4</sup> Duplication elimin-

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

| 1911.         | 1916.         | 1921.         | 1926.         | 1931.         | 1935.         | 1936.         | 1937. <sup>1</sup> |    |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------------|----|
| 34,767,523    | 70,443,000    | 47,018,300    | 71,081,400    | 81,929,300    | 119,562,500   | 160,625,200   | 179,036,100        | 1  |
| 3,842,332     | 7,714,769     | 9,405,291     | 12,829,244    | 18,246,375    | 28,422,859    | 41,644,380    | 45,832,184         | 2  |
| 2,315,171     | 1,971,121     | 2,277,202     | 753,842       | 534,710       | 323,056       | 423,434       | 408,157            | 3  |
| 6,014,055     | 6,032,765     | 16,501,478    | 4,083,713     | 2,896,537     | 1,499,123     | 1,941,942     | 1,755,548          | 4  |
| 69,829        | 88,833        | 191,299       | 269,652       | 219,541       | 158,143       | 218,098       | 320,957            | 5  |
| 2,076,477     | 2,962,010     | 12,633,389    | 9,920,900     | 7,719,974     | 5,153,508     | 7,611,844     | 10,569,302         | 6  |
| 6,585,655     | 8,144,019     | 14,363,006    | 19,846,381    | 13,862,122    | 12,249,540    | 13,732,878    | 15,792,020         | 7  |
| 5,715,532     | 10,376,548    | 71,552,037    | 49,909,870    | 35,061,689    | 25,869,296    | 28,103,970    | 33,210,237         | 8  |
| —             | 9,264,080     | 15,112,586    | 29,537,366    | 44,848,479    | 47,850,462    | 53,261,626    | 62,899,709         | 9  |
| 3,092,437     | 17,974,292    | 78,922,137    | 102,238,568   | 127,352,706   | 82,147,844    | 90,761,379    | 110,176,448        | 10 |
| 84,368,425    | 257,019,215   | 482,140,444   | 606,058,672   | 292,280,037   | 220,233,097   | 242,801,877   | 340,450,628        | 11 |
| 69,093,263    | 133,375,083   | 188,859,937   | 190,975,417   | 83,714,772    | 86,848,144    | 100,932,110   | 133,940,776        | 12 |
| 1,818,931     | 15,097,691    | 18,783,884    | 8,940,046     | 6,504,182     | 7,523,144     | 10,273,697    | 12,830,212         | 13 |
| 56,334,695    | 83,116,282    | 284,561,478   | 278,674,960   | 230,604,474   | 180,932,709   | 181,831,743   | 223,918,476        | 14 |
| 9,884,346     | 66,127,099    | 76,500,741    | 74,735,077    | 38,937,661    | 40,736,038    | 52,368,057    | 53,173,175         | 15 |
| 34,000,996    | 66,036,542    | 45,939,377    | 102,688,026   | 95,652,063    | 191,345,386   | 212,547,372   | 230,152,314        | 16 |
| 10,085,493    | 12,090,973    | 40,345,345    | 24,712,584    | 21,107,780    | 15,654,323    | 19,083,643    | 20,081,028         | 17 |
| 3,088,840     | 15,961,226    | 20,142,826    | 17,354,889    | 12,825,852    | 15,270,064    | 19,018,931    | 19,237,697         | 18 |
| 5,088,564     | 87,780,627    | 32,380,669    | 16,428,376    | 18,115,846    | 12,083,020    | 13,113,527    | 15,397,600         | 19 |
| 274,316,553   | 741,610,638   | 1,189,163,701 | 1,320,568,147 | 799,742,667   | 756,625,925   | 849,030,417   | 1,061,181,906      | 20 |
| 79,214,041    | 95,421,161    | 250,431,110   | 203,417,431   | 177,597,464   | 109,418,595   | 110,342,532   | 131,400,217        | 21 |
| 30,671,908    | 38,657,514    | 61,722,300    | 49,185,558    | 45,995,756    | 19,957,477    | 24,314,220    | 27,863,224         | 22 |
| 87,416,282    | 96,191,485    | 243,008,342   | 184,761,831   | 130,717,022   | 81,798,280    | 89,814,164    | 104,811,304        | 23 |
| 26,851,936    | 18,277,420    | 57,449,384    | 40,403,096    | 46,073,843    | 21,199,687    | 23,271,631    | 28,927,720         | 24 |
| 91,968,180    | 92,005,895    | 245,625,703   | 181,196,800   | 192,614,200   | 100,066,145   | 114,253,715   | 150,239,139        | 25 |
| 27,579,572    | 29,431,592    | 55,651,319    | 47,692,985    | 61,809,296    | 28,496,629    | 33,655,919    | 37,037,954         | 26 |
| 53,430,475    | 53,490,284    | 206,095,113   | 139,033,940   | 153,578,658   | 102,428,037   | 105,421,236   | 116,948,261        | 27 |
| 12,471,730    | 19,217,505    | 37,887,449    | 28,404,276    | 35,650,772    | 28,872,053    | 29,919,921    | 33,108,448         | 28 |
| 42,620,479    | 65,448,278    | 72,688,072    | 53,232,315    | 62,486,182    | 30,204,250    | 31,695,725    | 41,542,290         | 29 |
| 452,724,603   | 508,201,134   | 1,240,158,882 | 927,328,732   | 906,612,695   | 522,431,153   | 562,719,063   | 671,875,566        | 30 |
| 25,400        | 36,985        | 39,192        | 40,350        | 42,280        | 42,916        | 42,552        | —                  | 31 |
| 1,528,689,201 | 1,893,125,774 | 2,164,687,636 | 3,506,758,047 | 4,232,022,088 | 4,400,264,309 | 4,487,005,510 | —                  | 32 |
| 37,097,718    | 43,503,459    | 46,793,251    | 42,686,166    | 26,396,512    | 20,031,839    | 20,497,616    | —                  | 33 |
| 79,834,282    | 89,237,156    | 83,730,829    | 106,221,906   | 74,129,694    | 69,141,100    | 75,845,569    | —                  | 34 |
| 188,733,494   | 201,885,654   | 458,005,891   | 493,599,754   | 358,549,882   | 310,107,155   | 334,708,557   | —                  | 35 |
| 131,034,785   | 180,542,259   | 422,531,205   | 369,508,462   | 321,025,585   | 269,942,899   | 283,345,968   | —                  | 36 |
| 1,224         | 1,674         | 1,680         | 1,677         | 1,379         | 1,268         | 1,247         | —                  | 37 |
| 111,532,347   | 154,895,584   | 177,187,436   | 215,808,520   | 215,818,096   | 207,191,039   | 205,062,353   | —                  | 38 |
| 426,296,792   | 580,094,167   | 719,305,441   | 748,710,826   | 720,468,361   | 600,728,313   | 614,890,897   | —                  | 39 |
| 1,228,362     | 1,936,674     | 2,282,292     | 3,489,183     | 1,977,441     | 2,057,897     | 2,205,023     | —                  | 40 |
| 20,356,952    | 27,416,285    | 44,536,832    | 51,723,199    | 49,088,310    | 40,442,320    | 41,391,927    | —                  | 41 |
| 12,090,134    | 18,099,906    | 35,945,316    | 36,453,709    | 35,367,068    | 28,009,013    | 28,807,311    | —                  | 42 |
| —             | —             | —             | 378,269       | 378,094       | 410,808       | 410,448       | —                  | 43 |
| —             | —             | —             | —             | 66,250,229    | 42,438,560    | 34,966,916    | —                  | 44 |
| 21,783        | 128,328       | 464,805       | 832,268       | 1,200,668     | 1,176,116     | 1,240,124     | 1,319,702          | 45 |
| —             | —             | —             | 21,795,184    | 42,231,027    | 54,623,623    | 61,026,358    | —                  | 46 |
| 304,904       | 263,648       | 230,129       | 197,561       | 126,633       | 56,473        | 59,855        | 67,334             | 47 |
| 38,030,353    | 23,553,491    | 9,407,021     | 13,477,063    | 16,189,074    | 18,209,989    | 21,468,916    | 23,351,000         | 48 |

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<sup>1</sup> Revised since the publication of the 1937 Year Book.

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

|    | Item.                                     | 1871.       | 1881.       | 1891.       | 1901.       | 1906.       |
|----|---|-------------|-------------|-------------|-------------|-------------|
|    | <b>Shipping—</b>                          |             |             |             |             |             |
| 1  | Vessels on the registry..... No. ton      | —           | 7,394       | 7,015       | 6,687       | 7,516       |
|    |   |             | 1,310,896   | 1,005,475   | 606,270     | 665,415     |
|    | <b>Sea-Going—</b>                         |             |             |             |             |             |
| 2  | Entered..... ton                          | 2,591,573   | 4,032,946   | 5,273,935   | 7,514,732   | 8,505,353   |
| 3  | Cleared..... ton                          | 2,594,460   | 4,071,391   | 5,421,261   | 7,028,330   | 7,948,076   |
| 4  | Totals..... ton                           | 5,116,033   | 8,104,337   | 10,695,196  | 14,543,062  | 16,443,429  |
|    | <b>Inland International—</b>              |             |             |             |             |             |
| 5  | Entered..... ton                          | 4,055,198   | 2,934,503   | 4,098,434   | 5,720,575   | 9,352,633   |
| 6  | Cleared..... ton                          | 3,954,707   | 2,768,502   | 4,009,018   | 5,766,171   | 8,536,090   |
| 7  | Totals..... ton                           | 8,009,995   | 5,698,095   | 8,107,452   | 11,486,746  | 17,888,743  |
|    | <b>Coastwise—</b>                         |             |             |             |             |             |
| 8  | Entered..... ton                          | —           | 7,664,863   | 12,835,774  | 17,927,959  | 23,543,604  |
| 9  | Cleared..... ton                          | —           | 7,451,903   | 12,150,356  | 16,516,837  | 22,780,458  |
| 10 | Totals..... ton                           | —           | 15,116,766  | 25,986,130  | 34,444,796  | 46,324,062  |
|    | <b>Air Transportation—</b>                |             |             |             |             |             |
| 11 | Mileage flown.....                        | —           | —           | —           | —           | —           |
| 12 | Passenger miles..... No.                  | —           | —           | —           | —           | —           |
| 13 | Freight carried..... lb.                  | —           | —           | —           | —           | —           |
| 14 | Mail carried..... ton                     | —           | —           | —           | —           | —           |
|    | <b>Communications—</b>                    |             |             |             |             |             |
|    | <b>Telegraphs—</b>                        |             |             |             |             |             |
| 15 | Government, miles of line.... No.         | —           | 1,947       | 2,699       | 5,744       | 6,829       |
| 16 | Other, miles of line..... ton             | —           | —           | 27,856      | 30,194      | 31,506      |
|    | <b>Telephones—</b>                        |             |             |             |             |             |
| 17 | Numbers.....                              | —           | —           | —           | 63,192      | —           |
| 18 | Pole line mileage.....                    | —           | —           | —           | 14,108      | —           |
| 19 | Employees..... No.                        | —           | —           | —           | —           | —           |
|    | <b>Radio—</b>                             |             |             |             |             |             |
| 20 | Receiving sets..... No.                   | —           | —           | —           | —           | —           |
|    | <b>Post Office—</b>                       |             |             |             |             |             |
| 21 | Revenue..... \$                           | 803,637     | 1,344,970   | 2,515,824   | 3,421,192   | 5,933,342   |
| 22 | Expenditure..... \$                       | 994,876     | 1,376,658   | 3,101,676   | 3,837,370   | 4,921,577   |
| 23 | Money orders issued..... \$               | 4,540,434   | 7,725,212   | 12,478,175  | 17,950,268  | 37,355,673  |
|    | <b>Dominion Finance—</b>                  |             |             |             |             |             |
| 24 | Customs revenue..... \$                   | 11,841,105  | 18,406,092  | 23,305,218  | 28,293,930  | 46,053,377  |
| 25 | Excise revenue..... \$                    | 4,265,945   | 5,343,022   | 6,014,550   | 10,318,266  | 14,010,220  |
| 26 | War tax revenue..... \$                   | —           | —           | —           | —           | —           |
| 27 | Income tax..... \$                        | —           | —           | —           | —           | —           |
| 28 | Sales tax..... \$                         | —           | —           | —           | —           | —           |
| 29 | Total receipts from taxation..... \$      | 16,820,369  | 23,942,139  | 30,220,068  | 38,612,196  | 60,063,597  |
| 30 | Per capita receipts from taxation..... \$ | 4.42        | 5.54        | 6.25        | 7.19        | 9.69        |
| 31 | Total revenue..... \$                     | 19,335,561  | 29,635,298  | 38,579,311  | 52,514,701  | 80,139,360  |
| 32 | Revenue per capita..... \$                | 5.24        | 6.85        | 7.95        | 9.78        | 13.93       |
| 33 | Total expenditure..... \$                 | 19,263,475  | 33,790,645  | 40,798,205  | 57,982,805  | 83,277,042  |
| 34 | Expenditure per capita..... \$            | 5.23        | 7.83        | 8.44        | 10.79       | 13.44       |
| 35 | Gross debt..... \$                        | 115,492,683 | 199,861,537 | 298,899,230 | 354,732,433 | 392,269,680 |
| 36 | Assets..... \$                            | 37,786,165  | 44,465,757  | 52,090,199  | 86,252,429  | 125,226,703 |
|    | Net Debt..... \$                          | 77,706,518  | 155,395,780 | 237,809,031 | 268,480,004 | 267,042,977 |
|    | <b>Provincial Finance—</b>                |             |             |             |             |             |
| 37 | Revenue, Ordinary, Totals..... \$         | 5,518,946   | 7,858,698   | 10,603,615  | 14,074,991  | 23,027,122  |
| 38 | Expenditure, Ordinary, Totals..... \$     | 4,925,008   | 8,119,701   | 11,628,363  | 14,146,059  | 21,169,803  |
|    | <b>Note Circulation—</b>                  |             |             |             |             |             |
| 39 | Bank notes..... \$                        | 20,914,637  | 28,516,662  | 33,061,042  | 50,601,205  | 70,638,870  |
| 40 | Dominion or Bank of Canada notes..... \$  | 7,244,341   | 14,539,795  | 16,176,316  | 27,898,509  | 49,941,426  |

<sup>1</sup> The figures for 1937 are subject to revision.

<sup>2</sup> As at June 30.

<sup>3</sup> Excluding United States lines of Canadian National Telegraphs.

<sup>4</sup> Excluding employees on rural lines in Saskatchewan.

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

| 1911.                              | 1916.                              | 1921.                    | 1926.                    | 1931.                    | 1935.                    | 1938.                    | 1937. <sup>1</sup>       |    |
|------------------------------------|------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----|
| 8,088                              | 8,659                              | 7,482                    | 8,193                    | 8,966                    | 8,894                    | 9,373                    | -                        | 1  |
| 770,440                            | 943,131                            | 1,223,973                | 1,348,965                | 1,484,423                | 1,389,343                | 1,307,071                | -                        |    |
| 11,919,339                         | 12,616,927                         | 12,516,503               | 22,837,720               | 28,064,762               | 28,512,257               | 28,895,751               | 31,145,065               | 2  |
| 10,377,847                         | 12,210,723                         | 12,400,226               | 22,817,270               | 26,535,387               | 28,547,591               | 29,156,876               | 31,802,948               | 3  |
| 22,297,186                         | 24,827,650                         | 24,916,729               | 45,654,996               | 54,600,149               | 57,069,848               | 58,062,627               | 62,948,011               | 4  |
| 13,286,102                         | 16,486,778                         | 14,828,454               | 14,117,099               | 17,709,090               | 14,772,884               | 14,472,022               | 15,564,121               | 5  |
| 11,846,257                         | 16,406,670                         | 14,903,447               | 15,474,782               | 18,542,037               | 14,602,087               | 14,998,858               | 16,074,614               | 6  |
| 25,132,359                         | 32,893,448                         | 29,731,901               | 29,591,831               | 80,311,727               | 29,374,971               | 29,470,880               | 31,688,735               | 7  |
| 34,230,669                         | 35,624,074                         | 25,567,545               | 41,770,480               | 47,134,652               | 43,146,037               | 42,979,361               | 45,973,830               | 8  |
| 32,347,265                         | 33,085,350                         | 27,773,668               | 41,117,175               | 47,540,555               | 42,827,149               | 41,815,610               | 45,447,342               | 9  |
| 66,627,934                         | 68,709,424                         | 56,341,213               | 82,887,655               | 94,675,207               | 85,973,186               | 84,794,977               | 91,421,172               | 10 |
| -                                  | -                                  | 294,449                  | 383,103                  | 7,046,270                | 7,522,102                | 7,100,401 <sup>1</sup>   | 9,339,743                | 11 |
| -                                  | -                                  | -                        | 631,715                  | 4,073,552                | 7,936,950                | 11,272,716 <sup>1</sup>  | 14,744,384               | 12 |
| -                                  | -                                  | 79,850                   | 724,721                  | 2,372,467                | 26,439,224               | 25,387,719               | 26,226,200               | 13 |
| -                                  | -                                  | -                        | 3,900                    | 470,461                  | 1,126,084                | 1,107,060                | 1,221,869                | 14 |
| 8,446                              | 10,699                             | 11,207                   | 10,722                   | 9,300                    | 8,884                    | 8,893                    | -                        | 15 |
| 33,905                             | 38,552                             | 41,577                   | 42,239 <sup>1</sup>      | 43,928                   | 44,150                   | 44,014                   | -                        | 16 |
| 302,750 <sup>1</sup>               | 548,421 <sup>1</sup>               | 902,090                  | 1,201,008                | 1,364,200                | 1,208,815                | 1,266,228                | -                        | 17 |
| -                                  | -                                  | 178,093                  | 201,604                  | 222,196                  | 207,916                  | 210,926                  | -                        | 18 |
| 10,425 <sup>1</sup> , <sup>4</sup> | 15,247 <sup>1</sup> , <sup>4</sup> | 10,943 <sup>4</sup>      | 23,083 <sup>4</sup>      | 23,825 <sup>4</sup>      | 17,414 <sup>4</sup>      | 17,776 <sup>4</sup>      | -                        | 19 |
| -                                  | -                                  | -                        | 134,436                  | 523,100                  | 812,335                  | 862,109                  | 1,088,500                | 20 |
| 9,140,952                          | 13,858,410                         | 26,331,119               | 31,024,464               | 30,416,106               | 31,248,324               | 32,507,883               | 34,274,552               | 21 |
| 7,954,223                          | 16,009,139                         | 24,561,262               | 30,499,636               | 36,202,603               | 28,974,316               | 30,100,102               | 30,638,675               | 22 |
| 70,614,862                         | 94,469,871                         | 173,523,822              | 177,840,231              | 167,749,651              | 114,832,065              | 121,810,839              | 133,155,222              | 23 |
| 71,838,089                         | 98,617,695                         | 163,266,804              | 127,355,144              | 131,208,955              | 76,561,975               | 74,004,580               | 83,771,091               | 24 |
| 16,869,837                         | 22,428,492                         | 37,118,367               | 42,923,549               | 57,746,808               | 43,189,655               | 44,406,797               | 45,956,857               | 25 |
| -                                  | 3,620,782                          | 168,335,327              | 157,296,320              | 107,320,633              | 181,118,715              | 197,434,627              | 256,822,921              | 26 |
| -                                  | -                                  | 49,381,324               | 55,571,962               | 71,049,022               | 66,508,006               | 82,709,508               | 102,345,242              | 27 |
| -                                  | -                                  | 35,114,539               | 74,025,093               | 20,783,944               | 72,447,311               | 77,551,974               | 112,835,250              | 28 |
| 88,707,926                         | 124,666,969                        | 368,770,498              | 327,575,013              | 296,276,396              | 304,443,729              | 317,311,809              | 336,550,869              | 29 |
| 12-31                              | 15-58                              | 41-96                    | 34-66                    | 28-55                    | 27-84                    | 28-77                    | 34-76                    | 30 |
| 117,780,409                        | 172,147,838                        | 436,292,185              | 382,893,099              | 356,160,876              | 361,871,929              | 372,595,996              | 454,153,747              | 31 |
| 18-34                              | 21-22                              | 49-64                    | 40-52                    | 34-32                    | 33-09                    | 33-79                    | 40-84                    | 32 |
| 122,861,250                        | 339,702,502                        | 528,302,513              | 355,188,423              | 440,008,855              | 478,004,747              | 532,585,555              | 532,006,432              | 33 |
| 17-04                              | 42-46                              | 60-11                    | 37-59                    | 42-41                    | 43-71                    | 48-29                    | 47-84                    | 34 |
| 474,941,487                        | 936,987,802                        | 2,902,482,117            | 2,768,779,184            | 2,610,265,698            | 3,205,956,369            | 3,431,044,027            | 3,542,521,139            | 35 |
| 134,899,435                        | 321,831,631                        | 561,603,133 <sup>1</sup> | 379,048,085 <sup>1</sup> | 348,653,702 <sup>1</sup> | 350,845,411 <sup>1</sup> | 425,843,509 <sup>1</sup> | 458,568,937 <sup>1</sup> | 36 |
| 340,042,052                        | 615,156,171                        | 2,340,878,984            | 2,389,731,098            | 2,261,611,937            | 2,846,110,958            | 3,006,100,517            | 3,058,952,202            |    |
| 40,706,948                         | 50,015,795                         | 102,030,458              | 146,450,904              | 179,143,480              | 160,567,695              | 232,616,182              | -                        | 37 |
| 38,144,511                         | 53,826,219                         | 102,569,515              | 144,183,178              | 190,754,202              | 181,175,686              | 248,141,805              | -                        | 38 |
| 89,982,223                         | 126,691,913                        | 194,621,710              | 168,885,995              | 141,969,350              | 125,644,102              | 119,507,306              | 110,259,134              | 39 |
| 99,921,354                         | 176,816,006                        | 271,531,162              | 190,004,824              | 153,079,362              | 127,335,340              | 106,275,223              | 141,053,457              | 40 |

<sup>1</sup> Active assets only.<sup>2</sup> As at June 30 from 1871 to 1906.

Monthly averages from 1911 to 1937.

<sup>3</sup> Revised since the publication of the 1937 Year Book.

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

| Item.  | 1871.       | 1881.       | 1891.       | 1901.         | 1906.         |
|--|-------------|-------------|-------------|---------------|---------------|
| <b>Chartered Banks—</b>  |             |             |             |               |               |
| 1 Capital, paid-up..... \$                                       | 37,095,340  | 59,534,977  | 60,700,697  | 67,035,615    | 91,035,604    |
| 2 Assets..... \$   | 125,273,621 | 200,613,879 | 209,307,032 | 531,829,324   | 578,512,076   |
| 3 Liabilities to the public..... \$                              | 80,250,974  | 127,176,249 | 187,332,325 | 420,003,743   | 713,700,553   |
| 4 Deposits payable on demand..... \$                             | —           | —           | —           | 95,169,631    | 165,134,509   |
| 5 Deposits payable after notice..... \$                          | —           | —           | —           | 291,624,064   | 381,778,705   |
| 6 Totals, Deposits..... \$                                       | 56,287,391  | 94,346,481  | 148,396,968 | 249,573,327   | 605,968,513   |
| <b>Savings Banks—</b>  |             |             |             |               |               |
| 7 Deposits in Post Office..... \$                                | 2,497,260   | 6,208,227   | 21,738,648  | 39,850,813    | 45,736,488    |
| 8 Deposits in Government Banks..... \$                           | 2,072,037   | 9,638,445   | 17,061,373  | 16,093,146    | 16,174,134    |
| 9 Deposits in Special Banks..... \$                              | 5,766,712   | 7,685,858   | 10,982,332  | 19,125,097    | 27,399,194    |
| <b>Loan Companies—<sup>1</sup></b>                               |             |             |             |               |               |
| 10 Assets..... \$  | 8,392,404   | 73,906,638  | 125,041,140 | 158,523,307   | 232,076,447   |
| 11 Liabilities..... \$   | 8,392,958   | 71,965,017  | 123,015,704 | 158,523,307   | 232,076,447   |
| 12 Deposits..... \$  | 2,399,136   | 13,460,268  | 18,482,959  | 20,756,910    | 23,046,194    |
| <b>Trust Companies—</b>  |             |             |             |               |               |
| 13 Shareholders' assets..... \$                                  | —           | —           | —           | —             | —             |
| 14 Trust funds, liabilities..... \$                              | —           | —           | —           | —             | —             |
| <b>Dominion Fire Insurance—</b>                                  |             |             |             |               |               |
| 15 Amounts at risk, Dec. 31..... \$                              | 228,453,784 | 462,210,968 | 759,602,191 | 1,038,687,619 | 1,443,902,244 |
| 16 Premium income for each year..... \$                          | 2,321,716   | 3,827,116   | 6,163,716   | 9,650,348     | 14,687,963    |
| 17 Losses paid during each year..... \$                          | 1,549,199   | 3,169,824   | 3,906,697   | 6,774,956     | 6,584,291     |
| <b>Provincial Fire Insurance—</b>                                |             |             |             |               |               |
| 18 Amounts at risk, Dec. 31..... \$                              | —           | —           | —           | —             | —             |
| 19 Premium income for each year..... \$                          | —           | —           | —           | —             | —             |
| 20 Losses paid during each year..... \$                          | —           | —           | —           | —             | —             |
| <b>Dominion Life Insurance—<sup>2</sup></b>                      |             |             |             |               |               |
| 21 Amounts at risk, Dec. 31..... \$                              | 45,825,935  | 103,290,632 | 261,475,229 | 463,769,034   | 656,260,900   |
| 22 Premium income for each year..... \$                          | 1,852,974   | 3,094,659   | 8,417,702   | 15,189,854    | 22,364,456    |
| 23 Net amount of policies become claims during each year..... \$ | —           | —           | —           | 7,182,358     | 8,881,776     |
| <b>Provincial Life Insurance—</b>                                |             |             |             |               |               |
| 24 Amounts at risk, Dec. 31..... \$                              | —           | —           | —           | —             | —             |
| 25 Premium income for year..... \$                               | —           | —           | —           | —             | —             |
| 26 Net amount of premiums become claims during each year..... \$ | —           | —           | —           | —             | —             |
| <b>Business Transacted—</b>                                      |             |             |             |               |               |
| 27 Bank clearings..... \$'000                                    | —           | —           | 580,644     | 1,871,092     | 3,950,701     |
| 28 Bank debits..... "  | —           | —           | —           | —             | —             |
| <b>Commercial Failures.....</b>                                  | No.         | —           | 1,561       | 1,341         | 1,134         |
| 29 Assets..... \$  | —           | —           | —           | 7,685,828     | 6,499,052     |
| 30 Liabilities..... \$   | —           | —           | 16,723,939  | 10,511,671    | 9,085,773     |
| <b>Education (Provincially Controlled Schools only)—</b>         |             |             |             |               |               |
| 32 Enrolment..... No.  | 803,000     | 891,000     | 993,000     | 1,092,633     | 1,173,099     |
| 33 Averages of daily attendance..... "                           | —           | —           | —           | 668,000       | 743,299       |
| 34 Teachers..... \$  | 13,559      | 18,016      | 23,718      | 27,126        | 32,250        |
| 35 Public expenditures on..... "                                 | —           | —           | —           | 11,044,925    | 16,368,244    |
| <b>Criminal Statistics—<sup>3</sup></b>                          |             |             |             |               |               |
| 36 Convictions, criminal offences..... No.                       | —           | 7,378       | 8,600       | 9,074         | 14,363        |
| 37 Convictions, minor offences..... "                            | —           | 21,847      | 29,017      | 32,174        | 50,540        |
| <b>Hospitals—</b>  |             |             |             |               |               |
| 38 Other than mental..... No.                                    | —           | —           | —           | —             | —             |
| 39 Patients under treatment during year..... "                   | —           | —           | —           | —             | —             |
| 40 Bed capacity..... "   | —           | —           | —           | —             | —             |
| 41 Mental..... "   | —           | —           | —           | —             | —             |
| 42 Patients under treatment during year..... "                   | —           | —           | —           | —             | —             |
| 43 Receipts..... \$  | —           | —           | —           | —             | —             |
| 44 Expenditures..... \$  | —           | —           | —           | —             | —             |

<sup>1</sup> The figures for 1937 are subject to revision.<sup>2</sup> Including amounts deposited elsewhere than in Canada from 1901.<sup>3</sup> Included in Post Office savings banks.<sup>4</sup> Including Building Societies and Trust Companies (1871-1911).<sup>5</sup> Revised since the publication of the 1937 Year Book.<sup>6</sup> Figures do not include fraternal insurance.<sup>7</sup> These figures are for 1924, the first year for which bank debits are available.<sup>8</sup> Includes Newfoundland.<sup>9</sup> Year ended Sept. 30.

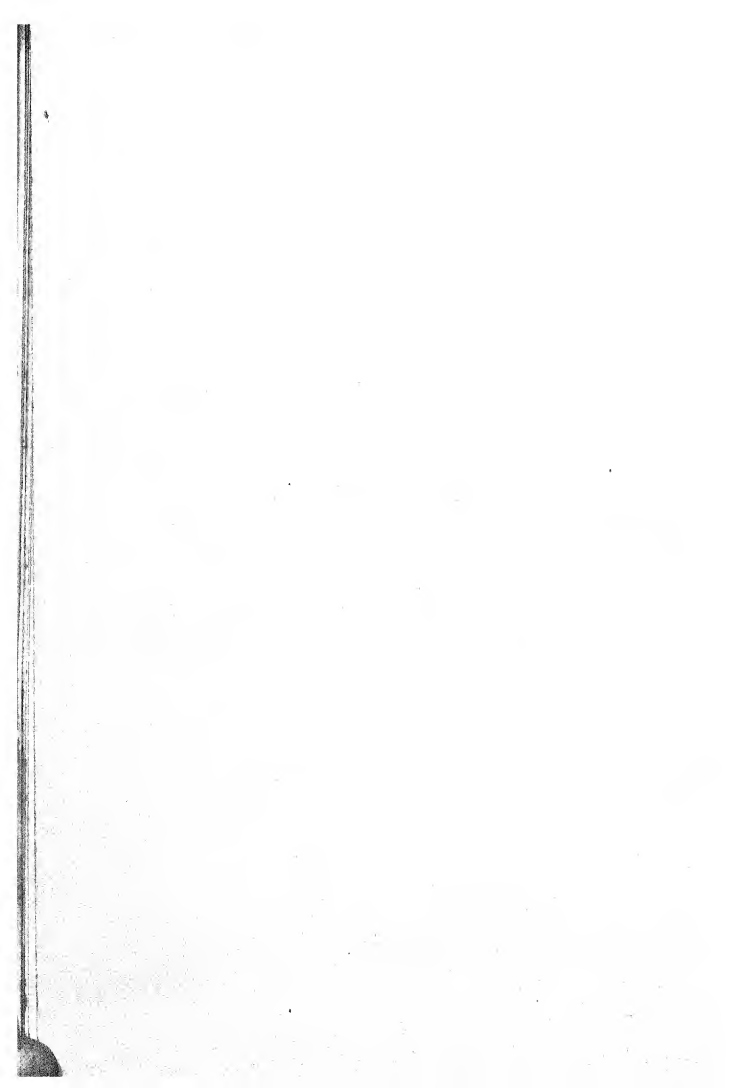
## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—concluded.

| 1911.         | 1916.                    | 1921.                   | 1926.                    | 1931.                    | 1935.                    | 1936.         | 1937. <sup>1</sup> |    |
|---------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|---------------|--------------------|----|
| 103,009,256   | 113,175,353              | 129,096,339             | 116,638,254              | 144,674,853              | 145,500,000              | 145,500,000   | 145,500,000        | 1  |
| 1,303,131,260 | 1,839,289,709            | 2,841,782,079           | 2,864,019,213            | 3,066,018,472            | 2,956,577,704            | 3,144,506,755 | 3,317,087,132      | 2  |
| 1,037,661,393 | 1,596,905,337            | 2,556,454,190           | 2,604,601,786            | 2,741,554,219            | 2,667,950,352            | 2,855,622,232 | 3,025,721,653      | 3  |
| 304,801,755   | 428,717,781              | 551,914,643             | 553,322,935              | 578,604,394              | 568,615,373              | 618,340,501   | 691,319,545        | 4  |
| 508,976,209   | 780,842,383              | 1,289,347,063           | 1,340,550,021            | 1,437,976,749            | 1,445,281,247            | 1,518,216,945 | 1,573,654,555      | 5  |
| 980,433,788   | 1,418,035,429            | 2,264,586,736           | 2,277,192,043            | 2,422,834,828            | 2,426,760,923            | 2,614,895,597 | 2,775,530,413      | 6  |
| 43,330,579    | 40,008,418               | 29,010,619              | 24,035,669               | 24,750,227               | 22,547,006               | 22,047,287    | 21,879,593         | 7  |
| 14,673,752    | 13,519,855               | 10,150,189              | 8,794,870                | 8,230,422                | 66,496,595               | 69,665,415    | 73,450,133         | 8  |
| 34,770,386    | 40,405,037               | 58,576,775              | 67,241,344               | 147,094,183 <sup>a</sup> | 137,994,145 <sup>a</sup> | 137,210,511   | -                  | 10 |
| 389,701,988   | 70,872,297               | 96,698,810              | 120,321,065              | 146,046,087 <sup>a</sup> | 137,882,873 <sup>a</sup> | 137,199,814   | -                  | 11 |
| 389,701,988   | 70,872,297               | 95,281,122              | 119,425,417 <sup>a</sup> | 30,823,662               | 26,556,302               | 26,250,954    | -                  | 12 |
| 33,742,513    | 8,987,720                | 15,868,926              | 21,316,150               | 15,459,347               | 15,970,893               | 16,374,553    | -                  | 13 |
| -             | 7,794,712                | 10,237,930              | 13,195,277               | 241,416,690              | 277,351,701              | 261,481,061   | -                  | 14 |
| -             | 47,182,220               | 87,802,281              | 157,750,647              | 9,544,641,293            | 8,782,008,099            | 9,248,273,260 | 9,773,599,893      | 15 |
| 2,279,898,846 | 3,720,058,236            | 6,020,513,832           | 8,051,444,136            | 50,342,609               | 40,884,870               | 40,318,290    | 42,475,604         | 16 |
| 20,575,255    | 27,783,852               | 47,312,564              | 52,595,923               | 29,938,409               | 14,821,463               | 14,072,257    | 14,811,659         | 17 |
| 10,950,948    | 16,114,063               | 27,572,560              | 26,705,975               | 1,341,184,333            | 1,044,028,953            | 1,184,852,046 | -                  | 18 |
| -             | 849,915,678 <sup>b</sup> | 1,209,704,435           | 1,266,255,476            | 7,185,066                | 5,250,638                | 5,002,603     | -                  | 19 |
| -             | 3,902,504                | 5,545,549               | 6,068,701                | 4,985,005                | 2,413,000                | 2,190,624     | -                  | 20 |
| -             | 2,188,458                | 3,544,820               | 3,062,946                | 6,622,267,793            | 6,250,138,404            | 6,403,037,477 | 6,542,786,202      | 21 |
| 950,220,771   | 1,422,179,032            | 2,934,843,848           | 4,610,196,334            | 225,100,571              | 200,157,567              | 200,541,205   | 199,093,260        | 22 |
| 31,619,626    | 48,093,105               | 98,864,371              | 159,872,965              | 54,410,589               | 53,798,438               | 58,068,634    | 60,379,142         | 23 |
| 11,434,901    | 20,259,534               | 24,014,465              | 34,642,526               | 162,437,144              | 130,044,228              | -             | -                  | 24 |
| -             | 348,097,229              | 222,871,178             | 147,821,972              | 5,173,615                | 4,140,599                | 3,025,124     | -                  | 25 |
| -             | 5,311,003                | 4,389,008               | 3,991,126                | 2,938,097                | 2,938,097                | 2,195,587     | -                  | 26 |
| -             | 4,592,420                | 2,812,077               | 1,741,735                | 16,827,603               | 16,927,486               | 19,202,527    | 18,850,385         | 27 |
| 7,346,382     | 10,315,854               | 16,811,287              | 17,715,090               | 31,586,468               | 31,546,068               | 35,923,607    | 35,166,061         | 28 |
| -             | -                        | 27,157,474 <sup>c</sup> | 30,358,034               | 2,563 <sup>a</sup>       | 1,367                    | 1,238         | 952                | 29 |
| 1,332         | 1,685 <sup>a</sup>       | 2,451 <sup>a</sup>      | 2,196 <sup>a</sup>       | 37,613,810 <sup>a</sup>  | 9,014,000                | 7,000,000     | 4,813,000          | 30 |
| 9,904,404     | 19,670,542 <sup>a</sup>  | 57,158,397 <sup>a</sup> | 25,668,509 <sup>a</sup>  | 52,937,554 <sup>a</sup>  | 13,064,000               | 11,314,000    | 7,426,000          | 31 |
| 13,491,196    | 25,069,534 <sup>a</sup>  | 73,299,111 <sup>a</sup> | 37,682,882 <sup>a</sup>  | -                        | -                        | -             | -                  | 32 |
| 1,361,205     | 1,626,144                | 1,880,805               | 2,085,473                | 2,264,106                | 2,195,823                | -             | -                  | 33 |
| 870,532       | 1,118,522                | 1,349,256               | 1,564,830                | 1,801,955                | 1,857,256                | -             | -                  | 34 |
| 40,510        | 50,307                   | 56,607                  | 63,840                   | 71,246                   | 73,921                   | -             | -                  | 35 |
| 37,971,374    | 57,362,734               | 112,976,543             | 122,701,259              | 144,748,823              | 111,569,326              | -             | -                  | 36 |
| 10,547        | 23,282                   | 24,946                  | 27,036                   | 44,064                   | 43,759                   | 45,594        | -                  | 37 |
| 93,713        | 100,509                  | 152,227                 | 169,171                  | 323,024                  | 360,093                  | 375,381       | -                  | 38 |
| -             | -                        | -                       | -                        | 822                      | 906                      | 903           | -                  | 39 |
| -             | -                        | -                       | -                        | 688,456                  | 815,568                  | 877,945       | -                  | 40 |
| -             | -                        | -                       | -                        | 55,285                   | 65,802                   | 66,489        | -                  | 41 |
| -             | -                        | -                       | -                        | 56                       | 56                       | 57            | -                  | 42 |
| -             | -                        | -                       | -                        | 40,485                   | 50,734                   | 53,320        | -                  | 43 |
| -             | -                        | -                       | -                        | -                        | 10,940,797               | 14,300,952    | -                  | 44 |
| -             | -                        | -                       | -                        | -                        | 10,968,882               | 14,222,138    | -                  | 45 |

## NOTE.

In the foregoing Summary, the statistics of fisheries (1871-1916), trade, shipping, the Post Office, the public debt, revenue and expenditure and the Post Office and Government savings banks relate to the fiscal years ended June 30 up to 1909; subsequently to years ended Mar. 31. Agricultural, dairying, fisheries (from 1922), mineral, manufacturing, banking, insurance, loan and trust companies, construction, road transportation, vital, hospital, and immigration statistics relate to the calendar years and railway statistics to the years ended June 30, 1871-1916, and to the calendar years 1921 and 1923-37. Canal statistics are those of the navigation seasons. The telegraph statistics relate to the fiscal years for Government lines and to the calendar years for other lines.





## CHAPTER I.—PHYSIOGRAPHY.

### PART I.—GEOGRAPHICAL FEATURES.\*

**Situation.**—The Dominion of Canada comprises the whole northern part of the North American continent with its islands, except the United States territory of Alaska and the territory of Newfoundland (which includes Labrador). It takes in the whole Arctic archipelago between Davis strait and the connecting waters northward to the 60th meridian on the east and the 141st meridian on the west.

The Dominion is bounded on the west by the Pacific ocean and Alaska; on the south by the United States; on the east by the Atlantic ocean, the waters between Newfoundland and the Gulf of the St. Lawrence, Labrador, Davis strait, and the dividing waters between the Danish territory of Greenland and Ellesmere island; northward it extends to the North Pole.

The southernmost point is Middle island in lake Erie, in north latitude  $41^{\circ}41'$ , and from east to west Canada extends from about west longitude  $57^{\circ}$  at Belle Isle strait to west longitude  $141^{\circ}$ , the boundary of Alaska. Canadian territory thus extends over  $84^{\circ}$  of longitude and  $48^{\circ}$  of latitude.

**Area.**—The area of the Dominion is 3,694,863 square miles, a figure which may be compared with that of 3,738,395 square miles for the United States and its dependent territories, 3,776,700 the total area of Europe, 2,974,581 the total area of Australia, 3,275,510 the area of Brazil, 1,805,252 the area of India, 121,633 the area of the British Isles. Canada's area is over 27 p.c. of the total area of the British Empire as it is shown on page 165 of the 1934-35 Year Book.

**Political Subdivisions.**—Canada is divided from east to west into the following provinces: the Maritime Provinces of Nova Scotia, Prince Edward Island, and New Brunswick, all three comparatively small in area; Quebec, covering a strip south of the St. Lawrence river and the whole territory north of the St. Lawrence river and east of the Ottawa river to Hudson strait, except the coast of Labrador; Ontario, extending northward from the Great Lakes to Hudson bay; Manitoba, Saskatchewan, and Alberta, the provinces of the interior continental plain, extending from the boundary of the United States to  $60^{\circ}$  north latitude; and British Columbia, the province of the Cordilleran region, also extending from the International Boundary to  $60^{\circ}$ N. North of the area included in the provinces the country is divided into the Yukon Territory to the west, abutting on Alaska, and the Northwest Territories. The latter is subdivided into three provisional districts: that of Mackenzie comprises the mainland between Yukon and the meridian of longitude  $102^{\circ}$ W.; the district of Keewatin comprises in general the remainder of the mainland between the district of Mackenzie and Hudson bay, and includes the off-shore islands in Hudson and James bays; the district of Franklin comprises in general the Arctic archipelago.

**Prince Edward Island.**—This, the smallest province of the Dominion, lies just off the coast east of New Brunswick and north of Nova Scotia from both of which it is separated by Northumberland strait from ten to twenty-five miles wide. It is about 120 miles in length and, with an average width of 20 miles, covers an area of 2,184 square miles, approximately 200 square miles more than the State of Delaware. The island is almost trisected by the deep indentations of Malpeque bay north of Summerside and by the mouth of the Hillsborough river at Charlottetown, which nearly meets Tracadie bay on the north side. Its rich, red soil and red sandstone formations are distinctive features, and no point on the island attains a greater

\*Revised by F. H. Peters, Surveyor General and Chief, Hydrographic Service, Department of Mines and Resources, Ottawa.

altitude than about 450 feet above sea-level. Its climate, tempered by the surrounding waters of the gulf and yet free from the rigours of Atlantic storms, combined with a fertile soil and sheltered harbours, offers great inducements to the pursuits of agriculture and fishing. The province is noted for its relative predominance in the fox-farming industry, its lobster canneries, its oyster beds, and its production of seed potatoes.

*Nova Scotia.*—The province of Nova Scotia is 381 miles in length by from 50 to 105 miles in width, a long, narrow strip of land lying parallel to the Maine and New Brunswick coasts and joined to the latter province by the isthmus of Chignecto, which is 15 miles in width. It includes to the north the island of Cape Breton, which is separated from the mainland by the narrow strait of Canso. The total area of the province is 21,068 square miles, a little over 2,000 square miles less than the combined areas of Belgium and Holland. Cape Breton island, south of the main entrance to the gulf of St. Lawrence and sheltering Prince Edward island from the Atlantic, is roughly 100 miles in length with an extreme breadth of 87 miles. Its area of 3,970 square miles encloses the salt-water lakes of Bras d'Or, connected with the sea at the north by two natural channels and at the south by the St. Peters ship canal. The ridge of low mountainous country running through the centre of the Nova Scotia mainland, the highest altitude of which is less than 1,500 feet, divides it roughly into two slopes. That facing the Atlantic is generally rocky and open to the sweep of Atlantic storms, but the other, facing the bay of Fundy and Northumberland strait, consists for the most part of fertile plains and river valleys noted for general farming and for fruit-farming districts which produce the famous Nova Scotia apples. The Atlantic coast is deeply indented with numerous excellent harbours, many of which provided splendid homes and refuges for the old sail fishing fleets. The province is still the home of an extensive fishing industry. The mineral resources of Nova Scotia were among the first in the Dominion to be exploited as some of its coal deposits outcropped on the sea-coast. These valuable coal measures make Nova Scotia still one of the chief coal-producing provinces of the Dominion. In addition, there are extensive areas of gold-bearing formations and valuable deposits of gypsum.

*New Brunswick.*—With a total area of 27,985 square miles, New Brunswick may be compared in size to Scotland with its area of 30,405 square miles. The province is very compact and in shape nearly rectangular, with its depth not greatly exceeding its width. The conformation is in general undulating and of low relief. In the southeastern half of the province the ground elevation does not generally exceed 500 feet above sea-level except for a narrow strip in the south which produces the highlands bordering the bay of Fundy east of Saint John. In the northwestern half the ground elevation is in general from 500 to 1,000 feet above sea-level and reaches its greatest elevation of about 2,690 feet in Northumberland county north-east of Grand Falls. The St. John, rising in the sister province of Quebec and the bordering State of Maine, is a river with many distinctive beauties, while its length of nearly 400 miles makes it quite noteworthy as to size. In the northeastern half of the province there are very extensive areas of Crown lands still carrying valuable stands of merchantable timber. The bay of Chaleur at the north, the gulf of St. Lawrence and Northumberland strait at the east, the bay of Fundy at the south, and Passamaquoddy bay at the southwest, provide the province with a very extensive sea-coast. To its southwest is a group of islands belonging to the province, the most important of which are Grand Manan, Campobello, and the West Isles. New Brunswick has been called the best watered country in the world; numerous rivers

provide access to extensive lumbering areas in its interior and to many of the most attractive hunting and fishing resorts in the Dominion. While its forest resources are an important economic feature, extensive areas of rich agricultural lands are found in the river valleys and the broad plains near the coasts. The Minto coal-fields, though producing on a limited scale for many years, have shown an expanding tendency recently and the province also produces a limited quantity of petroleum and natural gas.

*Quebec.*—Quebec might well be included among the Maritime Provinces, for with the St. Lawrence river, the gulf of St. Lawrence, the Atlantic, Hudson strait and bay, salt water washes the coasts of the province for a length of over 2,700 miles. Besides including a narrow strip of land between the St. Lawrence and the International and New Brunswick boundaries, Quebec extends northward from the St. Lawrence and Ottawa rivers to Labrador and Hudson strait, covering over 17° of latitude and an area of 594,534 square miles, about 38 p.c. of which lies south of the isotherm of 60° F. mean July temperature.\* The combined areas of France, Germany, and Spain are about 2,600 square miles less than the area of Quebec. The conformity of the surface of Quebec is in general that characteristic of the Precambrian rocks, being quite even in general but much diversified by minor hills and hollows. North of the St. Lawrence the land takes the form of a ridge, parallel to the river and rising from sea-level to the Height of Land at an elevation of from 1,000 to 3,000 feet and then descending gently again to the sea-level of Hudson bay to the northwest; but to the northeast the ridge carries its height to end abruptly in the high headlands of Labrador. South of the river, the area is comprised of the St. Lawrence Lowlands between Montreal and Quebec which, rising to the east, produce the highest known elevation in the province, *viz.*, 4,160 feet, that of Jacques Cartier peak of Tabletop mountain in the Gaspé peninsula. With the exception of the treeless zone extending somewhat south of Ungava bay, most of the province supports a valuable tree growth varying from the mixed forest in the southwest to the eastern and northern coniferous in the areas of higher latitude. Apart from its importance as the threshold of Canada and the Atlantic gateway through which ocean vessels must pass on their way to the interior of the continent, Quebec is also noted for its natural resources. The extensive timber limits of its northern areas form the basis for the great pulp and paper industry of the present and the future. Its rivers, many of them as yet comparatively unknown, may be harnessed to supply about two-fifths of the electric power available in Canada. Its asbestos deposits have long been known for their quality and extent, while more recently there have been extensive developments of deposits of gold and copper in the northwestern part of the province, with further discoveries extending the mineralized area into the Chibougamau district. These developments have brought the province up to third place in mineral production in Canada. The fisheries of the St. Lawrence river and gulf are well known. Agriculturally, the climate and soil of the upper St. Lawrence River valley and the plains of the Eastern Townships are eminently adapted to general farming operations.

*Ontario.*—The province of Ontario is the section of the Dominion contained between the great international lakes and Hudson bay and between the western boundary of Quebec and the eastern limits of Manitoba. Although generally regarded as an inland province, Ontario has a fresh-water shore line on the Great Lakes of more than 2,362 miles and on the north a salt-water shore line of about 680 miles with a tidal port at Moosonee at the southern end of James bay. The

\* The isotherm of 60° F. mean July temperature is generally considered as the northern limit for the economic production of cereals.

southernmost point of Ontario, which is also the southernmost point of the Dominion, is in north latitude  $41^{\circ} 41'$ —a little further south than the northern boundary of the State of California—and its most northern, in north latitude  $56^{\circ} 50'$ . The total area comprised within its limits, of which about 82 p.c. lies south of the isotherm of  $60^{\circ}$  F. mean July temperature,\* is 412,582 square miles, of which its fresh-water area of 49,300 square miles forms the unusually large proportion of 12 p.c. The province is over 17,000 square miles greater in area than are France and Germany together, and when compared with the States to the south, Ontario is found to be almost equal in extent to the combined areas of the six New England States, together with New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, and Wisconsin. Excepting in the southwestern part, the surface conformity of Ontario is influenced by the characteristics of the Precambrian rocks. In northern Ontario a large area with elevations of 1,000 feet or over adjoins the north shore of the Great Lakes and going north a short distance over the Height of Land the slope descends very gently to Hudson bay, which has a wide marginal strip less than 500 feet above sea-level. The highest point in Ontario is 2,120 feet, on the promontory at the northeastern corner of lake Superior. The whole province supports a valuable covering of trees, varying, from south to north, from the mixed forest to the eastern and northern coniferous. Many varieties of climate and soil are encountered, from the distinctively southern conditions found along the shores of lake Erie to the very different ones of Hudson and James bays. Ontario, of all the provinces, is the centre of the country's manufacturing industries, owing to its abundant water-power resources and its proximity to the coalfields of Pennsylvania, but the many resources of its rural districts are not on this account neglected. Mining is a very important industry in the wide-spread Precambrian area and, although the most important districts are Sudbury, Porcupine, and Kirkland Lake, profitable mining operations, principally of gold, are now being carried on from the Manitoba boundary eastward across northern Ontario and down into eastern Ontario. There is also an important production of petroleum and natural gas, salt, and gypsum in the southwestern part of the province. Fruit farming in the Niagara district and general farming throughout the entire southern part of the province are carried on extensively under unusually favourable conditions, while timber, pulp, and furs are other important products of more northern parts.

*Manitoba.*—Manitoba, the most easterly of the Prairie Provinces, and also the oldest of them in point of settlement, includes the area between Ontario on the east and Saskatchewan on the west. Its southerly limit is the International Boundary, while its northerly boundary is the 60th parallel of latitude and Hudson bay, where its coast of over 400 miles includes the harbour and port of Churchill. The total area of Manitoba, of which about 56 p.c. lies south of the isotherm of  $60^{\circ}$  F. mean July temperature,\* is 246,512 square miles—3,246 square miles greater than twice the total area of the British Isles. The conformity of the surface of Manitoba is quite even; commencing on the north with a strip bordering on Hudson bay—perhaps 100 miles wide and less than 500 feet in elevation—the surface rises gradually towards the west and south. The bulk of the province has an elevation of between 500 and 1,000 feet, and the greatest height of 2,727 feet is attained in Duck mountain, north-west of lake Dauphin. East and north of lake Winnipeg the Canadian Shield is found with its Precambrian rock formation, but the remainder of the province is overlain by very fertile soil of great depth. The treeless prairie belt extends into the southwest corner of the province, but the greater portion of the developed area is in the grove belt, characterized by groves of poplar interspersed with open prairie

\* See footnote, p. 3.

patches; to the north there are great areas of northern mixed forest, blending into the northern coniferous, which thin again to some treeless areas along the coast-line farther north. The province has been regarded as typically agricultural, its southern lands being specially adapted to this form of industry. Its northern districts, however, are of importance in the production of timber and furs and its numerous large lakes in the production of fresh-water fish, chiefly whitefish. About three-fifths of the area of this province is underlain by the Precambrian rocks which have been found so rich in minerals in northern Ontario and Quebec. Two large deposits of copper-gold-zinc ore have been developed, south of the Churchill river near the Manitoba-Saskatchewan boundary, while to the east and north of lake Winnipeg recent years have witnessed great activity in the prospecting and development of gold properties, a number of which are now producing. The province also possesses important water-power resources in the rivers of the Precambrian area.

*Saskatchewan.*—This central prairie province lies between Manitoba and Alberta; it extends from the International Boundary on the south to the 60th parallel of latitude, which divides it from the Northwest Territories. The area, of which about 89 p.c. lies south of the isotherm of 60° F. mean July temperature,\* is 251,700 square miles, approximating that of Manitoba, and greater by 5,000 square miles than the combined areas of the British Isles and Norway. Approximately one-third of the total area, generally lying north of the Churchill river, is underlain by the Precambrian rocks which have been found so richly mineralized in other parts of Canada. The Flinflon copper-gold-zinc deposit on the Manitoba-Saskatchewan boundary is an evidence of economic mineralization in the east, while in the Lake Athabaska region of the northwest promising discoveries of gold have been made recently. The northern districts, abundantly watered by lakes and rivers, in addition to potential mineral wealth, are rich in timber resources while the southerly two-thirds of the province overlain by generally fertile soil of great depth includes a large portion of the famous western wheat fields. The larger part of the developed area in the south is comprised in the great treeless prairie belt, fringed to the north with a zone of poplar interspersed with open prairie, which gradually changes into the northern mixed forest covering all the northerly parts. Apart from the southern prairies, which are extraordinarily smooth, the surface topography is generally of low relief with a gradually rising slope towards the west. The bulk of the province has a general elevation of between 1,000 and 2,000 feet, with the maximum elevation of about 4,500 feet on the eastern point of the Cypress hills in the southwest corner. The climate in the southern parts is quite different from that of Eastern Canada, with less precipitation and perhaps more severe features than are encountered in many other parts of the country, but is nevertheless most favourable to plant growth, when sufficient moisture is available.

*Alberta.*—Lying between Saskatchewan on the east and the Rocky mountains and the 120th meridian on the west, and bounded on the north and south by the Northwest Territories and the United States, respectively, is the province of Alberta. Its area is slightly greater than that of Saskatchewan or Manitoba, comprising a total of 255,285 square miles, of which about 90 p.c. lies south of the isotherm of 60° F. mean July temperature.\* The area of the province is over 8,600 square miles greater than the combined areas of the British Isles and Norway. Like Saskatchewan, the southern part of the province is comprised in the dry, treeless prairie belt, changing to the north into a zone of poplar interspersed with open prairie, which again gives way to the northern mixed forest covering the northerly parts. The

\* See footnote, p. 3.

Precambrian rocks just touch Alberta at its northeast corner, so that, excepting the fringe of mountainous country on its western border, practically the whole of the province is overlain by arable soil of great depth. Alberta has two marked features: (1) the great valley of the Peace river, which has already resulted in the extension of settlement farther north than in any other part of Canada, and (2) the wonderful grazing lands in the foothills district, which, rising sharply on the west, commence the ascent which continues to the very peaks of the Rocky mountains. The southern half of the province, rising towards the west, lies at a general elevation of from 2,000 to 4,000 feet; but in the northern half the slope descends until elevations of well under 1,000 feet are reached at lake Athabaska in the northeast corner. Mount Columbia, with an elevation of 12,294 feet, is the highest point in the province. Alberta has the most extensive coal resources of any province of the Dominion and has also become the leading producer of petroleum and natural gas. Lumbering is important in the more mountainous western parts and in the north, while ranching is still pursued in the less populous sections. In the southern prairies there are considerable areas where the quantity and distribution of the natural precipitation makes permanent agriculture precarious and in these areas a number of large irrigation projects have been developed, taking their water supply from rivers rising in the mountains which form the western boundary of the province. The climate of Alberta is a particularly pleasant one, cooler in summer than more eastern parts of the country and tempered in winter by the "Chinook" winds.

*British Columbia.*—British Columbia, the most westerly province of the Dominion, comprises an area of 366,255 square miles, slightly more than three times the area of the British Isles. The predominant feature of the province is the parallel ranges of mountains which cover all of it except the northeast corner and produce a conformation characterized by high mountain ranges interspaced with valleys, many of which are extremely fertile, with climatic conditions well adapted to mixed agriculture or fruit growing. Apart from the smoother area in the northeast corner which extends up from the "Peace River Block" there is another notably large area of smoother terrain in the Stuart Lake district, traversed by the Canadian National railway running west from Fort George to Prince Rupert. The highest point in the province is mount Fairweather (15,287 feet). The shore line of the Pacific is deeply indented with many inlets ideal for harbourage and with wonderful scenic aspects. With two ocean ports served by transcontinental railways, British Columbia is well situated and equipped to carry on trade with the Orient, while its great stands of fir, spruce, and cedar timber constitute a natural resource of great value. The province includes many islands of the Pacific, notably the Queen Charlotte group and Vancouver island; the latter, with an area of about 12,408 square miles, is noted for its temperate climate and abundant natural resources. The wealth of the forest resources supports the lumbering and pulp and paper industries and puts British Columbia ahead of any other province in the production of lumber and timber. The province also excels in fishery products, chiefly on account of its catches of the famous Pacific salmon. The mineral resources are remarkable for their variety and wealth. The production of the metals, gold, copper, silver, lead, and zinc, has played an important role in the economic life of the province since its early days, while valuable coal deposits on Vancouver island, and at Crow's Nest and Fernie in the interior, have been worked for many years. The boundaries of the province extend from Alberta on the east to the Pacific ocean and Alaska on the west, and from the International Boundary northward to Yukon.

*Yukon and Northwest Territories.*—The vast area of 1,516,758 square miles is included within the boundaries of Canada's northern subdivisions, the Yukon Territory and the three provisional districts of the Northwest Territories. This is over twelve times the area of the British Isles, nearly half the area of the United States, and more than the combined areas of the Argentine Republic and Chile in South America. The northern territories are as yet, in parts, unexplored, but travel and transport by air is having a great influence in their further exploration and development. By means of aeroplane photography, the mapping of areas adjacent to the chief transportation routes and mineral discoveries is being rapidly extended. There are many widely scattered indications of mineral wealth in these territories. The discovery of alluvial gold in the Yukon was the cause of the first opening up of that territory, which of late years has been producing coal for local requirements and exporting silver and lead, as well as gold. The presence of copper deposits in the Coppermine River area has been known for many years and recent exploration substantiates their probable eventual worth. More recently, at the east end of Great Bear lake, rich deposits of silver-radium ore have been discovered and are now being mined. Oil wells which have been drilled at Norman on the Mackenzie river are providing a source of power for the mining and transportation activities, as well as a convenient fuel for the increasing number of residents in the district. Promising gold prospects have been located in the Great Slave Lake area. Because a large portion lies within the Arctic circle, the tendency has been to associate with the Northwest Territories thoughts of ice and snow but as our knowledge is increased the argument steadily gains more weight that what have been regarded in the past as the great "barren lands" of the northern mainland, are more appropriately described as our great northern prairies.

Development of the resources of, and communications in, the Northwest Territories and Yukon are dealt with in Chapter XXVIII, Subsection 1 of Section 1.

**Summary of Land and Water Area.**—The total land and fresh-water areas of the Dominion, together with its distribution by provinces and territories, are shown in Table 1.

1.—Land and Fresh-Water Areas of Canada, by Provinces and Territories, 1937.<sup>1</sup>

| Province or Territory.    | Land. <sup>2</sup> | Fresh Water. <sup>2</sup> | Total. <sup>2</sup> | Per Cent of Total Area. |
|---------------------------|--------------------|---------------------------|---------------------|-------------------------|
|                           | sq. miles.         | sq. miles.                | sq. miles.          |                         |
| Prince Edward Island..... | 2,184              | —                         | 2,184               | 0.1                     |
| Nova Scotia.....          | 20,743             | 325                       | 21,068              | 0.6                     |
| New Brunswick.....        | 27,473             | 512                       | 27,985              | 0.8                     |
| Quebec.....               | 523,534            | 71,000                    | 594,534             | 16.1                    |
| Ontario.....              | 363,282            | 49,300                    | 412,582             | 11.1                    |
| Manitoba.....             | 219,723            | 26,789                    | 246,512             | 6.7                     |
| Saskatchewan.....         | 237,075            | 13,725                    | 251,700             | 6.8                     |
| Alberta.....              | 249,800            | 6,485                     | 256,285             | 6.9                     |
| British Columbia.....     | 359,279            | 6,976                     | 366,255             | 9.9                     |
| Yukon.....                | 205,346            | 1,730                     | 207,076             | 5.6                     |
| Northwest Territories—    |                    |                           |                     |                         |
| Franklin.....             | 540,532            | 7,500                     | 554,032             | 15.0                    |
| Keewatin.....             | 218,400            | 9,700                     | 228,100             | 6.2                     |
| Mackenzie.....            | 493,225            | 34,265                    | 527,490             | 14.2                    |
| <b>Canada.....</b>        | <b>3,466,556</b>   | <b>223,307</b>            | <b>3,694,563</b>    | <b>100.0</b>            |

<sup>1</sup> The salt-water areas of Canada are excluded.

<sup>2</sup> Approximate.



## Section 1.—Orography.

The outstanding and predominant orographical feature in Canada is the great Cordilleran mountain system which, extending up from the south, parallels the coast of the Pacific ocean, and, continuing on, comprises the bulk of the United States territory of Alaska. Throughout Canada this mountain system has a width of about four hundred miles and, covering about 530,000 square miles in area, includes nearly all of British Columbia and Yukon. This region is definitely the most rugged and elevated in the Dominion, many of the summits reaching heights of 10,000 feet with occasional peaks over 13,000 feet above sea-level. The principal named peaks exceeding 11,000 feet in elevation are given in Table 2. The main mountain ranges forming the system are the Coast mountains and the St. Elias mountains on the Pacific side, the Selkirks and the Rockies on the east side of the system to the south, and further north on the east side the Stikine and the Mackenzie mountains. This great mountainous tract is a formidable barrier between the ocean and the interior of Western Canada; by precipitating a great part of the moisture out of the winds coming from the Pacific, it has a marked effect on the climate of the western country. On the west side, the Cordilleras are drained by mountain streams pitching swiftly down to the Pacific. The Yukon territory is drained to the north by that remarkable river of the same name which runs through a wide valley over 1,700 miles long before reaching the Bering sea. On the east side of the mountains and their foothills, the land slopes gently away to the east and to the north.

## 2.—Mountain Peaks over 11,000 Feet in Elevation, with Latitude and Longitude.

NOTE.—The highest mountain in Eastern Canada, with the exception of the Torngats in Labrador, peaks of which rise to about 5,500 feet, is Tabletop mountain (recently re-named Mount Jacques Cartier by the Geographic Board of Canada) in N. lat. 48°59', W. long. 65°55', Gaspé district, Quebec, the summit of which is 4,160 feet above sea-level.

| Province and Mountain Peak.    | Elevation.       | N. Lat. |    | W. Long. |    | Range.     |
|--------------------------------|------------------|---------|----|----------|----|------------|
|                                | ft.              | °       | '  | °        | '  |            |
| <b>Alberta—</b>                |                  |         |    |          |    |            |
| Alberta.....                   | 11,874           | 52      | 14 | 117      | 36 | Rocky mts. |
| Alexandra <sup>1</sup> .....   | 11,214           | 51      | 59 | 117      | 12 | "          |
| Assiniboine <sup>1</sup> ..... | 11,570           | 50      | 59 | 115      | 42 | "          |
| Athabaska.....                 | 11,452           | 52      | 07 | 117      | 11 | "          |
| Coleman.....                   | 11,000           | 52      | 06 | 116      | 55 | "          |
| Columbia <sup>1</sup> .....    | 12,294           | 52      | 09 | 117      | 27 | "          |
| Deltaform <sup>1</sup> .....   | 11,235           | 51      | 18 | 116      | 15 | "          |
| Diadem.....                    | 11,060           | 52      | 19 | 117      | 00 | "          |
| Forbes.....                    | 11,802           | 51      | 48 | 116      | 59 | "          |
| Fryatt.....                    | 11,026           | 52      | 33 | 117      | 64 | "          |
| Hector.....                    | 11,135           | 51      | 34 | 116      | 15 | "          |
| Hungabee <sup>1</sup> .....    | 11,457           | 51      | 20 | 116      | 17 | "          |
| Joffre <sup>1</sup> .....      | 11,316           | 50      | 32 | 115      | 12 | "          |
| King Edward <sup>1</sup> ..... | 11,400           | 52      | 10 | 117      | 30 | "          |
| Kitchener.....                 | 11,600           | 52      | 13 | 117      | 19 | "          |
| Lyall <sup>1</sup> .....       | 11,495           | 51      | 58 | 117      | 06 | "          |
| Lefroy <sup>1</sup> .....      | 11,230           | 51      | 22 | 116      | 17 | "          |
| Lurette <sup>1</sup> .....     | 11,150           | 50      | 52 | 115      | 39 | "          |
| Sir Douglas <sup>1</sup> ..... | 11,174           | 50      | 43 | 115      | 20 | "          |
| Snow Dome <sup>1</sup> .....   | 11,340           | 52      | 11 | 117      | 19 | "          |
| Stutfield.....                 | 11,320           | 52      | 15 | 117      | 29 | "          |
| Temple.....                    | 11,636           | 51      | 21 | 116      | 15 | "          |
| The Twins.....                 | 11,675<br>12,085 | 52      | 13 | 117      | 12 | "          |
| Victoria <sup>1</sup> .....    | 11,365           | 51      | 23 | 116      | 18 | "          |
| Wilson.....                    | 11,000           | 51      | 58 | 116      | 45 | "          |
| Woolley.....                   | 11,170           | 52      | 18 | 117      | 25 | "          |

<sup>1</sup> This peak is on the interprovincial boundary between Alberta and British Columbia.

## 2.—Mountain Peaks over 11,000 Feet in Elevation, with Latitude and Longitude—con.

| Province and Mountain Peak. | Elevation. | N. Lat. | W. Long. | Range.         |
|-----------------------------|------------|---------|----------|----------------|
|                             | ft.        | ° ' "   | ° ' "    |                |
| <b>British Columbia—</b>    |            |         |          |                |
| Bush.....                   | 11,000     | 54 00   | 120 15   | Rocky mts.     |
| Bryce.....                  | 11,507     | 52 03   | 117 30   | "              |
| Clemenceau.....             | 12,001     | 53 3    | 117 3    | "              |
| Chown.....                  | 11,500     | 53 26   | 119 26   | "              |
| Delphine.....               | 11,076     | 50 28   | 116 25   | Selkirk mts.   |
| Fairweather.....            | 15,287     | 58 54   | 137 31   | St. Elias mts. |
| Farnham.....                | 11,342     | 50 29   | 116 27   | Selkirk mts.   |
| Goodsir.....                | 11,676     | 51 12   | 116 24   | Rocky mts.     |
| Hasler.....                 | 11,113     | 51 09   | 117 25   | Selkirk mts.   |
| Huber.....                  | 11,051     | 51 22   | 116 18   | "              |
| Jumbo.....                  | 11,217     | 50 24   | 116 32   | Rocky mts.     |
| King George.....            | 11,226     | 50 36   | 115 24   | "              |
| Resplendent.....            | 11,240     | 53 05   | 119 07   | "              |
| Robson.....                 | 12,972     | 53 07   | 119 08   | "              |
| Root.....                   | 12,860     | 58 59   | 137 30   | St. Elias mts. |
| Selwyn.....                 | 11,013     | 51 09   | 117 24   | Selkirk mts.   |
| Sir Alexander.....          | 11,000     | 54 00   | 120 15   | Rocky mts.     |
| Sir Sandford.....           | 11,590     | 51 39   | 117 52   | Selkirk mts.   |
| The Helmet.....             | 11,160     | 51 11   | 116 20   | Rocky mts.     |
| Waddington.....             | 13,260     | 51 23   | 125 16   | Coast mts.     |
| Whitehorn.....              | 11,101     | 53 03   | 119 16   | Rocky mts.     |
| <b>Yukon—</b>               |            |         |          |                |
| Alverstone.....             | 14,500     | 60 21   | 139 02   | St. Elias mts. |
| Augusta.....                | 14,070     | 60 18   | 140 28   | "              |
| Baird.....                  | 11,375     | 60 19   | 140 31   | "              |
| Badham.....                 | 12,625     | 60 38   | 139 47   | "              |
| Cook.....                   | 13,760     | 60 10   | 139 59   | "              |
| Craig.....                  | 13,250     | 61 16   | 140 53   | "              |
| Hubbard.....                | 14,950     | 61 16   | 140 53   | "              |
| Jeannette.....              | 11,700     | 60 20   | 140 43   | "              |
| King.....                   | 17,130     | 60 35   | 140 39   | "              |
| Logan.....                  | 10,850     | 60 35   | 140 21   | "              |
| Lucania.....                | 17,150     | 61 01   | 140 28   | "              |
| Malaspina.....              | 15,150     | 60 19   | 140 42   | "              |
| McArthur.....               | 14,400     | 60 36   | 140 13   | "              |
| Newton.....                 | 13,811     | 60 19   | 140 52   | "              |
| St. Elias.....              | 13,003     | 60 18   | 140 57   | "              |
| Steels.....                 | 16,438     | 61 06   | 140 19   | "              |
| Strickland.....             | 13,813     | 61 14   | 140 45   | "              |
| Vancouver.....              | 15,090     | 60 21   | 139 42   | "              |
| Walsh.....                  | 14,493     | 61 00   | 140 00   | "              |
| Wood.....                   | 15,885     | 61 14   | 140 31   | "              |

<sup>1</sup> This peak is on the international boundary between British Columbia and Alaska. <sup>2</sup> The enumerated peaks in Yukon are on or near the Yukon-Alaska boundary. <sup>3</sup> Data not available.

The southern portion of the eastern declivity, from the Rocky mountains down to lake Winnipeg, is comprised in the Nelson River drainage emptying into Hudson bay; representing the presently settled part of Western Canada, it includes the treeless prairies and comprises the lands which, in the main, produce Canada's great wheat crops. This area is characteristically different from other parts of Canada in that any exposure of surface rock is rare. Generally, it is overlain by great depths of clay soil, through which the streams have cut themselves down into deep coulees and the rivers into deep wide valleys. Lakes of any considerable extent are infrequent and usually quite shallow; in the dry prairie section there are many places where the evaporation from the broad and shallow bodies of water is so great that they have little or no outflowage and consequently the concentration of mineral salts in the water makes it unfit for domestic use. The terrain is generally smooth or gently undulating and, from an elevation of 3,400 feet at Calgary, falls away gradually to an elevation of 800 feet around lake Winnipeg seven hundred miles to

the east. Just north of Edmonton a height of land turns the waters to flow north into the great Mackenzie river, over 2,500 miles long, whose valley with its low elevation above the sea is the outstanding feature of the Northwest Territories. In this watershed the terrain becomes less smooth with prominent elevations in the Caribou, Horn, and Franklin mountains and the clay soils of the prairies give way to more of sand and gravel. Great Slave and Great Bear lakes, each half as large again as lake Ontario and less elevated above the sea than lake Erie, are notable features; north and east of these two great lakes the country comes within the Canadian Shield\* and the rock with some shallow overburden slopes gently down to the Arctic ocean without any large uplifts to break the monotony.

Going east again, in the more northerly part there is encountered the orographical influence of Hudson bay which, indenting the continent so deeply and with rivers running in from west, south, and east, has an enormous drainage basin mainly in Manitoba, Ontario, and Quebec. Practically all of this great basin, excepting the Nelson River drainage, is included in the Canadian Shield, the surface characteristic of which is hard rock either exposed or overlain with shallow soil generally confining agriculture to the valleys or small basins. With only small areas in northeastern Quebec rising above 2,000 feet in elevation, there are no great eminences, but the surface is generally accidented by many hills and hollows with countless numbers of lakes and streams. On its west and south sides, Hudson bay is bordered by a strip of low land under 500 feet in elevation and varying in width from one to two hundred miles; in the southerly part of these flat, low lands the rock is overlain with a considerable depth of soil sometimes referred to as the clay belt of northern Ontario.

South and east of Hudson bay the predominating feature, both orographically and economically, is the very extensive depression containing the Great Lakes and the St. Lawrence river which connects them with the Atlantic ocean. The bulk of the drainage basin of the Great Lakes and the St. Lawrence lies within the limits of the Canadian Shield with the same characteristics as already described. The very important exception is the valley of the St. Lawrence river from Kingston to Quebec and the peninsula of Ontario formed by the Great Lakes which together are generally known as the St. Lawrence Lowlands, about 35,000 square miles in area. At present, containing the greater part of the population of Canada, this industrial area is of great economic importance; the climatic conditions and fertile soil combine to make it most suitable for mixed farming.

The Maritime Provinces, New Brunswick, Nova Scotia, and Prince Edward Island, together with the southeastern portion of Quebec, embrace an extension northward of the Appalachian mountains but, excepting the Notre Dame mountains of Gaspé peninsula, the comparatively low elevations are better described as hills. The whole area may be regarded as a peninsula jutting out with bold and broken coast-line to separate the gulf of St. Lawrence from the Atlantic and it is this situation that dominates the orography; with the exception of the St. John, the rivers are of no great length in their courses down to the sea. It is a beautiful country of diversified character with areas of good farm lands; the broken coast provides many good harbours and the only ocean ports open throughout the whole year that Canada possesses on the Atlantic seaboard.

\* Excepting the St. Lawrence Lowlands, the Maritime Provinces, and the Hudson Bay Lowland, the Canadian Shield embraces all of Canada east of a line commencing at Darnley bay on the Arctic coast and running south and east through Great Bear lake, Great Slave lake, lake Athabaska, lake Winnipeg, and Lake of the Woods on the International Boundary.

## Section 2.—Lakes and Rivers.

The fresh-water area of Canada is unusually large constituting over 6 p.c. of the total area of the country. The outstanding feature is the Great Lakes, details concerning which are given in Table 3.

Particularly notable are the depth of lake Superior and the shallowness of lake St. Clair and lake Erie.

### 3.—Areas, Elevations, and Depths of the Great Lakes.

| Lake.          | Length. | Breadth. | Maximum Depth. | Area.      | Elevation Above Sea-level. |
|----------------|---------|----------|----------------|------------|----------------------------|
|                | miles.  | miles.   | feet.          | sq. miles. | feet.                      |
| Superior.....  | 383     | 160      | 1,302          | 31,820     | 602-23                     |
| Michigan.....  | 321     | 118      | 923            | 22,400     | 580-77                     |
| Huron.....     | 247     | 101      | 750            | 23,010     | 580-77                     |
| St. Clair..... | 26      | 24       | 23             | 460        | 575-30                     |
| Erie.....      | 241     | 57       | 210            | 9,940      | 572-40                     |
| Ontario.....   | 193     | 53       | 774            | 7,540      | 245-88                     |

Lake Superior, with an area of 31,820 square miles, is the largest body of fresh water in the world. As the International Boundary between Canada and the United States passes through the centre of lakes Superior, Huron, St. Clair, Erie, and Ontario, only a part of the areas of these lakes given in the above statement is Canadian, while the whole of lake Michigan is within United States territory. The total length of the St. Lawrence waterway, from the head of the St. Louis river in Minnesota to Pointe-des-Monts at the entrance of the gulf of St. Lawrence, is 1,900 miles. The great obstacle to navigation on this waterway was the rise of 326 feet between lakes Ontario and Erie, which is now surmounted by the new Welland canal; the river itself dropping over the escarpment at Niagara creates perhaps the most famous waterfall in the world. The Great Lakes, with the St. Lawrence river, form the most important system of waterways on the continent and one of the world's most notable fresh-water transportation routes. In addition to the Great Lakes there are many other remarkably large lakes; the eleven following, with their areas in square miles in parentheses, are all over 1,000 square miles in area: Great Bear (11,660), Great Slave (11,170), Winnipeg (9,398), Athabaska (3,058), Reindeer (2,444), Winnipegosis (2,086), Manitoba (1,817), Dubawnt (1,600), Nipigon (1,870), Southern Indian (1,200), Lake of the Woods (1,346). Apart from these lakes, named as notable for their size, there are innumerable other lakes scattered all over that major portion of the area of Canada lying within the Canadian Shield. In an area of 6,094 square miles, accurately mapped, just south and east of lake Winnipeg, there are 3,000 lakes; in an area of 5,294 square miles, accurately mapped, southwest of Reindeer lake in Saskatchewan, there are 7,500 lakes. Table 4 gives a list of the principal lakes of Canada, by provinces, with their elevations in feet and their areas in square miles.

## 4.—Areas and Elevations of Principal Canadian Lakes, by Provinces.

NOTE.—In the case of those reservoirs and lakes for which two elevations are given, HW means high water, LW low water, and N normal level.

| Province and Lake.                                      | Elevation.           | Area.         | Province and Lake.                                    | Elevation.           | Area.         |
|---|----------------------|---------------|---|----------------------|---------------|
|   | ft.                  | square miles. |   | ft.                  | square miles. |
| <b>Nova Scotia—</b>                                     |                      |               | <b>Ontario—concluded.</b>                             |                      |               |
| Bras d'Or.....  | tidal                | 360           | Manitou, Kenora.....                                  | 1,215                | 60            |
| <b>New Brunswick—</b>                                   |                      |               | Mille Lacs, Lac des.....                              | 1,491                | 102           |
| Grand.....  | tidal                | 65            | Mimikaki.....   | 1,177                | 72            |
| <b>Quebec—</b>  |                      |               | Nipigon.....  | 852                  | 1,870         |
| Abitibi (total, 350) part.....                          | 868                  | 55            | Nipissing.....  | 643                  | 330           |
| Albanel.....  | 1,289                | 145           | Ontario (total, 7,540) part.....                      | 246                  | 3,727         |
| Baskatong (reservoir).....                              | HW 732<br>LW 677     | 109           | Rainy (total, 386) part.....                          | 1,107                | 292           |
| Bienville.....  | 1,203                | 392           | Red.....  | 1,157                | 69            |
| Burnt (Lac Brule).....                                  | 1,109                | 56            | St. Clair (total, 460) part.....                      | 575                  | 270           |
| Cabonga (reservoir) (Kakabonga).....                    | HW 1,185<br>LW 1,109 | 66            | St. Francis, river St. Lawrence (total, 85) part..... | LW 151<br>N 153      | 20            |
| Champlain (total, 360) part.....                        | 95                   | 18            | St. Joseph.....                                       | 1,219                | 187           |
| Chibougamau.....  | 1,253                | 138           | Sandy.....  | 1,190                | 270           |
| Clearwater.....   | 1,790                | 290           | Soul (reservoir).....                                 | HW 1,172<br>LW 1,156 | 416           |
| d'Iberville.....  | 1                    | 120           | Shoal (total, 114) part.....                          | 1,065                | 108           |
| Eynas.....  | 612                  | 150           | Simcoe.....   | 718                  | 230           |
| Gosland.....  | 660                  | 125           | Stout, Berens river.....                              | 1,039                | 50            |
| Indian House.....                                       | 1                    | 125           | Sturgeon, English river.....                          | 1,342                | 110           |
| Kanapiskau.....   | 1,850                | 375           | Superior (total, 31,820) part.....                    | 602                  | 11,200        |
| Kempt.....  | 1,372                | 63            | Timagami.....   | 962                  | 90            |
| Kipawa.....   | 884                  | 95            | Timiskaming (total, 110) part.....                    | HW 593<br>N 584      | 55            |
| Lower Seal.....   | 1,850                | 130           | Trout, English river.....                             | 1,204                | 156           |
| Manikougan.....   | 1                    | 110           | Trout, Severn river.....                              | 1                    | 215           |
| Manuan.....   | 1,340                | 100           | Woods, Lake of the (total, 1,346) part.....           | HW 1,062<br>LW 1,055 | 1,127         |
| Maricourt.....  | 1                    | 110           | <b>Manitoba—</b>                                      |                      |               |
| Mattagami.....  | 615                  | 38            | Athapuskow.....                                       | 951                  | 104           |
| Minto.....  | 1                    | 485           | Atikameg.....   | 855                  | 112           |
| Mistassin.....  | 1,243                | 840           | Beaverhill.....                                       | 951                  | 70            |
| Nichik.....   | 1,760                | 150           | Cedar.....  | 829                  | 537           |
| Olga.....   | 1,635                | 60            | Cormorant.....  | 840                  | 134           |
| Payne.....  | 1                    | 300           | Cross, Nelson river.....                              | 679                  | 274           |
| Pipmakan.....   | 1                    | 90            | Dauphin.....  | 853                  | 200           |
| Pietipi.....  | 1                    | 138           | Dog.....  | 815                  | 64            |
| Quinze, Lac des.....                                    | HW 867<br>N 867      | 55            | Etawnei.....  | 1                    | 546           |
| St. Francis, river S. Lawrence (total, 85) part.....    | LW 151<br>N 153      | 63            | Gode.....   | 585                  | 319           |
| St. John.....   | LW 65<br>N 67        | 375           | Goose.....  | 935                  | 53            |
| St. Louis.....  | LW 11<br>N 11        | 130           | Granville.....  | 850                  | 181           |
| Simard.....   | 856                  | 59            | Island.....   | 744                  | 550           |
| Timiskaming (total, 110) part.....                      | HW 593<br>N 584      | 55            | Kanuchawie (total, 88) part.....                      | 1,153                | 30            |
| Two Mountains.....                                      | 72                   | 63            | Kipahigan (total, 59) part.....                       | 963                  | 29            |
| Waswanipi.....  | 680                  | 75            | Kiskitogias.....                                      | 709                  | 99            |
| <b>Ontario—</b>   |                      |               | Kiskitto.....   | 696                  | 65            |
| Abitibi (total, 350) part.....                          | 868                  | 295           | Kissiasing.....                                       | 920                  | 141           |
| Dog.....  | 1,378                | 61            | Manitoba.....   | 813                  | 1,817         |
| Engle.....  | 1,192                | 137           | Molson.....   | 1                    | 154           |
| Erie (total, 9,940) part.....                           | 572                  | 5,094         | Moore.....  | 638                  | 525           |
| Huron, including Georgian bay (total, 23,010) part..... | 581                  | 13,675        | Namew (total, 79) part.....                           | 873                  | 30            |
| Kouagamie.....  | 1                    | 90            | Northern Indian.....                                  | 725                  | 150           |
| La Croix (total, 55) part.....                          | 1,181                | 25            | Nueltin (total, 336) part.....                        | 1                    | 76            |
| Long.....   | 1,025                | 75            | Oxford.....   | 612                  | 155           |
|   |                      |               | Paint.....  | 615                  | 54            |
|   |                      |               | Pelican, west of lake Winnipegosis.....               | 837                  | 80            |
|   |                      |               | Playgreen.....  | 711                  | 267           |
|   |                      |               | Red.....  | 911                  | 78            |
|   |                      |               | Red Deer, west of lake Winnipegosis.....              | 862                  | 86            |
|   |                      |               | Reindeer (total, 2,444) part.....                     | 1,150                | 386           |
|   |                      |               | St. Martin.....                                       | 798                  | 125           |
|   |                      |               | Setting.....  | 737                  | 49            |
|   |                      |               | Shoal (total, 114) part.....                          | 1,065                | 6             |

<sup>1</sup> Elevation not available.

## 4.—Areas and Elevations of Principal Canadian Lakes, by Provinces—concluded.

| Province and Lake.                          | Elevation.         | Area.         | Province and Lake.                     | Elevation. | Area.         |
|---|--------------------|---------------|--|------------|---------------|
|   | ft.                | square miles. |  | ft.        | square miles. |
| <b>Manitoba—concluded.</b>                  |                    |               | <b>British Columbia—</b>               |            |               |
| Sipiweak.....                               | 598                | 201           | Adams.....                             | 1,334      | 52            |
| Sisipuk (total, 99) part.....               | 915                | 73            | Atlin (total, 308) part.....           | 2,200      | 307           |
| Southern Indian.....                        | 800                | 1,200         | Balins.....                            | 2,330      | 194           |
| Stevenson.....                              | 1                  | 75            | Chilko.....                            | 2,342      | 75            |
| Swan.....                                   | 849                | 100           | Eutsuk.....                            | 2,317      | 96            |
| Talbot.....                                 | 845                | 72            | François.....                          | 2,345      | 91            |
| Todatara (total, 241) part.....             | 1                  | 156           | Harrison.....                          | 34         | 87            |
| Walker.....                                 | 1,121              | 62            | Kootenay.....                          | 1,741      | 168           |
| Waterhen.....                               | 829                | 90            | Kotcho (unsurveyed and estimated)..... | 1          | 90            |
| Wekusko.....                                | 840                | 64            | Lower Arrow.....                       | 1,379      | 59            |
| Winnipeg.....                               | 712                | 9,398         | Okanagan.....                          | 1,123      | 138           |
| Winnipegosis.....                           | 831                | 2,086         | Ootsa.....                             | 2,666      | 50            |
| Woods, Lake of the (total, 1,346) part..... | HW1,062<br>LW1,055 | 59            | Quesnel.....                           | 2,375      | 100           |
| <b>Saskatchewan—</b>                        |                    |               | Shuswap.....                           | 1,137      | 120           |
| Amisk.....                                  | 964                | 168           | Stuart.....                            | 2,225      | 139           |
| Athabaska (total, 3,058) part.....          | 699                | 2,165         | Tagish (total, 138) part.....          | 2,148      | 93            |
| Besnard.....                                | 1,294              | 72            | Takla.....                             | 2,270      | 102           |
| Black Birch.....                            | 1,517              | 54            | Teslin (total, 161) part.....          | 2,250      | 65            |
| Candle.....                                 | 1,620              | 56            | Upper Arrow.....                       | 1,395      | 38            |
| Canoe.....                                  | 1,415              | 73            | <b>Northwest Territories—</b>          |            |               |
| Churchill.....                              | 1,332              | 213           | Aberdeen.....                          | 130        | 475           |
| Cold (total, 136) part.....                 | 1,756              | 36            | Artillery.....                         | 1,190      | 207           |
| Cree.....                                   | 850                | 350           | Aylmer.....                            | 1,230      | 340           |
| Cumberland.....                             | 1,741              | 93            | Baker.....                             | 30         | 975           |
| Deschambault.....                           | 1,072              | 209           | Clinton-Colden.....                    | 1,228      | 253           |
| Doré.....                                   | 1,506              | 248           | Dubawnt.....                           | 500        | 1,800         |
| Île-à-la-Croix.....                         | 1,379              | 165           | Faber.....                             | 753        | 163           |
| Kamuchawie (total, 56) part.....            | 1,153              | 26            | Franklin.....                          | 1          | 175           |
| Kipahigan (total, 59) part.....             | 963                | 30            | Garry.....                             | 1          | 980           |
| La Plonge.....                              | 1,476              | 90            | Gras, Lac de.....                      | 1,300      | 345           |
| La Ronge.....                               | 1,250              | 450           | Great Bear.....                        | 391        | 11,080        |
| Last Mountain.....                          | 1,608              | 89            | Great Slave.....                       | 495        | 11,170        |
| Loche, Lac la.....                          | 1,459              | 70            | Hardisty.....                          | 999        | 107           |
| Montreal.....                               | 1,608              | 162           | Hottah.....                            | 1          | 377           |
| Nomev (total, 79) part.....                 | 873                | 71            | Kaministiquia.....                     | 320        | 380           |
| Nemebien.....                               | 1,250              | 63            | Macdougall.....                        | 1          | 285           |
| Peter Pond.....                             | 1,332              | 302           | Magase.....                            | 1          | 540           |
| Primrose (total, 181) part.....             | 1,964              | 173           | Martre, Lac la.....                    | 1          | 840           |
| Quill.....                                  | 1,704              | 236           | Mackay.....                            | 1,415      | 250           |
| Reindeer (total, 2,444) part.....           | 1,150              | 2,058         | Marian.....                            | 495        | 90            |
| Riou.....                                   | 1                  | 75            | Nueltin (total, 336) part.....         | 1          | 280           |
| Sisipuk (total, 99) part.....               | 915                | 26            | Nutawit.....                           | 1          | 350           |
| Smoothstone.....                            | 1,572              | 110           | Pelly.....                             | 1          | 331           |
| Snake.....                                  | 1,262              | 159           | Pokah.....                             | 1          | 295           |
| Tazin.....                                  | 1,130              | 156           | Rae.....                               | 748        | 74            |
| Wollaston.....                              | 1,300              | 708           | Schultz.....                           | 115        | 110           |
| <b>Alberta—</b>                             |                    |               | Thoolintob.....                        | 1          | 160           |
| Athabaska (total, 3,058) part.....          | 699                | 893           | Todatara (total, 241) part.....        | 1          | 85            |
| Beaverhill.....                             | 2,202              | 30            | Yathkyed.....                          | 300        | 860           |
| Biche, Lac la.....                          | 1,784              | 94            | <b>Yukon—</b>                          |            |               |
| Buffalo.....                                | 2,566              | 56            | Aishihik.....                          | 1          | 107           |
| Calling.....                                | 1,947              | 55            | Atlin (total, 308) part.....           | 2,200      | 1             |
| Clare.....                                  | 699                | 545           | Clune.....                             | 2,500      | 184           |
| Cold (total, 136) part.....                 | 1,756              | 100           | Kusawa.....                            | 2,565      | 56            |
| Lesser Slave.....                           | 1,893              | 461           | Laberge.....                           | 2,100      | 87            |
| Mamawi.....                                 | 690                | 64            | Tagish (total, 138) part.....          | 2,148      | 45            |
| Peerless.....                               | 2,267              | 75            | Teslin (total, 161) part.....          | 2,250      | 96            |
| Primrose (total, 181) part.....             | 1,964              | 8             |  |            |               |
| Sullivan (variable).....                    | 2,652              | 62            |  |            |               |
| Utkuma.....                                 | 2,105              | 85            |  |            |               |

1 Elevation not available.

The river systems of Canada, excluding the Arctic islands, are best studied by segregating the main drainage basins as shown in Table 5.\*

5.—Drainage Basins in Canada.

| Drainage Basin.                        | Area Drained. <sup>1</sup> | Drainage Basin.                             | Area Drained. <sup>1</sup> |
|--|----------------------------|---|----------------------------|
|  | sq. miles.                 |   | sq. miles.                 |
| <b>Atlantic Basin.</b>                 |                            | <b>Arctic Basin.</b>                        |                            |
| Atlantic or Maritime Provinces.....    | 61,151                     | Great Slave lake.....                       | 370,681                    |
| Great Lakes and St. Lawrence river.... | 359,312                    | Arctic.....                                 | 559,676                    |
| <b>Total.....</b>                      | <b>420,463</b>             | <b>Total.....</b>                           | <b>930,357</b>             |
| <b>Hudson Bay Basin.</b>               |                            | <b>Pacific Basin.</b>                       |                            |
| Northern Quebec.....                   | 343,259                    | Pacific.....                                | 273,540                    |
| Southwest Hudson bay.....              | 263,997                    | Yukon river.....                            | 127,190                    |
| Nelson river.....                      | 368,182                    | <b>Total.....</b>                           | <b>400,730</b>             |
| Western Hudson bay.....                | 353,722                    | <b>Gulf of Mexico Basin.....</b>            | <b>10,121</b>              |
| <b>Total.....</b>                      | <b>1,379,160</b>           | <b>Area, Canada Less Arctic Archipelago</b> | <b>3,140,831</b>           |

<sup>1</sup> Areas are approximate.

It is noteworthy that the greater part of the Dominion drains into Hudson bay and the Arctic ocean; the Nelson River drainage is exceptional in running *through* the most arable and the most settled part of the West, but, otherwise, the rivers run *away* from the settled areas towards the cold northern salt waters and this adversely affects their industrial utility. The Mackenzie, which drains Great Slave lake is, with its headwaters, the longest river in Canada (2,514 miles) and its valley constitutes the natural transportation route through the Northwest Territories down to the Arctic ocean. From Fort Smith, on the Slave river, large river boats run without any obstruction down to Aklavik in the delta of the Mackenzie, a distance of 1,292 miles. In Eastern Canada it is the Great Lakes and St. Lawrence drainage basin that dominates all others and has undergone the greatest development. The St. Lawrence river and the Great Lakes provide a water route from the Atlantic as far as Fort William and Port Arthur, twin cities situated on lake Superior and only 419 miles from Winnipeg, the half-way mark in distance across the Dominion. The main tributaries of the St. Lawrence all flowing south (most of which have lakes available for reservoiring), together with the main river itself, have developed and undeveloped water powers whose economic value it would be difficult to over-estimate. Apart from the plains region of the West, the rivers of Canada have a vast power potentiality well distributed over the country, as may be seen by reference to the water-power map at the beginning of Chapter XIII. Table 6 gives the lengths of the principal rivers with their tributaries classified according to the four major drainage basins.

\* Drainage basins classified according to Dominion Water and Power Bureau, Department of Mines and Resources.

## 6.—Lengths of Principal Rivers and Tributaries in Canada.

NOTE.—In this table the tributaries and sub-tributaries are indicated by indentation of the names. Thus the Ottawa and other rivers are shown as tributary to the St. Lawrence, and the Gatineau and other rivers as tributary to the Ottawa.

| River.  | Miles. | River.   | Miles. |
|---|--------|--|--------|
| <b>Flowing into the Atlantic Ocean.</b>         |        | <b>Flowing into Hudson Bay—concluded.</b>      |        |
| Natashkwan (to Labrador boundary).....          | 160    | Moose (to head of Mattagami).....              | 340    |
| Natashkwan (to head of Mattagami).....          | 270    | Mattagami.....                                 | 275    |
| Moisie.....                                     | 210    | Abitibi.....                                   | 340    |
| Marguerite.....                                 | 130    | Messinipi.....                                 | 265    |
| St. John.....                                   | 399    | Harricannaw.....                               | 250    |
| Miramichi.....                                  | 135    | Nottaway (to head of Waswanipi).....           | 400    |
| St. Lawrence (to head of St. Louis, Minn.)..... | 1,900  | Waswanipi.....                                 | 190    |
| Manikugan.....                                  | 310    | Rupert.....                                    | 380    |
| Outarde.....                                    | 270    | Pastmain.....                                  | 375    |
| Bersimis.....                                   | 240    | Port George.....                               | 520    |
| Saguenay (to head of Peribonka).....            | 405    | Great Whale.....                               | 365    |
| Peribonka.....                                  | 280    | Leaf.....                                      | 295    |
| Mistassini.....                                 | 185    | Koksoak (to head of Kanapiskau).....           | 535    |
| Ashunmuhan.....                                 | 165    | Kanapiskau.....                                | 445    |
| Chaudière.....                                  | 120    | George.....                                    | 305    |
| St. Maurice.....                                | 325    |  |        |
| Mattawin.....                                   | 100    | <b>Flowing into the Pacific Ocean.</b>         |        |
| St. Francis.....                                | 165    | Columbia (total).....                          | 1,150  |
| Richelieu.....                                  | 210    | Columbia (in Canada).....                      | 459    |
| Ottawa.....                                     | 696    | Kootenay.....                                  | 407    |
| North.....                                      | 70     | Kootenay (in Canada).....                      | 270    |
| Rouge.....                                      | 115    | Fraser.....                                    | 850    |
| North Nation.....                               | 60     | Thompson (to head of North Thompson).....      | 304    |
| du Lièvre.....                                  | 205    | North Thompson.....                            | 210    |
| Gatineau.....                                   | 240    | South Thompson (to head of Shuswap).....       | 206    |
| Coulogne.....                                   | 135    | Chilcatin.....                                 | 146    |
| Dumoine.....                                    | 80     | West Road (Blackwater).....                    | 141    |
| South Nation.....                               | 90     | Nechako.....                                   | 287    |
| Mississippi.....                                | 105    | Stuart (to head of Driftwood).....             | 258    |
| Madawaska.....                                  | 130    | Porcupine.....                                 | 525    |
| Petawawa.....                                   | 95     | Skeena.....                                    | 360    |
| Moir.....                                       | 60     | Bulkley (to head of Maxam Creek).....          | 180    |
| Trent.....                                      | 150    | Nass.....                                      | 236    |
| Grand.....                                      | 165    | Stikine.....                                   | 335    |
| Thames.....                                     | 163    | Alsek.....                                     | 260    |
| French (to head of Sturgeon).....               | 180    | Yukon (mouth to head of Nisutlin).....         | 1,765  |
| Sturgeon.....                                   | 110    | Yukon (int. boundary to head of Nisutlin)..... | 655    |
| Spanish.....                                    | 153    | Stewart.....                                   | 320    |
| Mississagi.....                                 | 140    | White.....                                     | 185    |
| Thessalon.....                                  | 40     | Pelly.....                                     | 330    |
| Nipigon (to head of Ombabika).....              | 130    | Macmillan.....                                 | 200    |
|   |        | Lewes.....                                     | 393    |
| <b>Flowing into Hudson Bay.</b>                 |        | <b>Flowing into the Arctic Ocean.</b>          |        |
| Hayes.....                                      | 300    | Anderson.....                                  | 465    |
| Nelson (to lake Winnipeg).....                  | 400    | Horton.....                                    | 275    |
| Nelson (to head of Bow).....                    | 1,600  | Mackenzie (to head of Finlay).....             | 2,514  |
| Red (to head of lake Traverse).....             | 355    | Peel.....                                      | 365    |
| Red (to head of Shesenne).....                  | 545    | Arctic Red.....                                | 230    |
| Assiniboine.....                                | 590    | Twitya.....                                    | 200    |
| Souris.....                                     | 450    | Liard.....                                     | 570    |
| Qu'Appelle.....                                 | 270    | Fort Nelson.....                               | 260    |
| Winnipeg (to head of Firesteel).....            | 475    | South Nahanni.....                             | 250    |
| English.....                                    | 330    | Petitot.....                                   | 260    |
| Saskatchewan (to head of Bow).....              | 1,205  | Athabaska.....                                 | 765    |
| North Saskatchewan.....                         | 760    | Pembina.....                                   | 210    |
| South Saskatchewan (to head of Bow).....        | 865    | Slave.....                                     | 253    |
| Bow.....  | 315    | Hay.....                                       | 350    |
| Belly.....                                      | 180    | Peace (to head of Finlay).....                 | 1,054  |
| Red Deer.....                                   | 355    | Finlay.....                                    | 250    |
| Churchill.....                                  | 1,000  | Parsnip.....                                   | 145    |
| Beaver.....                                     | 305    | Smoky.....                                     | 245    |
| Kanan.....                                      | 355    | Little Smoky.....                              | 185    |
| Dubawut.....                                    | 455    | Coppermine.....                                | 525    |
| Severn.....                                     | 420    | Back.....                                      | 605    |
| Winiek.....                                     | 295    |  |        |
| Attawapiskat.....                               | 465    |  |        |
| Albany (to head of Cat river).....              | 610    |  |        |



### Section 3.—Islands.

The islands of Canada are among its most remarkable geographic features. They include the very large group lying in the Arctic ocean, the fringe of both large and small islands off the Pacific coast, those of the Maritime Provinces and Quebec in the Atlantic ocean and the gulf of St. Lawrence, together with the islands of the Great Lakes and other inland waters. The Arctic islands are of vast extent, Baffin, Victoria, and Ellesmere, the three largest, being approximately 201,600, 80,450, and 75,024 square miles in area, respectively, but Banks, Devon, Somerset, Prince of Wales, Melville, and Axel Heiberg are each larger than Prince Edward Island; Southampton, another very large island, lies just within the wide mouth of Hudson bay. Their economic potentialities, beyond deposits of coal and other minerals, have not been fully established. The Pacific Coast islands, with the exception of Vancouver island and the Queen Charlotte group, are small and dot the western coast of British Columbia from Dixon entrance to the southern boundary of the province. Vancouver island is 285 miles long and from 40 to 80 miles broad, covering an area of about 12,408 square miles; the mountain range which forms its backbone rises again to form the Queen Charlotte islands farther north. These islands figure largely in the mining, lumbering, and fishing industries of the West, and together with the bold and deeply indented coast-line provide a region for scenic cruises rivalling those of Norway.

On the eastern coast of the Dominion are the island province of Prince Edward Island, the island of Cape Breton (an integral part of Nova Scotia), Anticosti and the Magdalen group (included in the province of Quebec), and the islands of Grand Manan and Campobello (part of the province of New Brunswick) in the bay of Fundy. Prince Edward island is 2,184 square miles in area, Cape Breton 3,970 and Anticosti of about the same extent. Fishing activities in these eastern islands are important, while agriculture on Prince Edward island and mining on Cape Breton are the chief occupations of the inhabitants.

Manitoulin island and the Georgian Bay islands in lake Huron and the Thousand Islands group in the St. Lawrence river, at its outlet from lake Ontario, are the more important islands of the inland waters.

## PART II.—GEOLOGY.

### Section 1.—Geology of Canada.\*

In the section on Orography, pp. 8-10, the physical features of Canada have been considered and the natural divisions have been briefly described. These physiographic divisions depend fundamentally on underlying differences of geological structure and hence are geomorphic ones as well as physiographic. A description of the geology of Canada hence involves an account of the geology of each of these divisions. They are shown in the map on p. 17 and include:—

(1) The Canadian Shield, a vast V-shaped area of ancient rocks surrounding Hudson bay.

(2) The St. Lawrence Region, a lowland belt bordering the St. Lawrence river and extending westward through southern Ontario to lake Huron. It is underlain chiefly by flat or gently dipping strata of Palaeozoic age.

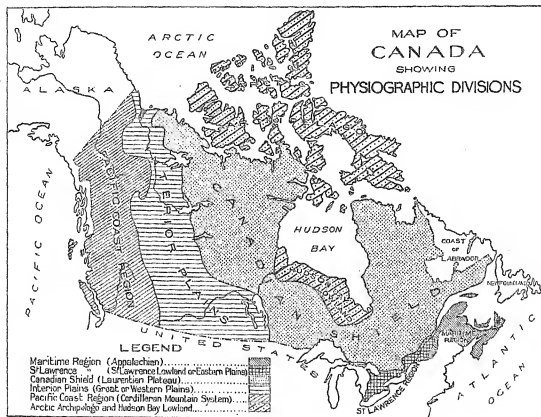
(3) The Appalachian and Acadian Regions, comprising the Maritime Provinces and most of that part of Quebec lying south of the St. Lawrence river. It is a hilly or mountainous region and is made up largely of disturbed beds.

(4) The Arctic Archipelago, with which is linked the Hudson Bay Lowland. The former includes the islands lying north of the Canadian Shield, while the latter is a broad, flat region, underlain by flat-lying Palaeozoic beds.

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(5) The Interior Plains Region of Manitoba, Saskatchewan, and Alberta, which stretches down Mackenzie valley to the Arctic ocean. It is underlain by only slightly disturbed Palaeozoic and Mesozoic strata.

(6) The Cordilleran Region, including the mountainous country of the Pacific coast which is developed on highly disturbed rocks.



The following geological time scale will assist the reader by showing the relationship of the various formations mentioned in this article to the geological map which faces p. 26.

## GEOLOGICAL TIME SCALE

| Eras.                               | Sub-Eras.          | Periods.      | Orogenies.       |
|-------------------------------------|--------------------|---------------|------------------|
| CENOZOIC.....                       | QUATERNARY.....    | Recent        | Laramide         |
|                                     |                    | Pleistocene   |                  |
|                                     | TERTIARY.....      | Pliocene      |                  |
|                                     |                    | Miocene       |                  |
| MESOZOIC.....                       |                    | Oligocene     | Coast intrusions |
|                                     |                    | Eocene        |                  |
|                                     |                    | Cretaceous    |                  |
|                                     |                    | Jurassic      |                  |
| PALAEZOIC.....                      | CARBONIFEROUS..... | Triassic      | Appalachian      |
|                                     |                    | Permian       |                  |
|                                     |                    | Pennsylvanian |                  |
|                                     |                    | Mississippian |                  |
|                                     |                    | Devonian      |                  |
|                                     |                    | Silurian      |                  |
| PROTEROZOIC (late Precambrian)..... |                    | Ordovician    | Shickshockian    |
|                                     |                    | Cambrian      |                  |
| ARCHÆAN (early Precambrian).....    |                    | Keweenaw      | Killarnean       |
|                                     |                    | Huronian      |                  |
|                                     |                    | Timiskamian   |                  |
|                                     |                    | Keewatin      | Laurentian       |

**The Canadian Shield.**—Comprising an area of nearly two million square miles, or more than one-half of the whole of Canada, this plateau-like region rises only locally to more than 1,500 or 2,000 feet above sea-level, except in Labrador where altitudes up to 5,000 feet are reached in certain places. Its most characteristic feature is its low relief. Standing anywhere on an elevation an even skyline meets the eye in every direction. Throughout most of the region the hills and ridges rise no more than 100 or 200 feet above the level of the adjacent lakes and valleys. In places, however, as locally along the southern margins of the Shield and in northeastern Quebec along the Labrador border, the relief is considerably more rugged. Though the general relief is low, the region in detail has a very irregular topography consisting of low, hummocky hills and ridges separated by depressions which are commonly occupied by lakes or muskegs. Lakes of all sizes and shapes, and containing numerous islands, dot practically the entire area, in places giving the appearance of a drowned area with only the ridge tops appearing. The rivers as a rule are mere successions of lake expansions connected by stretches in which rapids and waterfalls are numerous.

The rocks of the Shield are mainly of Precambrian age. They form a continental mass which in Precambrian time extended out in all directions beyond the present limits of the Shield. During the succeeding Palaeozoic and Mesozoic Eras the Shield was many times at least partly flooded by seas which advanced over it and later retreated. The sediments that accumulated in these seas were largely swept away by later erosion.

From the beginning of the Cambrian period on to the present, the Shield has been a stable mass. During this time it has suffered vertical movements at intervals but it has been unaffected by any folding or mountain-building deformation. Its earlier or Precambrian history, however, was very complex and included periods of volcanism, sedimentation, folding, mountain-building, and igneous intrusion, and also long intervals of quiescence in which erosion was the active process.

Precambrian time can be conveniently divided into two major divisions, the Archaean or early Precambrian and the Proterozoic or late Precambrian. The Archaean in turn falls into two subdivisions, in the earlier of which volcanism took place on a tremendous scale and lavas and tuffs, usually referred to as Keewatin, accumulated over wide areas in thicknesses measured in thousands of feet. With the volcanics are locally associated sediments, in many places altered to mica schists and gneisses. In the Rainy Lake region of western Ontario a thick succession of such sediments, known as the Couchiching series, lies below the Keewatin lavas. In northern Manitoba and Saskatchewan interbedded lavas and sediments of probably similar age are referred to as the Wekusko group. In eastern Ontario and southwestern Quebec a thick series composed of limestone, quartzite, and sedimentary gneiss, known as the Grenville series, is also usually regarded as having been deposited during this first part of the early Precambrian Era. This period was terminated by widespread but gentle folding movements accompanied by some intrusions of granite.

During the second period of the early Precambrian, a thick formation of clastic sediments was deposited. These are commonly referred to in northern Ontario and Quebec as the Timiskaming series. In northern Manitoba and Saskatchewan similar sediments apparently occupying a corresponding stratigraphic position are referred to as the Missi series. Certain series of sediments, such as the Sudbury of the

Sudbury region, the Doré at Michipicoten, the Ridout of the Woman River area, and others, are of disputed age being regarded by some geologists as Timiskamian and by others as belonging in the Keewatin. The period of Timiskamian sedimentation was succeeded by a mountain-building revolution which was accompanied by widespread intrusion of granite, commonly referred to as the Algonian batholiths. The time of the Algonian intrusions was a great mineral-forming epoch. Most of the gold ores of the Shield, and the copper-zinc sulphide replacement deposits, such as those of Noranda, Flin Flon, Sherritt-Gordon and many others, were formed at this time from mineralizers given off by these intrusives. A long period of quiescence followed in which erosion reduced the region to one of low relief.

The Proterozoic or late Precambrian included the long era during which thick series of sediments were deposited on this eroded complex of Archæan rocks. These strata are best developed in the region around lake Superior and north of lake Huron. They belong to two systems, an older known as the Huronian and a younger called the Keweenawan. North of lake Huron the Huronian strata consist of an older series called the Bruce—made up of conglomerates, quartzites, and impure dolomitic limestone, totalling in thickness up to 12,000 feet—and a younger series named the Cobalt—made up of boulder conglomerate and other materials of probable glacial origin, overlain by quartzite and slightly calcareous quartzite, the whole having a thickness up to 10,000 feet. These two series are separated by an unconformity but the time interval represented was probably not great. The beds for the most part lie with only gentle dips except on the north shore of lake Huron and eastward where they stand at high angles as a result of mountain-building movements. The Huronian rocks are intruded by dykes and sills of quartz diabase extending over wide areas of northeastern Ontario. These intrusions of what is called the Nipissing diabase attracted the silver-cobalt camp of Cobalt, and subsidiary camps. Copper is associated with this diabase in the western part of the region. The Huronian rocks are cut by masses of Killarney granite intruded during the mountain-building period at the close of the Huronian to which reference has been made, and both the Huronian sediments and the Nipissing diabase are cut by small masses of a younger granite which is rich in alkalies.

At Sudbury a series of volcanic and sedimentary rocks filling the basin of the nickel irruptive is known as the Whitewater series. It has usually been referred to as Upper Huronian. The nickel-bearing irruptive was intruded at the base of this series as a saucer-shaped sill or laccolith, 37 miles long and 17 miles wide. It differentiated from norite at the base to micropegmatite at the top. This intrusive is the source of the nickel-copper ores of the region, the deposits occurring along the outer margins of the mass or in offsets where the mass injects the surrounding rocks. Cutting all these rocks are trap and olivine diabase dykes.

North of lake Superior is a group of late Precambrian rocks which has been described under the term Kaministiquian. The group includes the Animikie series of conglomerate, iron formation, and shale; the Sibley series of conglomerate, sandstone, limestone, and tuff; and the Osler series of lavas, conglomerate, sandstone, and tuff. Strata resembling the Animikie rocks of the Lake Superior region also occur in the central part of Ungava peninsula and on the Belcher islands and the east coast of Hudson bay.

In the Northwest Territories a group of Proterozoic rocks known as the Great Slave group consists of sediments and volcanics and rests on an old erosion surface crossing granitic intrusives and the upturned edges of Archæan sediments. The group consists of a lower part made up of conglomerate, sandstone, quartzite, shale,

iron formation, limestone, tuff, agglomerate, andesite, and dolomite, and an upper part of dolomite, shale, limestone, sandstone, and lavas with interbeds of argillite. Still farther north in the Bathurst Inlet region of the Arctic coast are Proterozoic strata. Resting on granite is the Epworth dolomite which has a thin basal conglomerate and grades up through arkose into a cherty dolomite. Above this is the Kanuyak formation, made up of fine-grained calcareous tuffs and tuff-conglomerates, which at one place shows a structural unconformity with the Epworth beds. A still younger formation is the Goulburn quartzite which contains rounded fragments apparently of the Epworth and Kanuyak. The next younger rocks are those of the Coppermine River series to which reference will be made later.

The Keweenawan, the later division of the Proterozoic, saw the accumulation of great thicknesses of clastic deposits, in places accompanied by volcanic rocks, over various parts of the Shield. The type area is on the south side of lake Superior where thousands of feet of sediments and lavas are exposed. On the Canadian side several smaller areas occur on the east coast of lake Superior.

In the northwestern part of Canada are wide areas underlain by flat-lying or only gently dipping beds which are regarded as late Precambrian in age and are commonly correlated with the Keweenawan. The beds consist for the most part of sandstone and arkose with some conglomerate and shale. South of lake Athabaska is a broad area of these rocks to which the term Athabaska series has been applied. Smaller patches also occur north of the lake and to the northeast is another considerable area along the Dubawnt river. Interbedded basaltic flows and diabase dykes occur in places with these rocks. On Great Slave lake the Et-then series of elastic sediments is considered to be of equivalent age, while farther north on the Coppermine river and at Bathurst inlet a series of interbedded sediments and volcanics is known as the Coppermine River series. It carries notable copper deposits. Trap dykes, commonly considered as Keweenawan in age, are of wide occurrence over the entire Shield and are the youngest of the Precambrian rocks.

During the Pleistocene or Glacial period, the Shield was heavily glaciated by huge glaciers of continental extent. One of these sheets had its gathering ground west of Hudson bay and another in the heart of Labrador. From these centres the ice moved out in all directions. In its advance it scoured off the residual soil, smoothed down the topography, polished and striated the rock surface, and by scattering debris irregularly over the surface completely disorganized the drainage. The result was the formation of the numerous lakes which are everywhere so characteristic a feature of the region. On the retreat of the glaciers, large temporary lakes stood in places in front of ice and in these accumulated clay and other fine stratified deposits forming what are known as clay belts.

The Canadian Shield is a great store-house of mineral wealth and hence offers an attractive field to the prospector. It is not because its rocks are of Precambrian age that such is the case. It is rather because parts of it offer geological conditions favourable for the occurrence of minerals. Ore deposits the world over have, for the most part, resulted from mineralizing solutions given off from masses of igneous rocks during the late stages of their intrusion and cooling, and where we have an association of older rocks invaded by intrusives we may expect to find mineralization, no matter what age the rocks may be. During the Precambrian the rocks of the Shield, as has already been mentioned, were extensively invaded from time to time by intrusive masses of composition varying from acid to basic. Reference has been made to the nickel-copper deposits associated with the Sudbury irruptive, the silver-cobalt ores occurring with the Nipissing diabase, the gold deposits of Ontario

and Quebec associated with porphyry and other granitic rocks. The gold-bearing copper ores of western Quebec, the zinc-copper ores of northern Manitoba, the pitchblende and silver deposits of Great Bear lake are other important mineral occurrences which are being developed. In eastern Ontario and western Quebec, where granite has intruded limestone and other sediments of the Grenville series, occur deposits of mica, graphite, feldspar, magnesite, fluorite, kaolin, molybdenite, talc, apatite, and other minerals.

**The St. Lawrence Region.**—The St. Lawrence Region is a lowland which stretches westward from Quebec city for a distance of some 600 miles to lake Huron. It begins as a narrow strip bordering either side of the St. Lawrence and gradually widens until at Montreal it has a width of 120 miles. Its northerly border continues on up the Ottawa river but 50 miles west of Ottawa the belt is interrupted by a projection of the Canadian Shield known as the Frontenac axis which extends southward crossing the St. Lawrence between Kingston and Brockville. West of this axis the lowland occupies a triangular area lying between lakes Ontario, Erie, and Huron and an east and west line drawn from Kingston to the south end of Georgian bay. This western part in turn falls into two divisions separated from each other by a prominent topographic feature, the Niagara escarpment, an abrupt, eastward-facing rise of 250 to 300 feet, extending from Niagara river in a northwest direction to Bruce peninsula. Still farther to the northwest, the escarpment is continued by the northward-facing cliffs of Manitoulin and adjacent islands.

The St. Lawrence Region is underlain by Palaeozoic strata ranging in age from late Cambrian to late Devonian. For the most part the beds lie flat or at low angles. In places, however, as in southwestern Ontario, they are folded into broad low domes and elsewhere, as in the vicinity of Ottawa, they are traversed by faults of considerable magnitude. In general the beds dip away from the Canadian Shield so that as one proceeds in a direction leaving the Shield, progressively younger strata are encountered.

The strata are almost wholly of marine origin and were deposited in seas that spread out over a large part of the continent. Differential movements caused these seas to advance and retreat, so that the sediments which were deposited in them vary considerably. There are also local gaps in the sedimentary sequence caused by these movements but the movements were so gentle that there are no angular unconformities.

The oldest of the Palaeozoic formations is the Potsdam sandstone of Upper Cambrian age. It is followed by a thick succession of Ordovician strata. In the Ottawa-Montreal region these beds have a thickness of about 6,000 feet and are the youngest measures there are. They include Beekmantown or early Ordovician dolomitic limestones, Chazy sandstones, shales, and limestones, Black River limestone, and Trenton limestone deposited during the Middle Ordovician, and Upper Ordovician beds made up of the Utica shale, Lorraine shales with limestone and sandy layers, and the Richmond group of shales and limestones. The Lorraine and Richmond rocks are developed chiefly southeast of the St. Lawrence.

West of the Frontenac axis and east of the Niagara escarpment, the middle division of the St. Lawrence Region is also underlain by Ordovician strata. Along the escarpment these beds are succeeded by Silurian measures of which the lowest group is the Medina composed of sandstone, shale, and shaly limestone. These beds are succeeded by shales and limestones of the Clinton group which in turn are followed by the Rochester shale and Lockport dolomite of the Niagara group. Above the Lockport is the Guelph dolomite and this in turn is overlain by the Cayuga

group made up of the Salina formation and the lower Munroe dolomite and shale. The total thickness of the Silurian measures is around 1,750 feet.

The Cayugan beds are terminated by an erosion surface upon which rest Devonian beds about 1,000 feet in thickness. The succession from bottom to top is as follows: Sylvania sandstone, Upper Munroe dolomite, Oriskany sandstone, Onondaga limestone, Delaware limestone, Hamilton limestone and shale, Huron shale, and Port Lambton shale.

The only intrusive rocks of the St. Lawrence Region occur in the eastern part in what are known as the Monteregian hills. These are eight in number occurring along an approximately east and west line some 50 miles long. The most westerly is Mount Royal at Montreal. The hills are circular or oval in outline and rise abruptly to elevations of from 600 to 1,200 feet above the surrounding flat country. The flanks of the hills consist of altered and hardened sediments and the centres are composed of intrusive rocks, including various alkali types such as nepheline syenites, essexites, etc. The age of these intrusives may be as late as Pliocene.

The whole region was overrun by Pleistocene ice sheets and much of the bed-rock is covered by debris left by these glaciers. At Toronto stratified deposits carrying plant and animal remains lie between deposits of glacial material. These layers show that the region was crossed at least three times by ice sheets coming from central Ungava and that between these advances the region had a climate considerably milder than the present. In late Pleistocene time the region was depressed and an arm of the sea extended up the St. Lawrence valley as far at least as Brockville and up the Ottawa River valley beyond Ottawa. At Ottawa the sea stood at least 688 feet above its present level. In this sea, layers of clay were deposited and along its shores deposits of sand accumulated. Eventually uplift of the land caused the withdrawal of this sea to which the name Champlain is given.

The chief mineral occurrences of the St. Lawrence Region include petroleum and natural gas which are produced in southwest Ontario, salt from the counties bordering lakes Huron and St. Clair, and gypsum from the Grand River valley. Other materials which are available at many places include limestone and dolomite used in chemical and metallurgical industries, rock for construction purposes and clay for brick, tile, and cement manufacture.

**Appalachian and Acadian Regions.**—The Appalachian and Acadian Regions include that part of Canada lying south of the St. Lawrence river and east of a line running from Quebec city south to the foot of lake Champlain. The Appalachian Region, whose eastern boundary in Canada is the Restigouche river and Chaleur bay, is a continuation of the Appalachian Mountain system of the eastern United States. The Acadian Region lies to the southeast and comprises the provinces of New Brunswick, Nova Scotia, and Prince Edward Island.

The region is for the most part mountainous or hilly. In southeastern Quebec the Notre Dame mountains, consisting of three roughly parallel ridges trending northeast, reach elevations up to 3,100 feet and in Gaspé peninsula, the Shickshocks, actually a continuation of the same range, have heights up to 4,200 feet. Many of the mountain summits are flat-topped, showing that the region is really a dissected plateau. The Acadian Region is also largely one of plateaux, ridges, and valleys. In central New Brunswick is a rugged area with summits rising over 2,000 feet. To the east of this is a lowland area of some 10,000 square miles comprising the eastern portion of the province and all of Prince Edward Island. It nowhere rises over 600 feet above the sea. Nova Scotia is largely an upland region which in the northern part of Cape Breton island reaches elevations of 1,500 feet.

The rocks of the Appalachian and Acadian Regions include sediments, volcanics, and intrusives, chiefly of Palaeozoic age. In a few places rocks of Precambrian age are known and along the Bay of Fundy coast are a few areas underlain by Mesozoic rocks. The lowland area of eastern New Brunswick is underlain by little disturbed Carboniferous beds. Elsewhere, however, throughout the region, the rocks are nearly everywhere thrown into folds with axes trending in a northeast direction and are in addition broken by faults giving rise to a complex structure typical of the Appalachian Region in general. The chief period of deformation in this part of Canada, however, was during the Devonian, whereas to the south, in the United States, the greatest disturbances took place later during the Permian at the close of the Palaeozoic.

At Saint John city in southern New Brunswick is exposed a series of early Precambrian rocks made up of limestone, dolomite, quartzite, and gneiss. It is overlain by a thick succession of late Precambrian volcanic rocks upon which rest Cambrian strata. Precambrian rocks also occur in Cape Breton island. In Gaspé peninsula along the north side of Chaleur bay the Macquereau series, composed largely of quartzite, rests unconformably below Ordovician strata and may be Precambrian. Precambrian rocks have been described as occurring in central New Brunswick and in southwestern Quebec. Some of the occurrences are probably, however, of Palaeozoic age.

In the mainland of Nova Scotia a thick series of altered sediments, known as the Meguma or Gold-bearing series covers wide areas and is believed to be of late Precambrian age. The lower half of its 35,000 feet thickness consists dominantly of quartzites and the upper half of slates. The series is folded along northeast lines and is broken by northwest faults, the horizontal displacement of some of which exceed a mile. The rocks are intruded by dykes and sills of diabase and by batholithic masses of grey and red granites of Devonian age.

Cambrian formations occur in southeastern Quebec, in southern New Brunswick, and in northeastern Cape Breton. In early Ordovician times sediments were deposited in the St. Lawrence River Region. The Sillery formation of red and green shales with interbedded sandstone has at Quebec a thickness of 2,000 feet. A younger series, called the Lévis, consists of dark shales and thin-bedded limestones with a thickness of possibly as much as 5,000 feet. It forms a band varying in width from 6 to 35 miles; its beds have been folded, faulted, and in places overturned. Mid-Ordovician rocks occur in southwestern Quebec and in Gaspé and northern New Brunswick. Late Ordovician rocks are developed in the Matapédia River and Chaleur Bay districts. At the close of the Ordovician there were extensive mountain-building movements. Masses of peridotite which intrude the Ordovician and older rocks may have originated at this time.

Silurian rocks are exposed in southeastern Quebec, in Gaspé, in New Brunswick, and in Nova Scotia at Arisaig and a few other places. The next marine invasion was in Lower Devonian time when great thicknesses of sediments with interbedded volcanics accumulated in New Brunswick and Gaspé. During the Middle Devonian, a thick series of sandstones accumulated in Gaspé. In the Upper Devonian was deposited in the vicinity of Maguasha in the Gaspé coast a group of conglomerates, sandstones, and shales, one member of which is noted for the fossil fish it has yielded. Towards the close of the Middle Devonian, the whole Appalachian and Acadian Regions were affected by mountain-building movements accompanied by the intrusion of batholithic masses of granite.



Rocks of Carboniferous age underlie the lowland belt forming much of the southeastern half of New Brunswick, the part of Nova Scotia north of the Cobequid mountains, part of the lowland south of these mountains, southwestern and north-eastern Cape Breton island and all of Prince Edward island. With the Lower Carboniferous or Mississippian rocks occur the extensive gypsum deposits and the salt beds of Nova Scotia and New Brunswick and also the bituminous shales of these provinces. The Upper Carboniferous or Pennsylvanian strata contain the coal measures which occur at Sydney, and at other places in Nova Scotia and at Minto in New Brunswick. The Carboniferous beds have in places been folded and faulted but there are wide areas in which the strata have been but little disturbed since they were deposited.

Red sandstones deposited during the Triassic period are exposed in a number of small areas along the Bay of Fundy coast. In places as at North Mountain, Nova Scotia, the beds are accompanied by lava flows. During the Pleistocene the region was glaciated. At certain stages there were apparently local gathering grounds for glaciers in central New Brunswick and in central Gaspé.

The chief mineral deposits of the Appalachian and Acadian Regions include coal, asbestos, and gypsum. The coal and gypsum, as has already been mentioned, occur in the Carboniferous measures. Asbestos occurs in serpentinized peridotite in southeastern Quebec. Chromite also occurs with the peridotite. Gold occurs in quartz veins in the Gold-bearing series of Nova Scotia. Many of the deposits are located on domes or pitching anticlines. Zinc-lead deposits occur in central Gaspé in veins cutting lower Devonian beds. At Stirling in the southern part of Cape Breton island, zinc, lead, and copper sulphides occur in a series of volcanic rocks. Copper and iron pyrite deposits occur in southern Quebec. Salt occurs in Nova Scotia and New Brunswick.

**The Arctic Archipelago and Hudson Bay Lowland.**—The Arctic archipelago includes the islands lying north of the Canadian Shield. They have a land area of over half a million square miles. Save for northward extension of the area of the rocks of the Canadian Shield, the islands for the most part are a series of plateaux formed of gently dipping strata.

The main Precambrian belt extends through Baffin island to Ellesmere island. Its rocks consist chiefly of granite and granite-gneiss intrusive into various types of gneisses and schists. Palaeozoic strata, including Cambrian, Ordovician, Silurian, Devonian, and Carboniferous beds, cover most of the remaining area. Triassic rocks occur on the Sverdrup islands and a number of areas are underlain by Tertiary beds some of which are coal-bearing. Coal is also associated with some of the Upper Carboniferous strata at a number of places.

The Hudson Bay Lowland bordering the west side of Hudson bay has a length in a northwest direction of 800 miles, a width of from 100 to 200 miles and an area of 120,000 square miles. It rises from sea-level with a scarcely perceptible gradient to a height of about 400 feet. It is underlain by flat-lying rocks most of which are of Palaeozoic age ranging from Ordovician to Devonian. An area of Mesozoic beds carrying lignite occurs in the Moose River region.

The seas in which the Palaeozoic rocks which are now exposed in the Arctic Archipelago, the Hudson Bay Lowland, and the St. Lawrence Region were deposited extended at times widely over the Canadian Shield. Palaeozoic outliers are known on lake St. John, lake Nipissing, and lake Timiskaming in the south, and on lake Nicholson west of Hudson bay. These outliers are mere remnants which have survived the erosion of Mesozoic and Tertiary time.

**The Interior Plains.**—The Interior Plains division of Canada is part of a great plains region in the interior of the continent stretching from the gulf of Mexico to the Arctic ocean. In Canada it extends from the Canadian Shield on the east to the Cordillera on the west. At the United States border it has a width of 800 miles but in the extreme northwest at the mouth of the Mackenzie river it is less than 100 miles wide. Throughout most of the region the underlying Palaeozoic, Mesozoic, and Tertiary rocks are nearly flat-lying. In the northwestern part of the area, however, the Franklin range, which lies between Great Bear lake and Mackenzie river, is composed of folded strata. In western Alberta, also, the rocks are folded and faulted.

Geologically the region falls into three zones. On the east a narrow plain known as the Manitoba lowland is developed on flat-lying Palaeozoic strata which range in age from Ordovician to Devonian. In Manitoba the Ordovician beds rest on the Precambrian rocks of the Canadian Shield and commonly present a low escarpment facing the Shield. To the northwest this zone broadens to form the Mackenzie lowland. Here over wide areas Silurian measures form the base of the Palaeozoic section. In the Franklin mountains, however, red quartzites and sandstones of the Mount Clark formation are regarded as of probable Lower Cambrian age. They are succeeded by Middle and Upper Cambrian sandstones and shales. Beds regarded as of probable Ordovician age are also known to occur at the base of mount Kindle east of Wrigley and beneath the Silurian dolomite of the Great Slave Lake area. Over considerable areas strata of Cretaceous age also occur in the Mackenzie lowland region, as for example on Liard river, on the western shores of Great Bear lake, and at several places along the Mackenzie. At the mouth of Bear river is an area covered by partly consolidated Tertiary sands and clay carrying lignite beds.

The second zone includes much of southwestern Manitoba and southern Saskatchewan and Alberta. It is a broad belt underlain by Cretaceous rocks. Its eastern border, where these strata overlap the underlying Palaeozoic sediments, is an abrupt rise known as the Manitoba escarpment. Its surface gradually rises from an elevation of from 1,000 to 2,000 feet at the escarpment to from 4,000 to 5,000 feet at the border of the mountains on the west.

The third zone consists of the plateaux of Wood mountain and the Cypress hills which rise up to elevations of 1,000 feet above the level of the surrounding region. They are composed of flat-lying beds of Tertiary age.

In Pleistocene time glacial drift was widely scattered over the region. On the retreat of the ice deposits, clay accumulated in lakes which stood in front of the waning ice sheet. Much of southern Manitoba formed the bed of glacial lake Agassiz.

The Interior Plains Region is the great wheat-producing area of Canada. Coal mining is an important industry. Bituminous coal and lignites are produced in large quantities in Alberta and in small amounts in Saskatchewan from Cretaceous and Eocene beds. Natural gas is produced in large quantities from various horizons of the Cretaceous in Alberta. Petroleum has been found in the Devonian beds of the lower Mackenzie valley north of Norman, in Cretaceous strata at a number of localities in Alberta, and in Palaeozoic rocks in Turner valley. Along the Athabaska river the basal member of the Lower Cretaceous, known as the McMurray or the Tar sands, is heavily impregnated with bitumen. Gypsum is obtained from the Palaeozoic rocks of Manitoba and also occurs in northern Alberta. Deposits of lead and zinc occur in Devonian limestones at certain places south of Great Slave lake.

**The Cordilleran Region.**—The Cordilleran Region comprises the mountainous country bordering the Pacific ocean. The part of it which lies in Canada has an average width of 400 miles, a length in a northwest direction of 1,500 miles, and an area of 600,000 square miles. It is made up of three principal zones. On the east is the Rocky Mountain range; along the coast is a broad belt of mountains known as the Coast range, while between these two lies a third or intermediate belt made up of plateaux and mountain ranges. The Rocky mountains have a maximum width of 100 miles and have many peaks with elevations of from 10,000 to 12,000 feet. The Coast range, varying in width from 50 to 100 miles, rises abruptly from the coast to peaks which along the axis of the range reach elevations of from 7,000 to 10,000 feet. The interior plateau and mountain belt is represented in the north by the Yukon plateau, a gently rolling upland broken into a series of flat-topped ridges by valleys several thousand feet deep. In the southern part of British Columbia the interior region is a plateau rising 3,000 to 4,000 feet above sea-level and cut by valleys a thousand or so feet in depth. To the west this plateau either joins the Coast range directly or else is separated from it by the Cascade range and other mountains. To the east between the plateau and the Rocky mountains are a series of ranges separated by northwest-trending valleys. The Selkirk range with peaks over 11,000 feet is the most important of these.

The rocks of the Cordilleran Region range in age from Precambrian to Recent. The Rocky Mountain belt is composed of great thicknesses of Precambrian, Palaeozoic, and Mesozoic sediments, in most places unaccompanied by plutonic or volcanic rocks. The Coast range is essentially a complex batholith of granite of late Jurassic or early Cretaceous age cutting and enclosing sediments and volcanic rocks of earlier Mesozoic age. The Interior belt of plateaux and mountain ranges is underlain by Palaeozoic, Mesozoic, and Tertiary sediments and volcanic rocks. The pre-Tertiary beds are cut by numerous bodies of plutonic rocks and in several districts strata of Precambrian age are exposed.

The geological history of the Canadian Cordilleran Region may be briefly summarized as follows: In Precambrian time sediments which now are in the form of limestones, gneisses, and schists were deposited in the interior belt. In Yukon these strata are known as the Yukon group and in central British Columbia as the Shuswap group. These have been altered by intrusive rocks and included with them may be metamorphosed phases not only of Precambrian rocks but also of much later rocks. In late Precambrian time a thick series of argillites and related sediments accumulated on the site of the southern Rockies and farther west in the region now occupied by the Purcell mountains. The Purcell series, consisting dominantly of quartzites, has a thickness of over 20,000 feet.

From the Cambrian to the Carboniferous, sedimentation progressed in the Rocky Mountain and Purcell region. Cambrian strata are best known in the Bow and Kicking Horse valleys along the main line of the Canadian Pacific railway, where a total thickness of more than 18,000 feet of Cambrian beds are exposed. Another thick section can be seen in the Mount Robson district along the Canadian National railway. In both these areas the Cambrian beds are succeeded by Ordovician strata. Silurian limestone occurs south of Kicking Horse river, in Yukon, and in the western part of Mackenzie mountains. In Devonian time the whole eastern Cordilleran Region was submerged and calcareous beds, in places several thousand feet thick, were deposited. In the western part of the Rocky mountains they in places succeed Silurian beds but in the south and at various places in the eastern part of the Rockies they rest on late Precambrian or Cambrian strata. Carboniferous beds succeed the Devonian strata at many places in the Rockies.

Around Banff they include a thickness of 5,000 feet. In the interior belt around Kootenay lake Carboniferous beds rest directly on Precambrian rocks.

During the Triassic and Jurassic, sedimentation and volcanism on a vast scale occurred in the region from the Rocky mountains westward to the Pacific ocean, and on the site of what are now Vancouver island and the Queen Charlotte islands. In late Jurassic and early Cretaceous times this whole region was deformed. The Selkirk and Coast ranges were produced and the Coast range batholith was intruded. In later Cretaceous time, sediments were deposited on both sides of these Jurassic ranges.

Long continued erosion in late Cretaceous time reduced the mountains to a peneplain and unroofed their granite cores. During the Eocene occurred the great Laramide revolution which produced the Rocky mountains. The rocks of this belt were folded and faulted and in places great blocks of older rocks were thrust over younger beds. Local intrusions of igneous rock accompanied the deformation. In the Oligocene local movements accompanied by igneous intrusions again took place. During the Miocene period great fissure eruptions took place while during the succeeding Pliocene period there was further volcanism with general uplift and subsequent valley cutting. In the Pleistocene or Glacial period most of the Cordilleran Region with the exception of some of the higher ridge tops was covered by what is known as the Cordilleran ice sheet. The whole region was depressed at this time but in post-glacial time there has been uplift ranging from 450 to 1,000 feet.

The Cordilleran Region is a great mineral area. Most of the deposits are related to the Coast Range batholith. They occur principally along the borders of the batholith and in the older rocks surrounded by the intrusives and were produced by mineralizing solutions given off from the igneous masses. Some of the more important deposits are the copper ores of Hidden Creek, Britannia, and Allenby mountain, the gold-silver deposits of Salmon River district, the silver-lead-zinc ores of the Slocan, and the Sullivan ore body, the largest silver-lead-zinc mine in the world. Other mineral deposits include coal which occurs in the Rocky mountains and on Vancouver island in beds of Cretaceous and also of Tertiary age, iron ores on Vancouver and Queen Charlotte islands, placer gold in Yukon and in the Cariboo country in gravels of Tertiary age, and numerous other mineral occurrences.

### Section 2.—Economic Geology.

An article on this subject, prepared by F. J. Alcock, Ph.D., Mines and Geology Branch, Department of Mines and Resources, Ottawa, appeared at pp. 16-28 of the 1937 Year Book.

## PART III.—SEISMOLOGY IN CANADA.\*

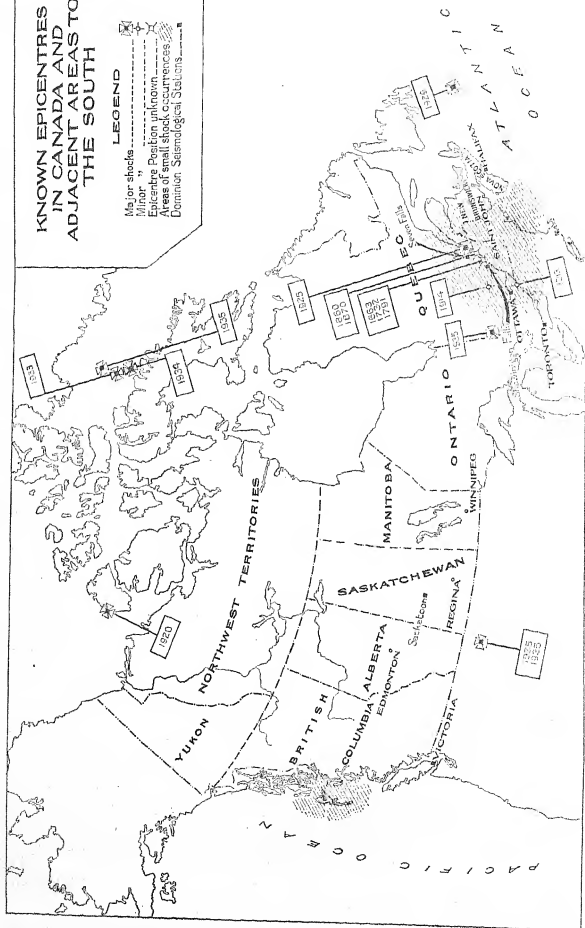
Seismology—that branch of science which treats of earthquakes—has received considerable attention in Canada during recent years. It has been generally recognized that earthquakes are frequent in regions of adjustment of strata and are characteristic of the newer mountain and coast regions where steep level-gradients occur. The energy radiated from an earthquake in the form of elastic waves in the earth is, however, recorded on sensitive seismographs up to great distances, even to the antipodes of the earthquake. Seismological researches, while regularly recording the routine statistical data regarding earthquakes, seek also to determine particular causes. Moreover, they endeavour to ascertain the physical properties

\* Prepared under the direction of R. Meldrum Stewart, Director, Dominion Observatory, Department of Mines and Resources, by Ernest A. Hodgson, Ph.D.

# KNOWN EPICENTRES IN CANADA AND ADJACENT AREAS TO THE SOUTH

## LEGEND

- Major shocks
- Minor "
- Epicentre Position unknown
- Areas of small shock occurrences
- Domestic Seismological Stations



of the earth's crust and interior as revealed by the peculiarities in the *time-distance curves* for earthquakes.

A time-distance curve, as its name implies, shows the relation between the areal, surface distances from the origin of the earthquake to the various recording stations and the elapsed time required for the initial impulses and their various reflections to reach each station from the origin concerned. Of late years, these time-distance curves have been greatly improved. It may be said that their further improvement must be through taking account of the depth of the origin—the *focal depth*. The point within the earth from which the energy of an earthquake is liberated is called the *focus*; the point vertically above the focus, on the surface, the *epicentre*.

The records of seismographs within five hundred miles of an earthquake are used to determine the epicentre, focal depth, and focal time. These same stations, together with the others at distances up to the antipodes of an earthquake, are used to determine arrival times for making up the time-distance curves. The curves themselves are the point of departure for the earth's crust and deep interior.

Previous to the beginning of the present century, seismological records for Canada are mostly to be found in historical documents. Such are our only reports of a great earthquake which disturbed Eastern Canada from above Montreal to below Quebec during the first part of the year 1663. Other earthquakes in Eastern Canada, for which similar records alone are available, occurred in 1732, 1791, 1860, and 1870. In 1925 another earthquake took place in the same region. It was the subject of careful study by the seismological division of the Dominion Observatory and several reports were published. Another, on Nov. 1, 1935, which occurred near Timiskaming, Que., was also carefully studied. It is known that the earthquakes of 1925 and 1935 were felt over wide areas. The former was reported from Duluth to Halifax and from the Arctic to the Carolinas. The latter was felt even farther west and as far south as Virginia. Many smaller earthquakes are experienced in Eastern Canada from time to time. Those previous to 1906 are listed from historical records. The subsequent ones have been recorded on seismographs.

The only other regions of Canada where earthquakes are sometimes experienced are British Columbia and the Arctic. The earthquakes in the west have been mostly centered near the Queen Charlotte islands and, within the brief span during which records are available, none has been severe. A severe earthquake occurred off Banks Island in the Arctic in 1920 and three of great intensity have since been centred in Baffin bay. The first of these occurred on Nov. 20, 1933. It is suspected that many small shocks, recorded on seismographs in Canada, originate in the almost uninhabited regions of the north but this has not, as yet, been established.

Previous to Dec. 1, 1936, two government departments carried on seismological investigations in Canada. Seismological stations were established at Toronto (1897), and at Victoria (1898), each under the auspices of the Meteorological Service. Stations at Ottawa (1905), Halifax (1915), Saskatoon (1915), Shawinigan Falls (1927), and Seven Falls (1927) were established by the Dominion Observatory. The stations at Halifax and at Saskatoon are maintained, respectively, with the co-operation of Dalhousie University and the University of Saskatchewan. The stations at Shawinigan Falls and at Seven Falls are maintained with the co-operation of the Shawinigan Water and Power Company. On Dec. 1, 1936, the Toronto and Victoria stations were taken over by the Dominion Observatory which now has charge of all seismological work—routine and research—being carried on.

The seismographs employed have been improved greatly since the first world chain of stations was established in 1896 by John Milne under the auspices of the British Association for the Advancement of Science. The instruments now used in Canada are Milne-Shaw, Wood-Anderson, and Mainka horizontals; Wiechert, and Benioff verticals. It is planned to modify the Mainka and Wiechert instruments for photographic recording, and electro-magnetic damping; the others are already of that type.

Seismological instruments have been modified for recording the earth tremors sent out by explosives detonated for the purpose of studying the earth structure near the surface (to a depth of about two miles). A technique has been developed for making use of this equipment to trace sub-surface contours. Such information is useful in locating oil deposits and, to a lesser degree, fault zones in which minerals may be found. Some work of this nature has been done in Canada, but only by trained groups of operators hired from companies outside Canada. In some cases the Dominion Observatory has been represented by an observer attached to the group. The officers of that institution endeavour to keep themselves posted as to the developments in this important application of seismology but, as yet, no work of this kind has been developed in Canada.

The Seismological Service of Canada, as now organized, has its central station at Ottawa. The records are developed at the auxiliary stations and sent to Ottawa for reading and the publication of reports. Seismological research is carried on at the Dominion Observatory and international co-operation in seismological work is there arranged.

#### PART IV.—THE FLORA OF CANADA.\*

NOTE.—Bibliographical references are indicated by arabic numerals and run consecutively throughout the article; corresponding notes are listed in the Bibliography at the end, pp. 56 to 59. Textual footnotes to individual pages are indicated by symbols.

The Dominion of Canada extends from Pelee island in lake Erie, a little south of latitude 42°, to the northern end of Ellesmere island in latitude 83°, that is, a distance in a north and south direction of about 2,800 miles. In an east and west direction, the distance from the Atlantic to the Pacific ocean is about 3,000 miles. In a country of such great extent there are naturally wide variations of climate such as the mild, equable, ocean climate of Vancouver island and the southwestern mainland, the warm, temperate climate of the lake Erie region, the dry, interior continental climate with wide extremes of heat and cold of the central prairie regions, and the rigours of the Arctic islands, to mention only a few outstanding variations. As might be expected, the range of flora in such a country is very wide and in the present age of specialized studies it would hardly be possible for one writer to do justice even to the highest group, namely, the seed-plants. If, in addition, cognizance is taken of the various groups of cryptogams—the mosses, fungi, etc.—it will be realized that all that can reasonably be attempted in an article such as this is a summary of some of the more important botanical features of different regions and an indication of what has been accomplished in regard to the study of the distribution in Canada of the various subdivisions of the plant kingdom. Any attempt to explain the origin of the various floral groups in Canada with reference to changes in geological time and to correlate their affinities with the plants of other countries (more particularly with those of the United States, Eastern Siberia, and Arctic Europe) would require specialized knowledge of each group and a much more intensive study of their local and general distribution than has hitherto been achieved

\* Prepared by John Adams, M.A. (Cantab.), Division of Botany, Experimental Farm, Ottawa.

**Previous Descriptive Works on Canadian Flora.**—The earliest descriptive work on the flora of Canada is that of J. P. Cornuti entitled "*Canadensium Plantarum Historia*", published at Paris in 1635.<sup>1</sup> It is written in Latin and contains a considerable number of figures of the species, many of which, such as *Adiantum pedatum*, *Asarum canadense*, etc., can be recognized readily although the names may be different. It includes, in addition, some species which are not indigenous. As might be expected from the date of publication, definite localities in this country are not specified.

At a much later date (1862) appeared Abbé L. Provancher's "*Flore Canadienne*",<sup>2</sup> written in French and also containing a number of illustrations. In addition to the native flora, it included descriptions of many plants cultivated in gardens as well as some species of the lower cryptogams, namely, mosses, lichens, Ivey, and algæ. But Canada, in the sense used by Provancher, was mostly synonymous with the present provinces of Quebec and Ontario. More recent manuals devoted mainly to the description of the species mentioned, rather than their detailed distribution in Canada, are those by Marie-Victorin,<sup>3</sup> Spotton, Cosens, and Ivey,<sup>4</sup> Hales,<sup>5</sup> Brown and Schäffer,<sup>6</sup> and Henry.<sup>7</sup> The forest trees have been dealt with in an adequate manner by Morton and Lewis.<sup>8</sup>

The first and only work to show the detailed distribution of the native plants throughout the Dominion was John Macoun's "*Catalogue of Canadian Plants*"<sup>9</sup> published in seven parts at intervals between the years 1883 and 1902. It comprised all groups of the plant kingdom with the exceptions of fungi and algæ. Other sectional lists dealing with a part or the whole of a particular province have appeared from time to time and are referred to in the proper places under their respective floral regions. But for a list of all the important papers on the distribution of Canadian plants published between the years 1635 and 1935, inclusive, reference should be made to the "*Bibliography of Canadian Plant Geography*".<sup>10</sup>

## FACTORS AFFECTING PLANT LIFE.

### Climate.

A full general account of the climate of Canada will be found in Koeppé's work<sup>11</sup> on the subject. The maps prepared by Brooks, Connor, and others<sup>12</sup> are also very instructive, while the meteorological reports<sup>13</sup> form the basis of practically all our knowledge of the subject apart from observations made by explorers. The relation of plants to climatic factors has been dealt with to some extent by Adams<sup>14</sup> and much more fully by Livingston and Shreve.<sup>15</sup> The adaptations of many plants in the Arctic Region to the difficulties of the climate under which they live are briefly described later on in this article at p. 40, while characteristics which aid other plants to withstand arid conditions in certain sections of the prairies are mentioned on pp. 47 and 48.

The study of plants in relation to climate involves consideration of a number of different factors such as temperature, rainfall, snowfall, evaporation, light, wind, humidity, and fog.

**Temperature.**—For a plant to function properly, a certain range of temperature is necessary. If the temperature is too low the plant may become dormant or may suffer temporary injury or may even be killed. Plants, however, vary greatly in their resistance to cold. As a result of this, the assemblage of species in a northern latitude may be entirely different from that in a region nearer the equator with the production of distinct floral areas. The method usually attempted of



measuring the effect of temperature on plant life is that of recording daily the maximum and minimum. For comparison of different localities a fairly correct idea can be obtained from the mean temperature of the air during the hottest and coldest months, usually July and January, together with the absolute minimum reached during the year. These observations should be supplemented by the minimum temperature of the soil at different depths, but such figures are very rarely obtainable.

**Precipitation.**—In the absence of water, plant life would cease to exist. Hence rainfall and its frequency are very important factors and both are easily measured. The total rainfall during the chief growing months, that is, from June to September, furnishes a useful basis for comparison of different areas, but rainfall figures alone lose much of their value unless supplemented by the amount of evaporation for which, unfortunately, few records exist. Evaporation from a water surface is, in fact, an index of the combined effect of four other factors, namely, temperature, bright sunshine, wind, and humidity of the air.

Figures of total snowfall are useful, mainly, as providing a basis for estimating the amount of moisture likely to be added to the soil when the snow melts in spring. A snow cover also protects the roots of the plants against excessive minimum temperatures.

**Light.**—Light varies greatly at different points on the earth's surface, not only in its duration but also in its intensity. During the summer months the duration of daylight in northern latitudes is much greater than in places farther south and, even though the temperature in the former localities may be lower, this is compensated for to a considerable degree in the plant's economy by the longer exposure to light. The same is true of light conditions on the summit of a mountain as compared with the valley at its base, and partly explains why arctic plants occurring at low altitudes above the sea are also often found in alpine situations much farther south. The following examples taken at different latitudes will show how the average duration of diffuse daylight (as distinct from hours of bright sunshine) varies in different localities during the month of June: Fort Vermilion (lat.  $58^{\circ} 23'$ ) 18.2 hours; Prince George (lat.  $53^{\circ} 50'$ ) 16.7 hours; Swift Current (lat.  $50^{\circ} 20'$ ) 16.3 hours; Annapolis Royal (lat.  $44^{\circ} 45'$ ) 15.7 hours; Harrow (lat.  $42^{\circ} 02'$ ) 15 hours.

As there is no simple or easy method of summing up the total daily light factor, the total hours of bright sunshine during the six growing months may serve to some extent to institute a comparison between different places. In this connection the data on the duration of daylight, given in the section on Meteorology at pp. 66 to 68, for places situated between latitudes  $44^{\circ}$  N. and  $52^{\circ}$  N., are of importance.

**Wind.**—Wind is important chiefly in promoting pollination of flowers so that seeds may be set; it also serves for the dispersal of many seeds and fruits over a wider area. Wind promotes evaporation of water from the surface of the soil but, as in the case of air humidity and of fog, it is seldom of more than local importance in the comparison of floral areas.

**Altitude.**—Altitude above the sea-level has a marked effect on climate and as a consequence on vegetation. Temperature falls about  $1^{\circ}$  F. for every 300 feet of ascent, while precipitation increases with altitude, taking the form of snow at higher levels. The duration of daylight also increases with altitude and the intensity of the wind is also greater. Owing to the difference in exposure to the sun's rays on

the northern and southern slopes of a mountain, the vegetation at the same level is markedly different. The orographical map facing p. 10 indicates those regions in Canada (confined principally to the western Cordillera, and Gaspé, to the eastern coast of Labrador, and to the Arctic islands) where altitudes are sufficiently great to materially affect vegetation.

#### Environment.

No very definite line can be drawn between the influences of climate and environment, since climate itself may be the cause of peculiar environmental conditions. Similarly latitude, geology, topography, and altitude all have their effect upon the conditions of vegetation. All these factors cannot be discussed here, but some mention should be made of instances in which certain plants exhibit special characteristics in relation to their environment, such as parasitic plants, climbing plants, water plants, etc. Groups characterized by these peculiar adaptations are discussed briefly below under ecological relationships.

In the course of the agricultural settlement of Canada and the development of trade with other parts of the world during the past three centuries, many forms of plant life not originally present in Canada have been introduced either intentionally or accidentally, and many of these forms have been able to so adapt themselves to conditions in various parts of this country that they have become established under natural conditions of reproduction. Such plants are briefly treated on pp. 34 and 35, under exotic flora.

**Ecologic Relationships and Groups.**\*—Any account of the Canadian flora which did not contain a brief description of those groups of plants which stand in a peculiar relationship to environmental conditions would be lacking in completeness. Such ecologic relationships are commonly considered to include: plants which, while attaching themselves to other plants, actually obtain their nourishment from the air (these are called epiphytes); parasitic and partially parasitic plants, which derive nourishment from the roots or stems of other plants; carnivorous plants; which trap and absorb insects or small aquatic animals; climbing plants; water plants; salt-loving plants; etc. With the exception of epiphytes, most of these groups contain a considerable number of representatives in our flora.

Hemiparasites are exemplified by several species of Dwarf Mistletoe (*Arceuthobium*) found growing on the branches of coniferous trees. Others in this group, such as *Castilleja* and *Pedicularis*, attach themselves to the roots of other plants.

Total parasites with no green colouring matter are exemplified by Dodder (*Cuscuta*) and the family *Orobanchaceae* with 5 Canadian genera.

Saprophytes likewise contain little or no chlorophyll and occur in some genera of *Orchidaceae*, such as Coral-root (*Corallorrhiza*), and 5 genera of *Monotropaceae*. In this last family the Indian Pipe (*Monotropa uniflora*) is the best known.

Three genera of carnivorous plants, namely, *Drosera*, *Pinguicula*, and *Sarracenia*, have leaves adapted for the capture of insects, while *Utricularia* has bladder-like organs in which minute aquatic animals are trapped.

Representatives of climbing plants occur in 23 genera. A variety of Poison Ivy (*Rhus Toxicodendron*) climbs by means of rootlets developed on the woody stem, while species of *Galium* scramble over other vegetation by means of hooks. Tendril-climbers occur in 4 families represented by *Smilax*, *Vicia*, *Vitis*, *Echinocystis*, and 3 other genera, while leaf-climbers are exemplified by *Adlumia*.

\* For an explanation of the classification and naming of the species mentioned in connection with these groups, see the part of this article dealing with "Classification of Flora", pp. 35 to 37.

There are a considerable number of herbaceous twiners, such as *Dioscorea* and *Ipomoea*, while woody twiners or lianes are exemplified by *Celastrus*, *Menispermum*, and some species of *Lonicera*.

Water-plants are well represented in the Canadian flora, as might be expected in a country with so many rivers and lakes of all sizes. The adaptations shown by water-plants to the surrounding medium are very varied in the different species, but one of the most characteristic features is the occurrence of air-spaces throughout all parts of the plant. These serve not only to give buoyancy to the stem and leaves, but also serve for the passage of gases throughout the tissues. A full discussion of the various adaptations will be found in the survey by the present author.<sup>19</sup> While it is difficult in some cases to draw the line between typical water-plants and swamp-plants, it is safe to say that there are 40 genera containing representatives of this group. Some of these, such as *Lemna*, *Callitriche*, and *Hippuris*, have a very wide distribution throughout the world. Among the more interesting members of this group are: *Wolffia*, one of the tiniest seed-plants known; *Phyllospadix*, growing in the sea on the Pacific coast; *Podostemon*, the only representative in Canada of a peculiar group of plants found attached to stones in running water; the Pickerel-weed (*Pontederia cordata*); the Water-shield (*Brasenia Schreberi*), and the American Lotus (*Nelumbo lutea*), both of which belong to the Waterlily family.

Spiny or prickly plants are probably adapted to defend themselves against browsing animals. They are represented by 2 genera of the Cactus family, namely *Mammillaria* and *Opuntia*, by various species of *Ribes*, also by Prickly Ash (*Xanthoxylum americanum*), Devil's Club (*Echinopanax horridum*), and others. Presumably belonging to the same ecologic group are plants with stinging hairs, such as *Laportea* and *Urtica*.

Halophytes or salt-loving plants are well represented in the Canadian flora. Some of the most striking examples are the Sea Lungwort (*Mertensia maritima*) and the Sea Lavender (*Limonium carolinianum*) found only on the Atlantic coast, while Scottish Lovage (*Ligusticum scoticum*), Beach Pea (*Lathyrus maritimus*), and Sea Ragwort (*Senecio Pseudo-Arnica*) occur on both the Atlantic and Pacific coasts. Some species, such as Lyme-grass (*Elymus arenarius*), Beach-grass (*Ammophila arenaria*) and Sea Rocket (*Cakile edentula*), are restricted to areas of drifted sand, while others, such as Sea Arrow-grass (*Triglochin maritima*) and Salt-grass (*Distichlis spicata*) are partial to the salt marsh.

It is worthy of note that a considerable number of plants belonging to this group, such as Beach Pea, Rocket, Beach-grass, and Knotweed Spurge (*Euphorbia polygonifolia*), also occur on the shores of the Great Lakes, indicating that those bodies of water were formerly connected with the sea. Other salt-loving plants, such as Sea Arrow-grass, Salt-grass, Sea Milkwort (*Glaux maritima*) and species of *Salicornia* and *Plantago*, occur also on saline soil in the Prairie Provinces.

A much fuller account of the relation of the above groups to environmental conditions, as well as methods of dispersal of seeds and fruits by wind and animals will be found in the "Survey"<sup>16</sup> by the author.

**Exotic Flora.**\*—In addition to the native or indigenous flora many other species have from time to time found their way into this country. Some of these have evidently come to stay and have proved themselves to be much more aggressive in their demand for elbow room than the indigenous species. Others may persist for a few years and then disappear. The majority have probably been

\* See footnote, p. 33.

introduced accidentally, but some, more particularly those cultivated for their beauty or belonging to the class of garden herbs, such as Caraway, Catnip, Tansy, etc., have been brought in by immigrants from various countries. These frequently escape in the vicinity of towns where garden refuse containing living roots or seeds has been thrown on dump heaps. Some doubtless came in by way of imported feeding materials such as hay or bird seed. But much the most important method of introduction was in the form of impurities in imported farm seeds.

Of the introduced species comparatively few are shrubs, such as Barberry, Buckthorn, etc. Most of these have fleshy fruits which are eaten by birds and in this way the seeds become distributed. Of the herbaceous species, the majority are annual plants with a special liking for cultivated ground, as every farmer and gardener knows by experience. Familiar examples are Wild Mustard, Goosefoot, Purslane, Groundsel, etc. The little Pineapple Weed (*Matricaria suaveolens*) is found from Cape Breton island to the Queen Charlotte islands. Others are biennial in nature, such as Great Mullein and Burdock. Many are perennial and are found on waste ground, roadsides, and pastures. Some of the most noxious weeds are in this class, such as Couch Grass, Docks, Field Bindweed, Ox-eye Daisy, Creeping Thistle, etc. One would not expect to find many plants whose original home was in a warmer climate maintaining themselves in this country, but there are some, such as Carpet Weed (*Mollugo verticillata*) and *Galinsoga ciliata*, the latter of which is a native of tropical America. Both are annuals and they are able to complete their life history here during the growing season.

There are even some aquatic plants among the immigrants, such as Flowering Rush (*Butomus umbellatus*), a species with pretty flowers which is spreading along the Ottawa and St. Lawrence rivers.

As might be expected, the larger numbers of introduced species are to be found in those families a considerable number of whose members are cultivated for use or ornament. These are as follows, with the number of exotic species belonging to each: *Compositae* 92; *Gramineae* 72; *Cruciferae* 53; *Leguminosae* 40; *Labiatae* 29; *Caryophyllaceae* 29; *Rosaceae* 28; *Scrophulariaceae* 23; *Umbelliferae* 17; *Polygonaceae* 17. Altogether about 600 exotic species which were not planted intentionally in their present habitats by human agency have been recorded as occurring in this country.

Further information on this subject will be found in Ada Georgia's "Manual of Weeds",<sup>17</sup> and in various local floral lists.

### CLASSIFICATION OF FLORA.

Before proceeding to review the various plant groups found in Canada, it may be desirable to explain briefly the basis upon which plants are classified and named in this article. Individuals, whether of the higher or lower forms of plant life, that resemble each other in their structural characteristics are grouped together under the term species; species which exhibit one or more similar characteristics are further grouped under a genus; and genera are similarly grouped in a family. The names of all these plant classifications are in Latin, which is still to a large extent internationally used by scientists. A species of plant of any group is always identified by a double Latin name, such as the Wild Plum (*Prunus nigra*), the Sand Cherry (*Prunus pumila*), or the Pin Cherry (*Prunus pennsylvanica*): the second word is the name of the species, while the first is that of the genus. In this respect, plant names resemble personal names, except that the genus name, corresponding to the

surname, comes first. Family names mostly end in the termination—*aceae*, Families in their turn are grouped into still larger subdivisions of the vegetable kingdom.

A popular arrangement of the vegetable kingdom is that which divides all plant forms into phanerogams or cryptogams, the former being characterized by the possession of seeds, while the cryptogams have no seeds, but are propagated by minute or microscopic bodies known as spores.

**Phanerogams.**—The phanerogams are divided into: (1) gymnosperms in which the seeds, instead of occurring in a closed receptacle, are found without any covering or merely placed between the scales of the cone; and (2) angiosperms in which the seeds are contained in a closed structure which later becomes the fruit. The gymnosperms, moreover, are all shrubs or trees, while the majority of angiosperms are herbaceous. The latter group is further subdivided into monocotyledons and dicotyledons. In the monocotyledons the leaves are usually much longer than broad, with parallel veins, and the vast majority of the group are herbaceous, while the dicotyledons have net-veined leaves and a considerable number of species are shrubs or trees. Further subdivisions of these groups carry the classification down to families, genera, and species.

**Cryptogams.**—The cryptogams, according to popular rather than strictly scientific usage, may be considered as consisting of six groups: vascular cryptogams, mosses, liverworts, lichens, fungi, and algæ. The vascular cryptogams have a lignified or woody supporting tissue which serves at the same time to conduct the sap. In common with the two next lower groups—the mosses and liverworts—they exhibit in their life-history an "alternation of generations", that is, a sexual followed by an asexual generation. The mature plant in the vascular cryptogams is the asexual stage. This group has three leading subdivisions—the ferns, horse-tails (*Equisetum*), and club-mosses (*Lycopodium*, etc.).

In the mosses and liverworts the mature plant is the sexual generation. They are generally lowly plants occurring mostly on damp soil or in shady places. Lignified or woody tissue is almost entirely absent. The mosses are leafy plants with only a single mid-vein in the leaf except in the genus *Sphagnum* which has none. In the liverworts two types occur, namely: (1) the thalloid type in which there is no differentiation into stem and leaf, and (2) the leafy type in which the leaves occur in two rows on the stem and are devoid of a mid-vein.

The lichens are a combination of the two lowest groups of plants and consist of a fungus and an alga living together for their mutual benefit. They are mostly greyish in colour but sometimes orange, sometimes black. They occur on rocks, or the bark of trees, or sometimes on the surface of the ground and exhibit three leading forms—the crustaceous, the foliose or leafy, and the fruticose or shrub-like.

The most characteristic feature of fungi is the absence of the green colouring matter (chlorophyll) so characteristic of most groups of plants. In consequence they are not truly self-supporting but must derive their food materials from the decaying remains of other plants or animals, in which case they are known as saprophytes, or else they attach themselves to the bodies of other plants (rarely animals) as parasites, the plant attacked being known as the host. There are three main groups of fungi, namely, *Phycomycetes*, *Ascomycetes* (including such forms as blue mould and morels), and *Basidiomycetes* (including mushrooms, polypores, puffballs, etc.). Under the last group are usually included the rusts (*Uredineae*), while the *Pyrenomycetes* are a sub-group of *Ascomycetes*. Two other groups of

plants are sometimes classified under fungi, namely, bacteria which contain the smallest living organisms and slime fungi (*Myxomycetes*) which are sometimes considered as belonging to the animal kingdom.

The algae, almost without exception, occur in water, some being confined to fresh water, others occurring only in the sea. They vary greatly in size, some, such as diatoms and desmids, being one-celled microscopic bodies, while others are several yards in length. Chlorophyll is usually present but in many the green colour is masked by some other pigment. The colour-groups usually recognized are the blue-green (*Cyanophyceae*), green (*Chlorophyceae*), brown (*Phaeophyceae*), and red (*Rhodophyceae*). The *Diatomaceae*, which are sometimes classified among algae, are of a golden colour, have a flinty covering composed of silica and are found, some in fresh, others in salt water. Both the blue-green and the green algae have likewise species characteristic of each medium. But the *Desmidiaceae* and allied species as well as the Stoneworts (*Characeae*) occur exclusively in fresh water. Both the *Phaeophyceae* and the *Rhodophyceae* occur exclusively in the sea, with the exception of 3 genera in the latter group.

### Section 1.—Phanerogams.

In the 11th edition of Engler and Diels' "Syllabus der Pflanzenfamilien",<sup>18</sup> there are described 314 families of flowering plants (angiosperms). On the same basis of classification, besides 3 families of gymnosperms, there are 124 families of indigenous angiosperms in Canada, but some of these, such as *Dioscoreaceae*, *Acanthaceae*, *Bignoniaceae*, and *Melastomataceae*, whose chief centres of distribution are in much warmer climates, are represented in this country by a single species only.

There are in Canada about 700 genera of indigenous phanerogams of which 10 belong to the group of gymnosperms, and 690 to the angiosperms of which 142 genera are monocotyledons and 548 dicotyledons. It is more difficult to reckon up the number of species owing to the divergence of opinion on the definition of this term. If, however, we employ the term 'species' in the wider Linnaean sense, there are about 35 species of gymnosperms and 4,112 species of angiosperms. About one-fourth of the latter are monocotyledons and the remainder dicotyledons. In the dicotyledonous group, about 346 species are shrubs or trees.

The largest family, as might be expected, is *Compositae* with 630 species, while *Cyperaceae* and *Gramineae* come next each with 352 species. Next in point of numbers come *Rosaceae* with 283 species, *Leguminosae* with 189 species, *Cruciferae* with 152 species, and *Scrophulariaceae* with 151 species.

The largest genus in the Canadian flora is *Carex* with 285 species followed by *Salix* with 96 species. Seven other genera contain over 50 species. These, in order of numerical importance, are *Aster*, *Potentilla*, *Saxifraga*, *Ranunculus*, *Solidago*, *Poa*, and *Polygonum*. There are 7 genera with 40 to 50 species each, and 26 genera with 20 to 40 species each. An estimate of the number of species in each genus will be found in the author's "Guide to the Genera".<sup>19</sup>

In the study of phanerogams, under the diverse conditions of plant life existing in a country so extensive as Canada, it is convenient and necessary to divide the country into various regions or zones, each of which, because of circumstances of climate, latitude or topography, tends to exhibit a flora characteristic of that region and differing in important aspects from that of other regions.

**Floral Regions.**—Considerable difference of opinion exists among botanists on the subject of the division of Canada and the United States into natural vegetational areas. Only four of the proposed schemes will be considered here.

So far as it applies to Canada, the scheme proposed by Merriam<sup>20</sup> consists of six zones, three of which, namely, Arctic, Hudsonian, and Canadian, are transcontinental. Next in order from north to south come the Transition Zone including the true prairie and then the Alleghanian Zone comprising part of southern Manitoba, part of southern Ontario, and parts of New Brunswick and Nova Scotia bordering on the bay of Fundy. The sixth zone, the Carolinian, includes the region in southern Ontario south of a line drawn from Hamilton to Sarnia.

Basing his subdivisions on the distribution of trees, Sargent<sup>21</sup> recognizes only three areas in Canada south of the Arctic Region. The North Eastern section includes the area east of a line from Wood mountain in Saskatchewan to the mouth of the Mackenzie river. The Rocky Mountains section includes a broad belt on each side of this chain, while the North Western section comprises the Selkirk mountains and the western half of British Columbia and Yukon.

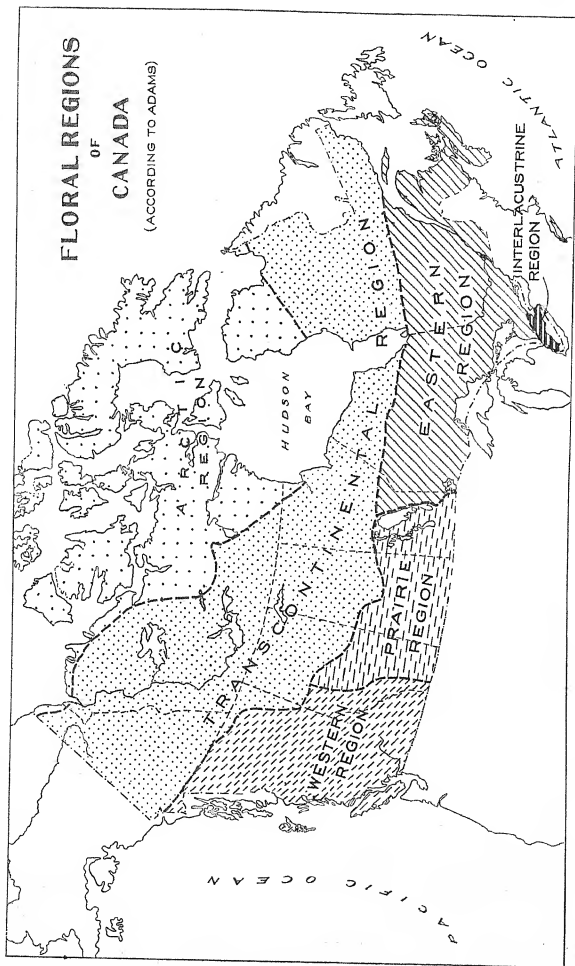
Harshberger<sup>22</sup> recognizes seven phytogeographic areas in Canada. These are: (1) Arctic Zone; (2) Subarctic or Northern Coniferous Forest Zone; (3) St. Lawrence-Great Lake Region, which extends as far west as lake Winnipeg; (4) Prairie Region; (5) Rocky Mountain Region, extending to the northern boundary of British Columbia; (6) Sitkan Region, comprising the northwestern coastal temperate zone extending from Cook inlet to the fifty-first parallel and including the northern part of Vancouver island; (7) Columbian Region, extending in Canada from about the bend of the Fraser river to the International Boundary. Most of the above regions are subdivided further into smaller areas.

Macoun and Malte<sup>23</sup> in their review of the flora of Canada divide the country into the following eleven vegetational areas: Arctic Zone; Subarctic Forest Zone; Hardwood Forest Zone; Carolinian Zone; Prairie (with three subdivisions); Rocky Mountain Foothills; Rocky Mountains Proper; Selkirk Range; Coast Range; Vancouver Island; and Dry Belts of British Columbia. In this scheme the Subarctic Forest Zone included the Hudsonian and part of the Canadian Zone of Merriam, while the Prairie was approximately the same as Merriam's Transition Zone.

In the present delimitation of the boundaries of the floral regions, which is almost the same as that previously proposed by the present author,<sup>16</sup> Canada has been divided into six regions: Arctic; Transcontinental; Eastern; Interlacustrine or Carolinian; Prairie; and Western. Several of these, particularly the Western, can be divided into smaller areas each with a distinctive flora. The boundaries of these six regions are shown on the accompanying map. As there is a certain amount of overlapping of the floras of any two regions where they meet, the above boundaries are not to be interpreted too rigidly. Characteristic features of each of the floral regions are given under the respective centre headings below. The distribution of seed-bearing plants in Canada is discussed in some detail under these six regions; for each, a brief outline is given of characteristic factors of climate or physiography which are likely to exercise a controlling influence upon the plant life within that region.

# FLORAL REGIONS OF CANADA

(ACCORDING TO ADAMS)





## Arctic Region.

This is regarded by general consent as including the treeless region along the northern mainland of Canada usually known as the "Arctic Prairies", together with the numerous islands forming the archipelago still farther north. One of the most outstanding climatic features of this region is the shortness of the season in summer during which the temperature is sufficiently high for the activity of plant life. But, although the mean temperature of the summer months remains comparatively low, a compensating factor is the prolonged period of daylight. North of the Arctic Circle there are a considerable number of days during which the sun never goes below the horizon. Even at Fort Rae in latitude  $62^{\circ} 40'$  the average daily duration of daylight is 19.8 hours in June and 18.9 hours during July.

Another feature of this region, important in its bearing on plant life, is the fact that the lower layers of the soil remain permanently frozen and only a few feet on the surface thaw out in summer. Thus, as an example, along the northern edge of the Transcontinental Region, according to figures quoted by Koeppé,<sup>11</sup> at Fort McPherson near the mouth of the Mackenzie river the frost penetrates to a depth of 52 feet and the ground on the surface thaws to a depth of only 3.5 feet, while at York Factory near the mouth of the Nelson river on Hudson bay the ground freezes to a depth of 19.8 feet and thaws out to a depth of 2.3 feet.

As an indication of the climatic conditions of temperature and precipitation likely to govern plant life in the Arctic Region, meteorological data are given below for three representative places. Unfortunately data on sunlight are not available. The records summarized here cover only 3 years in the cases of Coppermine and Pangnirtung and 5 years at Chesterfield.

METEOROLOGICAL RECORDS IN THE ARCTIC REGION.

| Place.            | Absolute Minimum Range. | Mean Temperature. |       | Average Rain, June to Sept. |
|-------------------|-------------------------|-------------------|-------|-----------------------------|
|                   |                         | January.          | July. |                             |
|                   | °F.                     | °F.               | °F.   | in.                         |
| Coppermine.....   | -54 to -42              | -23.4             | 52.0  | 3.56                        |
| Chesterfield..... | -60 to -47              | -26.6             | 48.0  | 6.96                        |
| Pangnirtung.....  | -46 to -38              | -17.8             | 46.5  | 6.33                        |

For a much fuller discussion of the climate of this region, reference should be made to Koeppé's work<sup>11</sup> already mentioned.

The vegetative characters of the Arctic Zone have been frequently described<sup>16,23</sup> but nowhere better than by Porsild,<sup>24</sup> who writes as follows:—

Among the herbs of the Arctic Zone there are no climbing plants, none that are poisonous, nor any that are protected by spines or thorns. Very few are annuals and as a general rule Arctic plants of all species depend only to a limited extent for their propagation upon seed, protecting themselves against unfavourable seasons by various means of vegetative reproduction. One of these means is wintering buds which are not buried in the soil, but are situated close to the surface and are well protected by withered leaves. Most of the herbs are caespitose with numerous leafy shoots, forming dense cushions or rosettes. In most species a profuse branching is the rule.

To this description might be added the viviparous condition where a small vegetative bulb-like growth takes the place of a flower, as in *Polygonum viviparum*. An example of the annual type of plant is furnished by *Gentiana arctophila*.

Woody plants are exemplified by dwarf shrubs of various kinds whose low stature is doubtless due mainly to harsh climatic conditions, such as cold soil, strong winds, etc. Some of these, such as *Diapensia lapponica*, exhibit the cushion-like type of growth found in herbs; others, such as *Empetrum nigrum*, have a trailing habit of growth. In *Loiseleuria procumbens* the leaves have a leathery texture, while in *Salix glauca* the leaves are covered by a waxy deposit to diminish transpiration.

The families best represented as regards number of species are *Gramineae*, *Cyperaceae*, *Compositae*, *Cruciferae*, *Caryophyllaceae*, *Saxifragaceae*, and *Ranunculaceae*.

There are 5 genera, namely, *Bartsia*, *Chrysanthemum*, *Eutrema*, *Lagotis*, and *Parrya*, which do not appear to be represented in Canada outside the Arctic Region.

Many species of Arctic plants occur also on the summits of mountains farther south where the climatic conditions are somewhat similar, but so far as is known at present there are about 120 species not found south of the Canadian Arctic Zone.

In spite of the comparative inaccessibility of the greater part of the Arctic Region, that territory has received a good deal of attention from botanical investigators. The most complete account of the flora is to be found in the work of Simmons<sup>25</sup> who records 8 species of ferns and their allies, 59 species of monocotyledons, and 137 species of dicotyledons. The report of Macoun and Holm<sup>26</sup> on the results of the Canadian Arctic Expedition, 1913-18, includes 230 species of vascular plants, while a recent report by Grönqvist<sup>27</sup> dealing with the 5th Thule Expedition, enumerates 6 species of ferns and their allies, 2 conifers, 47 monocotyledons, and 139 dicotyledons, together with 12 hybrids. Polmin<sup>28</sup> records 391 species from Akpatok island, of which 129 were vascular plants and the remainder various groups of cryptogams. Other important contributions to the flora of this region are those of Holm<sup>29</sup> and Johansen.<sup>30</sup>

### Transcontinental Region.

This region occupies, to a large extent, a transitional position between the Arctic Region to the north and the Eastern Region to the south, not only in regard to climate but also in its vegetation. As the name implies, it stretches across the continent from the gulf of St. Lawrence to Yukon and through Alaska to the Pacific ocean. It includes the whole of the Hudsonian and the western part of the Canadian Zone in Merriam's classification. No land elevations in the eastern part reach an altitude likely to alter the characteristic plant life, but in the far northwest and Yukon there are mountainous areas reaching to high altitudes. East of this mountainous part, the region is characterized by a generally flat topography with innumerable lakes ranging in size from mere ponds up to Great Bear lake with an area of 11,660 square miles. Bogs and muskegs are also very common. The altitude of the mountains and the areas and elevations of the chief lakes will be found in Chapter I at pp. 8 and 9, and 12 and 13 respectively.

Some idea of the variations in the climate of different parts of this region may be obtained from the figures in the following statement, derived from records covering the years 1909 to 1937, inclusive. It should be noted that the places of record are on the sea coast or along river courses and therefore are not representative of higher altitudes occurring especially in the northwestern part of the region.

## METEOROLOGICAL RECORDS IN THE TRANSCONTINENTAL REGION.

| Place.                       | Absolute Minimum Range. | Mean Temperature. |       | Average Rain, June to Sept. | Average Sunshine, May to October. |
|------------------------------|-------------------------|-------------------|-------|-----------------------------|-----------------------------------|
|                              |                         | January.          | July. |                             |                                   |
|                              | °F.                     | °F.               | °F.   | in.                         | hr.                               |
| Harrington Harbour, P.Q..... | -37 to -14              | 8.0               | 53.2  | 8.99                        | 1                                 |
| Fort George, P.Q.....        | -52 to -37              | -11.9             | 54.4  | 9.51                        | 1                                 |
| Port Nelson, Man.....        | -55 to -40              | -20.0             | 54.0  | 7.92                        | 1                                 |
| Churchill, Man.....          | -49 to -42              | -18.9             | 52.9  | 8.85                        | 1                                 |
| The Pas, Man.....            | -54 to -28              | -7.3              | 64.3  | 8.43                        | 1,288.0                           |
| Fort Vermilion, Alta.....    | -78 to -27              | -14.5             | 60.0  | 7.17                        | 1,417.4                           |
| Fort Good Hope, N.W.T.....   | -69 to -45              | -22.9             | 59.5  | 5.97                        | 1                                 |
| Dawson, Yukon.....           | -66 to -36              | -21.0             | 59.3  | 5.87                        | 1                                 |

<sup>1</sup> Data not available.

The outstanding feature of this region is the belt of forest, mainly coniferous, which extends throughout except for the high altitudes in Yukon. Characteristic species are the White Spruce (*Picea glauca*), Black Spruce (*Picea mariana*), Tamarack (*Larix laricina*), Balsam Fir (*Abies balsamea*), Jack Pine (*Pinus banksiana*), Aspen (*Populus tremuloides*), Balsam Poplar (*Populus balsamifera*), and White Birch (*Betula papyrifera*).

Some of the most characteristic shrubs are Junipers (*Juniperus communis* and *horizontalis*), Scrub Birch (*Betula glandulosa*), Buffalo Berry (*Shepherdia canadensis*), Swamp Red Currant (*Ribes triste*), Northern Gooseberry (*Ribes oxycanthoides*), Shrubby Cinquefoil (*Potentilla fruticosa*), Bearberry (*Arctostaphylos Uva-ursi*), Wild Rosemary (*Andromeda Polifolia*), Leather-leaf (*Chamaedaphne calyculata*), Labrador Tea (*Ledum groenlandicum*), Swamp Laurel (*Kalmia polifolia*), Creeping Snowberry (*Chiochens hispidula*), Rock Cranberry (*Vaccinium Vitis-idaea*).

Herbaceous species characteristic of the area are Marsh Arrow-grass (*Triglochin palustris*), Tall Cotton-grass (*Eriophorum angustifolium*), Tufted Hair-grass (*Deschampsia caespitosa*), Holy Grass (*Hierochloa odorata*), Floating Pondweed (*Potamogeton natans*), Twisted-stalk (*Streptopus amplexifolius*), Coral Root (*Coralorrhiza trifida*), Rattle-snake Plantain (*Peramium ophioides*), Gold Thread (*Coptis trifolia*), Northern Stitchwort (*Stellaria borealis*), Kidney-leaved Violet (*Violet renifolia*), Grass of Parnassus (*Parnassia palustris*), Bunch-berry (*Cornus canadensis*), Baked-apple Berry (*Rubus Chamaemorus*), One-flowered Wintergreen (*Moneses uniflora*), Cow-wheat (*Melampyrum lineare*), Twin-flower (*Linnæa americana*).

Apparently only one species is confined to this region, namely, the Small White Waterlily (*Nymphaea tetragona*).

Extensive lists of the flora of this region have been published by various investigators but, as much of the interior is inaccessible by ordinary means of conveyance, only certain areas along the coast have been studied intensively in the eastern part. The list issued by St. John<sup>21</sup> for the north shore of the gulf of St. Lawrence included 31 species of ferns and allied plants, 7 species of conifers, 146 native and 7 introduced species of monocotyledons, 240 native and 31 introduced species of dicotyledons. A later list by Lewis,<sup>22</sup> covering a somewhat similar area, contained the names of 567 vascular plants. In connection with the southern and eastern borders of James bay, a list of plants collected by Potter<sup>23</sup> contained 16 species of ferns and allied groups, 8 species of conifers, 94 species of monocotyledons and 200 species of dicotyledons. Introduced plants were included in the above totals.

In the west, Raup's investigations<sup>34</sup> covered an area somewhat transitional between the Transcontinental, Prairie, and Western Floral Regions. As the result of an extensive survey he mentions the occurrence of 38 species of ferns and allied groups and 716 species of seed-plants. Considerable areas of saline soil occur in the region traversed in which 14 species characteristic of such habitats were noted. Among these were *Triglochin maritima*, *Distichlis spicata*, *Chenopodium rubrum*, *Salicornia europaea*, *Suaeda depressa*, *Spergularia salina*, *Ranunculus cymbalaria*, and *Plantago eriopoda*, all of which are characteristic plants of the sea coast.

### Eastern Region.

This region, which corresponds in most particulars to the Hardwood Forest Zone of Macoun and Malte,<sup>35</sup> contains a large variety of soil-types. While practically all the higher altitudes are covered by forests up to their summits, except where they have been destroyed as the result of fire or lumbering operations, there are two well-marked treeless areas where the vegetation consists of scrub-heath. One of these areas constitutes the "barrens" of northern Cape Breton island, while the other consists of a small plateau 4 miles long by 2 miles broad on the summit of mount Albert in the Gaspé peninsula. At no other places within the region does altitude appear to exercise a controlling influence upon the flora.

### METEOROLOGICAL RECORDS IN THE EASTERN REGION.

| Place.                    | Absolute Minimum Range. | Mean Temperature. |       | Average Rain, June to Sept. | Average Sunshine, May to October. |
|---------------------------|-------------------------|-------------------|-------|-----------------------------|-----------------------------------|
|                           |                         | January.          | July. |                             |                                   |
|                           | °F.                     | °F.               | °F.   | in.                         | hr.                               |
| Halifax, N.S.....         | -21 to 7                | 23.0              | 64.8  | 15.99                       | 1                                 |
| Annapolis Royal, N.S..... | -12 to 5                | 23.0              | 63.9  | 13.01                       | 1,129.9                           |
| Charlottetown, P.E.I..... | -23 to -1               | 17.2              | 65.1  | 12.78                       | 1,216.2                           |
| Fredricton, N.B.....      | -35 to -15              | 12.7              | 66.0  | 14.74                       | 1,208.5                           |
| Quebec, P.Q.....          | -32 to -11              | 9.7               | 66.7  | 16.05                       | 1,109.7                           |
| Spirit Lake, P.Q.....     | -56 to -36              | 0.0               | 61.9  | 15.76                       | 1,086.2                           |
| Kingston, Ont.....        | -31 to 0                | 18.2              | 68.4  | 11.40                       | 1,307.1                           |
| Halleybury, Ont.....      | -48 to -23              | 6.7               | 67.3  | 13.36                       | 1                                 |
| Moose Factory, Ont.....   | -56 to -32              | -4.4              | 61.2  | 11.57                       | 1                                 |
| Port Arthur, Ont.....     | -37 to -16              | 6.6               | 62.9  | 12.33                       | 1                                 |
| Kenora, Ont.....          | -50 to -23              | -0.4              | 66.2  | 13.40                       | 1                                 |

<sup>1</sup> Data not available.

While most of the plants in this area extend southward through the district bordering on the Great Lakes into the United States, very few species have a westward extension beyond lake Winnipeg into the Prairie Region. If, for the present, the Eastern and Interlacustrine Regions be considered together, there are 14 families, with 1 or 2 genera in each, which do not occur elsewhere in Canada. These, with their respective genera, are as follows: *Eriocaulaceae*—*Eriocaulon*; *Pontederiaceae*—*Heteranthera*, *Pontederia*; *Xyridaceae*—*Xyris*; *Acanthaceae*—*Dianthera*; *Thymelaeaceae*—*Dicra*; *Hamamelidaceae*—*Hamamelis*; *Ilicaceae*—*Ilex*, *Nemopanthis*; *Juglandaceae*—*Carya*, *Juglans*; *Menispermaceae*—*Menispermum*; *Phrymaceae*—*Phryma*; *Podostemonaceae*—*Podostemon*; *Rutaceae*—*Xanthoxylum*; *Staphyleaceae*—*Staphylea*; *Tiliaceae*—*Tilia*.

In addition to the above 17 genera, there are 59 others confined to the eastern half of the Dominion. A list of these will be found in the present author's "Survey"<sup>1</sup>.

While the majority of the trees in this area are deciduous in nature, there are also a considerable number of evergreen species, the most characteristic of which are White Pine (*Pinus Strobus*), Red Pine (*Pinus resinosa*), Hemlock (*Tsuga canadensis*), and White Cedar (*Thuja occidentalis*).

Some of the more important deciduous trees are Yellow Birch (*Betula lutea*), Burr Oak (*Quercus macrocarpa*), Red Oak (*Quercus rubra*), Beech (*Fagus grandifolia*), White Elm (*Ulmus americana*), Sugar Maple (*Acer saccharum*), Red Maple (*Acer rubrum*), White Ash (*Fraxinus americana*), Black Ash (*Fraxinus nigra*), Black Cherry (*Prunus serotina*).

Among the numerous shrubs found in this region, mention may be made of Ground Hemlock (*Taxus canadensis*), White Virgin's Bower (*Clematis virginiana*), Purple Flowering Raspberry (*Rubus odoratus*), Woolly Steeple-bush (*Spiraea tomentosa*), Staghorn Sumac (*Rhus hirta*), Prickly-fruited Gooseberry (*Ribes cynosbati*), Blue-berried Grape (*Vitis vulpina*), Smooth-leaved Honeysuckle (*Lonicera dioica*), With-e-rod (*Viburnum cassinoides*), and various others.

Herbaceous species are very numerous. Among those typical of the forest floor are Yellow Clintonia (*Clintonia borealis*), Yellow Adder's Tongue (*Erythronium americanum*), White Trillium (*Trillium grandiflorum*), Hairy Solomon's Seal (*Polygonatum biflorum*), Red Baneberry (*Actaea rubra*), Liver-leaf (*Anemone hepatica*), Squirrel Corn (*Dicentra canadensis*), Two-leaved Mitrewort (*Mitella diphylla*), Cowwort (*Tiarella cordifolia*), Hairy Sweet Cicely (*Osmorrhiza Claytomi*), Enchanter's Nightshade (*Circaea lutetiana*), Wild Sarsaparilla (*Aralia nudicaulis*), Round-leaved American Wintergreen (*Pyrola americana*), Blue Wood Aster (*Aster cordifolius*), Broad-leaved Golden Rod (*Solidago flexicaulis*), Tall Rattlesnake-root (*Prenanthes trifoliolata*), and many others.

Characteristic of swampy open ground are a number of species with showy flowers such as Purple Fringed Orchid (*Halimnaria psycodes*), Drooping Ladies' Tresses (*Spiranthes cernua*), Closed Gentian (*Gentiana Andrewsii*), Turtle Head (*Chelone glabra*), Square-stemmed Aster (*Aster puniceus*), Golden Ragwort (*Senecio aureus*).

Macoun and Malte,<sup>23</sup> after noting the succession of spring, summer, and autumn flowers in this region, call special attention to the lavish display of colouring in the forest at the end of the growing season in the following passage:—

Very characteristic of the zone is the autumnal colouring of the leaves of trees, shrubs, and herbaceous plants. This autumnal colouring lasts a comparatively long time, from about the first week in September to the second week in October, dependent on the dryness of the season. During that period the most splendid display of colour is exhibited, especially in the open mixed woods where underbrush is well developed. Every shade of yellow, golden bronze, red and scarlet is mixed in a gorgeous symphony of colours generally most marvellously modulated by the sombre deep dark or bluish green of the conifers, which are dotted among the deciduous trees. No such wealth of colour is ever met with in any other country.

A feature of considerable interest, as has been pointed out by Fernald,<sup>26, 27</sup> is the presence in Nova Scotia, doubtless due to the milder winter climate, of a number of plants characteristic of the Coastal Plain Region of the United States. Among these may be mentioned *Lophiola americana*, *Lilaeopsis lineata*, *Sabbatia Kennedyana*, *Gerardia maritima*, *Utricularia subulata*.

Specially characteristic of the Eastern Region are certain plants which, as pointed out by Fernald,<sup>27</sup> show a remarkable discontinuity in their distribution. In this connection he writes: "The splendid sunflower-like *Senecio Pseudo-Arnica* Less. abounds on the shores of Bering sea, thence southwestward to Japan and Northern Korea and southeastward to Vancouver island. Otherwise it is known only as a

sea-strand plant centring on the gulf of St. Lawrence but with outlying stations northward beyond Hamilton inlet and very rarely southward to Grand Manan island at the entrance of the bay of Fundy; and it has a well-marked variety endemic to the Mingan islands". Elsewhere<sup>38</sup> he states that "these areas which have been free from vigorously eroding continental ice-sheets since the opening of the long interglacial epoch (preceding the last continental advance) are at once distinguished by the presence of hundreds of species which in eastern America are known nowhere else—and which are interpreted as relics of the flora which was widespread across the boreal regions during the long interglacial epoch but which was recently exterminated from the intermediate areas by the advance of the Wisconsin ice-sheet. Such isolations in the regions uninhabited by the latest continental ice are indicated by *Polystichum mohrioides*, *Senecio resedifolius*, *Lesquerella arctica*, *Erigeron compositus* and *Crepis nana*; and restriction to unglaciated arctic America by *Oxytropis arctica*. With these plants, chiefly of western America, now isolated on the unglaciated areas about the gulf of St. Lawrence or in northern Labrador, there are many endemics (more than 100 known in this, as yet, scarcely explored area) which are closely related to species of remote geographic range, rather than to species of the adjacent continental region. Such endemics are well illustrated by *Salix calcicola*, eastern representative of the northwestern *S. Richardsonii*".

One of the principal areas to escape glaciation in this region is the Gaspé peninsula. Here, as pointed out by Marie-Victorin,<sup>14</sup> are a number of relics which also are found in the western cordilleran region, such as *Danthonia intermedia*, *Dryas Drummondii*, *Erigeron hyssopifolius*, etc. Others are endemics with cordilleran affinity, such as *Astragalus gaspensis*, *Gentiana gaspensis*, *Aster gaspensis*, etc.

Among the more important publications dealing with the flora of the Eastern Region mention may be made of those of Lindsay<sup>39</sup> and Nichols<sup>40</sup> for Nova Scotia of which the latter dealt mainly with an ecological survey but also included the names of many vascular plants and mosses. The list of Hurst<sup>41</sup> included 595 species and varieties for Prince Edward Island, but additions made since bring the total of native and introduced plants up to 641. The flora of New Brunswick has been investigated by Fowler<sup>42</sup> who gives the detailed distribution of 985 species of vascular plants in that province. The comprehensive work of Marie-Victorin<sup>3</sup> on the flora of Quebec deals mainly with the southern part of that province as far north as lake St. John and the Saguenay river and east of the gulf of St. Lawrence with the exception of the Gaspé peninsula. Altogether, 1,917 species are described or mentioned. Of the various papers dealing with the province of Ontario, one of the most important is that of Fernald<sup>43</sup> relating partly to the flora of the Bruce peninsula.

#### Interlacustrine or Carolinian Region.

This is the smallest of all the floral regions into which the country has been divided, but nevertheless it has some quite unique features when viewed from a botanical standpoint. Owing to its proximity to the Great Lakes, this region has a shorter and milder winter than the country farther north, in this respect resembling the southern part of Nova Scotia.

There are 11 families found in this region which do not occur elsewhere in Canada. These, with the genera contained in them, are as follows: *Dioscoreaceae*—*Dioscorea*; *Saururaceae*—*Saururus*; *Moraceae*—*Morus*; *Anonaceae*—*Asimina*; *Magnoliaceae*—*Liriodendron*, *Magnolia*; *Phyllolacaceae*—*Phyllolacca*; *Lauraceae*—*Ben-*

zoïn, *Sassafras*; *Platanaceae*—*Platanus*; *Cassiaceae*—*Cercis*, *Gleditschia*, *Gymnocladus*; *Melastomataceae*—*Rhexia*; *Bignoniaceae*—*Tecoma*.

METEOROLOGICAL RECORDS IN THE INTERLACUSTRINE REGION.

| Place.                      | Absolute Minimum Range. | Mean Temperature. |       | Average Rain, June to Sept. | Average Sunshine, May to October. |
|-----------------------------|-------------------------|-------------------|-------|-----------------------------|-----------------------------------|
|                             |                         | January.          | July. |                             |                                   |
|                             | °F.                     | °F.               | °F.   | in.                         | hr.                               |
| Vineland <sup>1</sup> ..... | -14 to 11               | 24.0              | 70.0  | 11.67                       | 1,402.4                           |
| Grimsby.....                | -21 to 10               | 21.2              | 69.0  | 10.78                       | 2                                 |
| Woodstock.....              | -26 to 2                | 20.5              | 67.3  | 11.06                       | 1,294.0                           |
| London.....                 | -27 to 5                | 23.4              | 69.3  | 11.83                       | 3                                 |
| Harrow.....                 | -20 to 9                | 25.0              | 72.0  | 9.45                        | 1,370.5                           |

<sup>1</sup> Vineland is 323 feet, while Woodstock is 980 feet above sea-level.

<sup>2</sup> Data not available.

In addition to the 15 genera mentioned above, there are 32 others peculiar to this region. A list of these will be found in the present author's "Survey".<sup>18</sup> There are 262 species in this area which are not indigenous to any other part of Canada.

Some of the trees confined to this region are Black Walnut (*Juglans nigra*), Mockernut Hickory (*Carya alba*), Pignut Hickory (*Carya glabra*), Black Oak (*Quercus velutina*), Scarlet Oak (*Quercus coccinea*) and 5 other species of Oak, Blue Ash (*Fraxinus quadrangulata*).

Among the shrubs are Bristly Greenbrier (*Smilax hispida*), Poison Sumac (*Rhus Vernix*), Pink-flowered Crab-apple (*Pyrus glaucescens*), Woolly-leaved Grape (*Vitis aestivalis*), Flowering Dogwood (*Cornus florida*), and Deerberry (*Vaccinium stamineum*).

Some of the numerous herbs are White Adder's Tongue (*Erythronium albidum*), Yellow Fringed Orchid (*Habenaria ciliaris*), Flowering Spurge (*Euphorbia corollata*), Perennial Lupin (*Lupinus perennis*), Smooth-fruited Prickly Pear (*Opuntia humifusa*), Butterfly-weed (*Asclepias tuberosa*), Broad-leaved Water-leaf (*Hydrophyllum canadense*), Wild Bergamot (*Monarda fistulosa*), Dense Button-snakeroot (*Liatris spicata*), Tall Ironweed (*Vernonia altissima*).

Among the more important publications dealing with the flora of this region are those of Dodge for Lambton county<sup>44</sup> and Point Pelee.<sup>45</sup> The latter work contains the names of 865 species of vascular plants. Included in the district investigated was Pelee island, the most southerly part of the Dominion of Canada. On Pelee island, Dodge found 408 species, but he thinks "there should be found on this island about 650 or 700 species growing without cultivation", which shows "clearly that there is still work for a local botanist".

In Zenkert's work,<sup>46</sup> 1,702 species and varieties are mentioned, many of which occur on the Canadian side of the International Boundary.

#### Prairie Region.

The ground in this region rises gradually from about 750 feet in the Red River valley to about 4,500 feet above sea-level in the foothills of the Rocky mountains. The soil is usually deep and so the vegetation is better enabled to withstand drought by withdrawing moisture from the lower layers through the deeply penetrating roots.

The characteristic climatic features are wide variations in temperature, low annual precipitation, strong winds, and a high percentage of sunshine. The figures for some stations on the prairie are given below.

METEOROLOGICAL RECORDS IN THE PRAIRIE REGION.

| Place.                   | Absolute Minimum Range. | Mean Temperature. |       | Average Rain, June to Sept. | Average Sunshine, May to October. |
|--------------------------|-------------------------|-------------------|-------|-----------------------------|-----------------------------------|
|                          |                         | January.          | July. |                             |                                   |
|                          | °F.                     | °F.               | °F.   | in.                         | hr.                               |
| Winnipeg, Man.....       | -45 to -21              | -2.6              | 66.7  | 10.75                       | 1,373.0                           |
| Brandon, Man.....        | -51 to -26              | -2.6              | 64.6  | 9.87                        | 1,278.0                           |
| Indian Head, Sask.....   | -50 to -20              | -1.0              | 63.5  | 9.87                        | 1,228.0                           |
| Saskatoon, Sask.....     | -55 to -16              | -2.7              | 62.8  | 8.63                        | 1                                 |
| Rosetham, Sask.....      | -50 to -19              | -4.2              | 62.5  | 8.20                        | 1,398.3                           |
| Swift Current, Sask..... | -54 to -12              | 6.9               | 65.7  | 8.45                        | 1,487.2                           |
| Lethbridge, Alta.....    | -45 to 4                | 15.0              | 65.0  | 7.93                        | 1,542.6                           |
| Edmonton, Alta.....      | -52 to -10              | 6.2               | 61.4  | 10.08                       | 1,349.8                           |
| Beaverlodge, Alta.....   | -56 to -3               | 0.6               | 57.0  | 7.34                        | 1,360.5                           |

1 Data not available.

While the typical prairie is treeless—except along the river valleys—there is a transitional belt of mixed prairie and woodland along the eastern and northern sides. In marked contrast to the Eastern and Interlacustrine Regions there is no family of plants confined in Canada to the Prairie Region. The number of genera which occur only on the prairie is also much reduced, amounting to 15 altogether. There are, however, about 267 species characteristic of the prairie and not occurring elsewhere, about half of which are included under the three families of composites, leguminous plants, and grasses.

A characteristic feature of certain parts of the Prairie Region is the presence of lakes with no outlet, around the margin of which the soil is saline or alkaline. In such localities plants occur which elsewhere are found on the sea coast, such as Spike Grass (*Distichlis spicata*), Sea Crowfoot (*Ranunculus cymbalaria*), Sea Milk-wort (*Glaux maritima*), and others.

On the dry prairie a marked feature of the vegetation is the abundance of xerophytes, that is, plants with adaptations calculated to counteract the loss of water from the plant by evaporation. As examples, the following species, which are confined in their distribution to the Prairie Region, may be mentioned. Among shrubby types, the Winter Fat (*Eurotia lanata*) has a dense covering of hairs, while the Thorny Buffalo Berry (*Shepherdia argentea*) has scales on the leaves. Of the herbaceous types, the Hoary Sage-brush (*Artemisia cana*) is covered with hairs; the Beard-tongue (*Pentstemon nitidus*) is glaucous; the Purple Skeleton-weed (*Lygodesmia juncea*) has the leaves much reduced in size; while in the Purple Cactus (*Mammillaria vivipara*) the stem is fleshy and leaves are absent altogether. As mentioned above, some of the prairie plants are deep-rooting and are thus enabled to withstand a period of drought.

The 15 genera which are confined to the Prairie Region are as follows: the family Gramineae includes *Buchloë*, *Munroa*, and *Schedonnardus*; the family Leguminosae includes *Amorpha*, *Petalostemon*, and *Thermopsis*; the family Compositae includes *Acinea*, *Gutierrezia*, *Hymenopappus*, and *Thelesperma*; while the other genera are *Eurotia*, *Paronychia*, *Mammillaria*, *Musineon*, and *Heliotropium*.



Of the trees occurring in the Prairie Region, the Lance-leaved Cottonwood (*Populus acuminata*) and Narrow-leaved Cottonwood (*Populus angustifolia*) do not occur naturally outside that area. The Manitoba Maple (*Acer Negundo*), while characteristic of the prairie, ranges for some distance beyond the Lake of the Woods into the Eastern Region. Some characteristic eastern species such as *Ulmus americana* and *Quercus macrocarpa* extend for a considerable distance into the prairie, while a typical western species, the Lodgepole Pine (*Pinus contorta*) is found on the western part of the Cypress hills, in Alberta.

The absence of trees on the true prairie has been the subject of various explanations. One of these is the prevalence of grass fires during summer which would tend to destroy all woody types of vegetation. Another possible cause is a period of drought which would tend to prevent the successful establishment of seedling trees. A third and much more probable cause was the former prevalence of large herds of buffalo. Only herbaceous types of vegetation could be expected to survive successfully the constant cropping of grazing animals.

There are about 16 species of shrubs confined to the Prairie Region, some of which have already been mentioned. Among the others are Buffalo Currant (*Ribes aureum*), Prairie Cherry (*Prunus Vesseyi*), and Skunk-bush (*Rhus trilobata*).

Of the numerous herbs whose distribution is limited to the prairie, only a few can be mentioned here. Some of these are Grama Grass (*Bouteloua oligostachya*), Prairie Violet (*Viola pedatifida*), Big-seed Dock (*Rumex venosus*), Prairie Turnip (*Pisoralen esculenta*), Scarlet Gaura (*Gaura coccinea*), Prairie Lily (*Mentzelia decapetala*), Oval-leaved Milkweed (*Asclepias ovalifolia*), Western Ragweed (*Ambrosia psilostachya*).

Macoun and Malte<sup>23</sup> divide this region into three subdivisions or prairie steppes with their characteristic floral elements, the more important species in each subdivision being indicated.

A more detailed account of the distribution of plants in Manitoba will be found in the Check List of Jackson, Higham, and Groh<sup>27</sup> in which 42 species of ferns and allied plants, 12 species of conifers, 274 species of monocotyledons and 702 species of dicotyledons are recorded.

For Saskatchewan, Fraser and Russell<sup>28</sup> have indicated the distribution of 38 species of ferns and their allies, 9 species of conifers, 335 species of monocotyledons and 1,013 species of dicotyledons. Included in the list are 11 species partial to saline soil and also found on the sea coast which would indicate that much of the prairie was in comparatively recent times under the sea and that the coast-line was formerly far removed from its present limits.

No separate list appears to have been made of the species occurring in Alberta but the papers of Lewis, Dowding, and Moss,<sup>29, 30, 31</sup> although mainly ecological in nature, include the names of many species not only of vascular plants but also of some mosses and lichens as well as fresh-water algae.

#### Western Region.

This region, extending from the Rocky mountains to the Pacific coast, presents a greater diversity of topography and climate than any of the other regions. The topography is described in some detail at pp. 6 to 8. There are numerous mountain ranges, on many of the higher altitudes of which glaciers and perpetual snow are present, while between the mountains are deep trenches or river valleys where the climate is moderate. On the western side of the Coast range rainfall is very

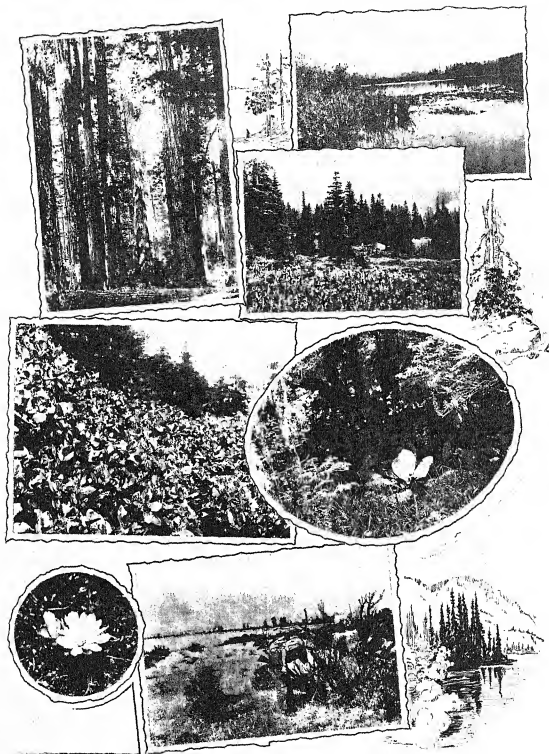
# TYPICAL FLORAS AND HABITATS OF THE EASTERN AND INTERLACUSTRINE REGIONS



**Eastern Region.**—*Upper left:* Typical deciduous trees and summer herbage along Tay canal, Lanark County, Ont.; *Centre:* Maples—Autumn foliage in young maple forest, Gatineau district, Que.; *Upper right:* Staghorn Sumac, near Ottawa, Ont.; *Lower left:* Maiden-hair Fern, White Trillium and Wild Ginger, typical woodland plants of Eastern Region; *Lower right:* White Water Lilies, typical in lakes and streams of the Eastern Region. **Interlacustrine or Carolinian Region.**—*Upper left:* Sprig of Flowering Dogwood, conspicuous shrub of the Carolinian Region; *Middle left:* Leaves and flower of Tulip tree, native of Carolinian; *Lower left:* Smooth-fruited Prickly Pear, found in dry sandy locations along lake Erie; *Centre:* Black Walnut in open location, common in original Carolinian forest; *Upper right:* Flowers of American Lotus, ranging into Canadian Carolinian around Pelee island; *Lower right:* Showy Lady's Slipper, conspicuous orchid ranging from the Carolinian through most of the Eastern Region.

Courtesy, National Museum of Canada and Dominion Forest Service,  
Department of Mines and Resources, Ottawa.

# TYPICAL FLORAS AND HABITATS OF THE WESTERN REGION



**Western Region.**—*Upper left:* Douglas Fir, Western Cedar and Western Hemlock, near Seabird lake, B.C.; *Upper right:* Willow-grown banks and pond lilies at Meadow lake, about 4,000 ft. elevation in the Selkirk range; *Middle right:* Typical flora with background of Engelmann spruce in alpine meadow, about 4,500 ft. elevation, Lihumpton Park, B.C.; *Middle left:* Salal shrubbery in flower, Graham island, B.C.; *Lower right:* Typical forest vegetation, Skunk Cabbage in foreground, lichen festoons on trees, Graham island, B.C.; *Foot of layout:* Greasewood, Osoyoos lake, Dry Belt of B.C.; *Inset:* Lewisia in bloom, Vasseux lake, Dry Belt of B.C.

*Courtesy, National Museum of Canada, Dominion Forest Service, Department of Mines and Resources, Ottawa, and Mr. P. Lyford, Vancouver, B.C.*

abundant, while to the east of that range is situated the Dry Belt extending from Okanagan to Taela lakes. The Interior Wet Belt, another zone of abundant precipitation, occurs along the western slope of the Selkirk mountains, while there is also a smaller dry belt in the vicinity of Kootenay lake. Some indication of the diversity of climatic conditions may be obtained from the meteorological records of the places given below. However, most of these places are centres of settlement and agriculture at comparatively low elevations and are not representative of conditions obtaining on the higher mountain slopes. Barkerville, with an elevation of 4,180 feet, is the highest point included.

## METEOROLOGICAL RECORDS IN THE WESTERN REGION.

| Place.             | Absolute Minimum Range. | Mean Temperature. |       | Average Rain, June to Sept. | Average Sunshine, May to October. |
|--------------------|-------------------------|-------------------|-------|-----------------------------|-----------------------------------|
|                    |                         | January.          | July. |                             |                                   |
|                    | °F.                     | °F.               | °F.   | in.                         | hr.                               |
| Invermere.....     | -43 to 0                | 11.7              | 63.0  | 5.49                        | 1,347.7                           |
| Vancouver.....     | 4 to 29                 | 35.6              | 63.3  | 9.28                        | 1,278.9                           |
| Victoria.....      | -2 to 34                | 38.6              | 59.9  | 3.57                        | 1,351.0                           |
| Clayoquot.....     | 10 to 31                | 39.5              | 57.6  | 15.71                       | 1                                 |
| Kamloops.....      | -31 to 20               | 21.8              | 69.8  | 4.24                        | 1,434.1                           |
| Prince George..... | -57 to 4                | 14.0              | 59.3  | 6.70                        | 1,229.2                           |
| Prince Rupert..... | -6 to 30                | 35.2              | 56.0  | 21.84                       | 790.7                             |
| Barkerville.....   | -22 to 4                | 16.2              | 54.2  | 13.34                       | 1                                 |
| Atlin.....         | -58 to 0                | 2.0               | 54.0  | 3.95                        | 1                                 |

<sup>1</sup> Data not available.

While there is no single family peculiar to the Western Region, there are 80 genera which do not occur elsewhere in Canada and the number of characteristic species is very large. Of these western genera, 2 are gymnosperms (*Chamaecyparis* and *Pseudotsuga*), while 12 are monocotyledons, including 6 of the lily family, but only 1 (*Melica*) of the grass family. The genus *Phyllospadix* occurs in the sea.

There are 66 genera of dicotyledons, of which 3 belong to the family *Cruciferae*, 3 to *Ericaceae*, 6 to *Umbelliferae*, and 18 to the family *Compositae*. The full list of genera will be found in the author's "Survey".<sup>16</sup>

Some of the characteristic trees of the Transcontinental Region are found also in the northern part of the Western Region, such as White Spruce, Black Spruce, Tamarack, Balsam Fir, and American Aspen. But, generally speaking, the trees of the Western Region are quite different. Among those with a comparatively wide distribution, at least in the southern part, are Lodgepole Pine (*Pinus contorta*), Western White Pine (*Pinus monticola*), Douglas Fir (*Pseudotsuga taxifolia*), Western Red Cedar (*Thuja plicata*), Black Cottonwood (*Populus trichocarpa*). The Engelmann Spruce (*Picea Engelmanni*) occupies a wide area to the east of the Coast Belt, while Western Larch (*Larix occidentalis*) is confined to the southeast part of British Columbia.

Four species occupy the higher slopes of the mountains and reach the limit of tree distribution, namely, White-bark Pine (*Pinus albicaulis*), Limber Pine (*Pinus flexilis*), Alpine Fir (*Abies lasiocarpa*), Alpine Larch (*Larix Lyallii*).

Some characteristic shrubs of the Western Region are Oregon Grape (*Mahonia Aquifolium*), Thimbleberry (*Rubus parviflorus*), Buck-brush (*Ceanothus sanguineus*), Devil's Club (*Echinopanax horridum*), Tall Mountain Bilberry (*Vaccinium membranaceum*), Wax-berried Elder (*Sambucus glauca*).

Among the more interesting herbaceous species found in this area are Skunk Cabbage (*Lysichiton camtschatcense*), Large-flowered Adder's Tongue (*Erythronium grandiflorum*), Western Wake-robin (*Trillium ovatum*), Western Wild Ginger (*Asarum caudatum*), Western Yellow Waterlily (*Nymphaea polysepala*), and various others.

The Selkirk range has a much higher rainfall than the Rocky mountains, resembling in this respect the conditions prevailing in the Coast Belt and as a result many species are common to both areas. Among such are Western Yew (*Taxus brevifolia*), Western Hemlock (*Tsuga heterophylla*), Mountain Hemlock (*Tsuga Mertensiana*), and Grand Fir (*Abies grandis*).

Other species of trees confined to the Coast Belt are Yellow Cedar (*Chamaecyparis nootkatensis*), Sitka Spruce (*Picea sitchensis*), Amabilis Fir (*Abies amabilis*), Red Alder (*Alnus rubra*), Garry Oak (*Quercus Garryana*), Broad-leaved maple (*Acer macrophyllum*), Cascara (*Rhamnus Purshiana*), Western Dogwood (*Cornus Nuttallii*), Madroña (*Arbutus Menziesii*).

Among the shrubs of the Coast Belt, mention may be made of Red-flowered Currant (*Ribes sanguineum*), Salmon Berry (*Rubus spectabilis*), Indian Plum (*Osmaronia cerasiformis*), Salal (*Gaultheria Shallon*), Red Bilberry (*Vaccinium parvifolium*), and others.

Some characteristic herbs of the coast are Western Buttercup (*Ranunculus occidentalis*), Cut-leaved Gold Thread (*Coptis asplenifolia*), Vanilla Leaf (*Achlys triphylla*), Many-flowered Dutchman's Breeches (*Dicentra formosa*), Three-leaved Coolwort (*Tiarella trifoliata*), Deer Cabbage (*Menyanthes Crista-galli*), and various others.

The Dry Belt has likewise quite a number of species peculiar to that area, but the only characteristic tree is the Ponderosa Pine (*Pinus ponderosa*).

Few shrubby species are confined to the Dry Belt, the chief being Antelope Brush (*Purshia tridentata*) and Sage-brush (*Artemisia tridentata*).

The characteristic herbaceous vegetation of the Dry Belt is mostly xerophytic, such as Bunch Grass (*Agropyron spicatum*), Bitter Root (*Lewisia rediviva*), Bladderpod (*Lesquerella Douglasii*), Woolly-Gromwell (*Lithospermum pilosum*), Perennial Gilia (*Gilia aggregata*), Balsam-root (*Balsamorhiza sagittata*), and many other species of Stick-leaf (*Mentzelia*), Lupin (*Lupinus*), etc.

Various species of alpine plants occur between the limit of tree growth and the region of perpetual snow. As mentioned previously, many of these occur also in the Arctic Region. There are, however, in the Western Region about 30 species of alpine plants which do not occur elsewhere in Canada. Of these some are shrubs, such as Alpine Willow (*Salix nivalis*), Red Heather (*Phyllodoce empetriformis*), Moss Heather (*Cassiope Mertensiana*), while herbs are represented by Alpine Hair-grass (*Deschampsia alpica*), White Marsh-marigold (*Caltha leptosepala*), several species of Saxifrage (*Saxifraga*), Mountain Pink (*Douglasia nivalis*), Whorled Greek Valerian (*Polemonium confertum*).

The most comprehensive account of the plants of the Western Region is that of Henry,<sup>7</sup> who describes 2,190 native and introduced species of vascular plants. The work by Brown and Schäffer,<sup>8</sup> which includes also the Selkirk mountains, enumerates 438 species of ferns and their allies and seed-plants, exclusive of grasses, sedges, and willows, which are not mentioned. Miss Farr's list<sup>9</sup> contains 38 species of ferns and allied plants and 725 species of seed-plants. The flora of Yoho Park has been investigated by Ulke,<sup>10</sup> who records 565 species of vascular plants. David-

son<sup>54</sup> lists several hundred species from the Skagit River basin, Dryas island, Windermere, Garibaldi mountain, and other localities. Whitford and Craig<sup>55</sup> give a detailed description accompanied by maps of the distribution of 22 species of coniferous and 26 species of deciduous forest trees.

The outlying islands have been dealt with by Osgood,<sup>56</sup> who enumerates 7 species of ferns and 118 species of seed-plants as occurring on Queen Charlotte islands. From a comparatively small area of Vancouver island, Glendenning<sup>57</sup> has enumerated 23 species of ferns and their allies, 13 species of gymnosperms and 547 species of angiosperms. Kermode's list<sup>58</sup> for the two main island groups includes 57 species of ferns and allied groups and 1,359 species of seed-plants. Of the latter, 284 species were introduced. Of the total species mentioned by Kermode, 19 species of ferns and their allies and 258 species of seed-plants occurred on the Queen Charlotte group.

## Section 2.—Cryptogams.

NOTE.—A brief description of the different groups of Cryptogams with their distinguishing characteristics has already been given under "Classification of Flora", pp. 35 to 37.

### Ferns and Allied Groups.

There are in Canada 25 genera of ferns (in the proper sense) and 2 of water-ferns. In the two groups combined there are about 76 species. One genus with a single species, namely, Curly Grass (*Schizaea pusilla*) characteristic of the pine barrens of New Jersey, is found in the province of Nova Scotia only. Another rare species, the Hart's Tongue (*Scolopendrium vulgare*) occurs only on limestone rocks in New Brunswick and at a few places in Ontario. Three genera are confined to the Western Region and include the Deer-fern (*Lomaria spicata*), 2 species of Lip-fern (*Cheilanthes*), and the Gold-fern (*Pityrogramma triangularis*).

Several species of ferns have a range extending into the Arctic Region, such as *Cryptogramma acrostichoides*, *Polystichum Lonchitis*, *Dryopteris fragrans*, *Cystopteris fragilis*, and 3 species of *Woodsia*.

The group of water-ferns comprises 2 genera with one species in each, namely, *Azolla caroliniana* found in lake Ontario and British Columbia, and *Marsilea vestita* which occurs in the Prairie Provinces.

The horsetail group includes about 13 species, one of which, the Giant Horsetail (*Equisetum giganteum*) is confined to the coastal area of British Columbia. *Equisetum scirpoides* and 3 other species range into the Arctic Region.

The other genera of the allied groups are *Lycopodium* with 12 species, *Selaginella* with 9 species, and *Isotetes* with 8 species. *Lycopodium selago* and *L. annotinum* reach the Arctic Region.

A fuller account of the fern group will be found in the description by Macoun and Burgess.<sup>60</sup>

### Mosses.

This group of plants is well represented in the Canadian flora, the most complete account of their distribution being that of Macoun and Kindberg<sup>60</sup> who list the names of 1,087 Canadian species. While mosses are most abundant in the southern parts of the Dominion, a considerable number occur also in the Arctic Region. Hesselbo<sup>61</sup> mentions 39 genera and 67 species, of which 13 species are additions to the list of Macoun and Kindberg. In reference to one of these species, *Cinclidium latifolium* Lindb., Hesselbo states that it was collected on Vansittart island where it seemed to occur abundantly but hitherto had been found only in

the Yenisei region of northern Siberia in about latitude 69°-70° N. and in glacial deposits in northern Jutland at a depth of about 83 metres below the ground. Williams<sup>53</sup> enumerates 68 species from the Arctic Region, of which 11 species (all sterile) belonged to the genus *Drepanocladus*, while *Bryum* was represented by 9 species, of which 5 were fruiting.

One of the most important lists is that of Dupret and Beaulac<sup>54</sup> for the region around Montreal containing 255 species, one of which, *Bryum camptoneurum* Card. and Thér., was hitherto undescribed. Another extensive list is that of Miss Brown<sup>54</sup> who records 346 species from Nova Scotia, of which one was a species new to science and two others had not been found previously in Canada.

#### Liverworts.

In this group, likewise, Macoun's Catalogue<sup>65</sup> is the most important work to show the distribution, 163 species being enumerated. Although these plants find a more congenial environment in warmer climates, nevertheless, Hesselbo's list<sup>61</sup> mentions 11 genera and 15 species as occurring in the Arctic Region, 4 of which species are not included in Macoun's Catalogue. For Nova Scotia, Miss Brown's list<sup>64</sup> includes 119 species of which 4 are new to Canada and 2 are new to North America.

For Western Canada, the chief authority on the distribution of this group is Brinkman<sup>66</sup> who has listed 254 species for the territory bordering on the Pacific. Among these, 39 species occurred in Yukon, 186 species in British Columbia, and 105 species in Alberta.

#### Lichens.

Unlike liverworts, the members of this group exhibit a great variety of habitats, some occurring on the surface of the ground, or on the bark of trees, or on bare rocks, or even on old bones. Being able to withstand a much more rigorous climate, they form an important element in the vegetation of the barren lands. Macoun in his Catalogue<sup>65</sup> enumerates 421 Canadian species, but since that date, with few exceptions, the study of this group has been largely neglected. And yet they are of decided economic importance particularly in the more northern parts, where they constitute the chief food of reindeer and caribou during the winter months.

As might be expected from the foregoing remarks, the lichens are well represented in the Arctic Region, the crustaceous species, according to Merrill<sup>67</sup> being best developed, while the foliaceous and fruticose types are mostly dwarfed and infertile. With reference to the tundra formations, he states that "in many places through the Barren Ground region and the Alaskan peninsula the ground is covered to the depth of a foot or more with the debris of successive generations of lichens and mosses of which only the uppermost layer is living". Of the 80 species and 13 varieties listed by Merrill, he states that most of them may be expected to occur in alpine situations of Alberta and British Columbia, but 3 species, namely, *Cetraria chrysantha*, *Polyblastia scotinopora*, and *Verrucaria striatula*, appear to be exclusively Arctic.

Lyngbe's report on lichens collected during the Thule Expedition<sup>68</sup> included the names of 28 genera and 99 species. Of these, 55 species were not included in Macoun's Catalogue, a fact which goes to show that many species of lichens still remain to be discovered in this country. Lyngbe further added that it is hardly probable that the collection of 99 species covers as much as one-third of the whole lichen flora of the region.

A list entitled "The Lichens of Manitoba" containing the names of 90 species was published by K. S. Wright as a special chapter in "The Fungi of Manitoba".<sup>69</sup>

### Fungi.

Regarded from a consideration of the number of species contained within it, this is doubtless by far the largest subdivision of the plant kingdom in Canada. A realization of this fact is probably the reason why no census list of the species found in the Dominion has ever been published. Consequently only sectional lists for various parts of the country can be referred to here.

The chief descriptive work dealing with the larger forms is that of Güssow and Odell<sup>70</sup> in which the characteristic features of 62 genera and 174 species are outlined accompanied by numerous photographs. Fraser<sup>71</sup> has described the characters of the various developmental stages of 104 species of rusts occurring in Nova Scotia. The distribution of fungi in this province has also been indicated by MacKay<sup>72,73</sup> in two lists of considerable length and more recently in a series of three papers by Wellmeyer and his associates.<sup>74</sup> The general list of Hay<sup>75</sup> for New Brunswick contains the names of 66 species of the larger saprophytic forms.

For the province of Quebec, Campbell<sup>76</sup> has enumerated 129 species all of which, except 4 species of *Ascomycetes*, belong to the *Basidiomycetes*, while Pomerleau<sup>77</sup> has described the characters and distribution of 32 species of *Pyrenomycetes* for the same province.

For the region around Ottawa, including parts of the provinces of Quebec and Ontario, Odell<sup>78</sup> has published a somewhat extensive list including 338 species of *Basidiomycetes*, 42 species of *Ascomycetes*, and one species of *Myxomycetes*. In contrast with the foregoing, a list of 28 genera and 110 species and varieties of *Myxomycetes* has been described for the province of Ontario by Currie,<sup>79</sup> the largest genus being *Physarum* with 20 species.

For the province of Manitoba a comprehensive list of 1,989 species (including bacteria and *Myxomycetes*) has been published by Bisby and associates.<sup>80</sup> Not only are the substrata indicated on which the saprophytic species occur, but also the hosts of the parasitic species. There is in addition a list of fungi observed on man and the higher animals.

A further contribution to the study of rusts in Canada is that of Fraser and Connors<sup>80</sup> who have recorded the occurrence, with names of hosts, of 161 species in the Prairie Provinces.

A total of 131 species has been recorded by Dearness<sup>81</sup> and others for the Arctic Region together with the host plants or substrata on which they occur. No *Myxomycetes* or *Phycomycetes* are mentioned and only 9 species of rusts and one of the smut group. The others are distributed as follows: 58 species of *Ascomycetes*, 36 species of *Basidiomycetes*, and 27 species of *Fungi imperfecti*.

### Algae.

Comparatively few persons realize how great is the economic importance of this group of plants. It is well known in the case of the higher animals that in the last analysis their food supply consists of plants, but probably it is not so evident in the case of aquatic animals, such as fishes, seals, porpoises, whales, etc. The larger specimens prey on the smaller and these in turn live on crustaceans, etc., and finally a point is reached where the very minute species live on microscopic plants such as diatoms. In this connection Lowe<sup>82</sup> states: "The phytoplankton of



the lakes of Central Canada has an economic interest as well as a biological interest. The fisheries of Manitoba are justly claimed to be the largest fresh-water fisheries in the world. Last year (1923) the fish taken from lake Winnipeg alone weighed 7,213,900 pounds, and this was not a record year".\* From these figures one can draw certain conclusions as to what the total might be for all the lakes and rivers on the earth's surface. Then there are the countless miles of sea coast (not to speak of deeper water) where fish find shelter as well as food and where the larger seaweeds have various industrial uses, being used as food, or as manure for growing crops, or for other purposes.

As in the case of fungi, no general list of algæ, either fresh-water or marine, has up to the present been compiled for Canada. But a considerable amount of attention has been devoted to the elucidation of both groups as a glance at the various papers mentioned in the literature dealing with the subject will show.

As practically all the species of algæ occurring in fresh water are different from those found in the sea it is more convenient to consider both groups from the point of view of the medium in which they grow. Before dealing with their distribution reference may be made to two other groups which are frequently classified as algæ, namely, *Characeae* and *Diatomaceae*.

**Characeæ.**—The Stoneworts, as the *Characeae* are popularly called, owing to the fact that many species have a deposit of lime in their tissues which makes them brittle, are confined to fresh water. They can be readily recognized by their odour which resembles that of garlic. Very little attention has been devoted to their study in this country but 2 genera, namely, *Chara* and *Nitella* are known to occur. Apparently the only accounts dealing with their distribution in detail are those of Robinson<sup>83</sup> who mentions 11 species of *Chara* as Canadian, and the earlier work of Allen.<sup>84</sup>

**Diatomaceæ.**—Diatoms are found both in fresh water and in the sea, the species occurring in the two habitats being with few exceptions quite different. The most comprehensive list of diatoms, both fresh-water and marine, so far published is that of Bailey<sup>85</sup> who states: "to prepare anything like a complete list of the diatoms of Canada is an impossibility. Not only is the region of enormous extent, embracing the whole breadth of America where that breadth is the greatest and extending northwards into Arctic regions, but it also presents a great diversity of physical conditions to which these plants, notwithstanding their minuteness and comparatively simple structure, must, like other plants, respond to a greater or less degree. Some of the interior lakes of Canada, like the Quill lakes in Saskatchewan, are saline, and in these quite a number of typically marine genera have been met with in great abundance". Bailey further states that up to 1907 probably not over a hundred species have been listed and these only from Nova Scotia and New Brunswick, while the present list contains the names of 550 species. These are grouped under 98 genera of which the largest by far is *Navicula* with 169 species, followed by *Nitzschia*, *Surirella*, and *Coscinodiscus*, with 48, 32, and 29 species, respectively.

A list of marine diatoms from the Arctic Region identified by Mann<sup>86</sup> contained names of 42 genera and 227 species. Of these *Navicula* was the largest genus with 64 species, while *Coscinodiscus* contained 23 species.

\* According to the latest figures compiled by the Dominion Bureau of Statistics the weight of fish taken from lake Winnipeg in 1936 was: summer, lake Winnipeg, 7,079,500 lb.; winter, lake Winnipeg and Red river, 5,140,200 lb.; total, 12,219,700 lb.

The report by Howe<sup>87</sup> for Hudson bay mentions 57 species. Other diatoms occurring in fresh water in various districts are referred to in the next section on the fresh-water group.

**Fresh-Water Algae.**—The first publication to call attention to this group is that of Kemp<sup>88</sup> in 1858. But for over half a century from this date little or no attention was devoted to these plants. In more recent times one of the chief lists for Eastern Canada is that of Miss Clare Miller,<sup>89</sup> who described the characters of 54 species and varieties occurring in the vicinity of Montreal.

Another important paper dealing also with the province of Quebec is that of Lowe<sup>90</sup> in which were included 12 species of *Flagellata*, 3 species of *Peridineae*, 27 species of *Cyanophyceae*, 61 species of *Diatomaceae*, 199 species of *Chlorophyceae*, and 3 species of *Rhodophyceae*, representing altogether 305 species and 128 genera. The above list included 115 species of desmids. The 3 red species were *Batrachospermum vagum*, *Chantransia scotica*, and *Lemanea torulosa*.

Klugh<sup>91</sup> has published several lists of algae for Georgian bay and various other districts in Ontario.

The region lying mainly between the Lake of the Woods and lake Winnipeg has been investigated by Lowe<sup>92</sup> whose report includes 9 species of *Flagellata*, 3 species of *Peridineae*, 22 species of *Cyanophyceae*, 40 species of *Diatomaceae*, 170 species of *Chlorophyceae*, representing altogether 100 genera with 244 species. Of the *Chlorophyceae*, more than half, namely, 91 species, are desmids, the genera *Cosmarium* and *Staurastrum* each having 25 species.

Taylor's two lists<sup>93,94</sup> for British Columbia included 55 species of *Cyanophyceae*, 34 species of *Chlorophyceae*, one species of *Flagellata*, and 2 species of *Rhodophyceae*, namely, *Lemanea fucina* and *Batrachospermum moniliforme*. Among the *Chlorophyceae* was the species known as Red Snow (*Chlamydomonas nivalis*). Taylor has also published another important paper<sup>95</sup> on the alpine species of British Columbia.

The desmids of British Columbia have been studied by Wailes<sup>96</sup> who has recorded 267 species collected in the coastal area, including the Vancouver district, the Nanaimo district, Gabriola island, and Cortes island. The largest genera mentioned are *Cosmarium* with 79 species, *Staurastrum* with 61 species, and *Closterium* with 35 species.

For the Arctic Region, Lowe<sup>96</sup> recorded the occurrence of 19 species of *Cyanophyceae*, 105 species of *Chlorophyceae* including 69 species of desmids of which the genera containing most species were *Cosmarium* and *Staurastrum*. There was also one species of *Flagellata*, namely, *Synura Uvella*, and one red species, namely, *Batrachospermum vagum*, and 41 species and varieties of diatoms.

**Marine Algae.**—The seaweeds found on the Atlantic coast of Canada present a striking contrast with those occurring in similar latitudes on the shores of Europe, especially as regards the number of genera and species. The Canadian species are mostly those found in colder waters, while in Europe the greater abundance of marine species is due to the mitigating influence of the Gulf Stream. While a considerable number of species in all the colour-groups are common to both sides of the Atlantic, such as *Chaetomorpha Melagonium*, *Ascophyllum nodosum*, *Chorda Filum*, *Chondrus crispus*, *Corallina officinalis*, etc., on the other hand, many European genera are entirely absent. In the green group one misses *Codium* and *Derbesia*, while among the brown species there are no representatives of such genera as *Pelvetia*, *Halidrya*, *Cystoseira*, *Dictyopteris*, *Padina*, etc. In the red group the missing genera, such as *Nitophyllum*, *Catenella*, *Griffithsia*, *Sphaerococcus*, etc., are even more numerous.

By way of contrast, a number of species occur on this side of the Atlantic only, such as the Sea Colander (*Agarum Turneri*), *Saccorhiza dermatodea*, *Ptilota pectinata*, etc. Many Arctic species, such as *Rhizoclonium riparium*, *Desmarestia oculenta*, *Odonthalia dentata*, etc., are found also on the Atlantic coast. Others, such as *Alaria membranacea*, *Polysiphonia arctica*, *Lithothamnion glaciale*, are exclusively Arctic, while other Arctic species, such as *Rhodomela Larix*, occur also on the Pacific coast of Canada.

The algal vegetation of the Pacific coast resembles that of the European Atlantic coast in the number of species belonging to the red group, doubtless owing to the warmer water, but there the comparison ends, for the species are mostly different. The same is largely true of the brown group in which many of the genera are also different, as in *Postelsia palmaeformis*, *Macrocystis pyrifera*, *Nereocystis Luetkeana*, some of which reach gigantic proportions.

One of the first lists of species to be compiled was that of Hay and MacKay<sup>97</sup> for the Maritime Provinces in which the distribution was shown of 4 species of *Cyanophyceae*, 15 species of *Chlorophyceae*, 31 species of *Phaeophyceae* and 33 species of *Rhodophyceae*.

Another more recent list by Bell and MacFarlane<sup>98</sup> for the same region included 24 species of *Chlorophyceae*, 39 species of *Phaeophyceae*, and 46 species of *Rhodophyceae*. For the Arctic coasts, Kjellman<sup>99</sup> mentions one species of *Cyanophyceae*, 8 species of *Chlorophyceae*, 15 species of *Phaeophyceae*, and 19 species of *Rhodophyceae*. That these figures do not truly represent the total marine flora is evident from the fact that Kjellman records 72 other species found on the west Greenland coast, most of which doubtless occur also in Arctic Canada.

Another Arctic list is that of Collins and his associates,<sup>97</sup> which includes a total of 53 species for the four colour-groups of which two species were previously undescribed. A separate list for Hudson bay by Howe<sup>99</sup> contained the names of 42 species (one being new) belonging to the four chief groups, together with 57 species of *Diatomaceae*.

For the Pacific coast of Canada, Collins<sup>100</sup> has recorded 40 species of *Chlorophyceae*, 45 species of *Phaeophyceae*, and 114 species of *Rhodophyceae*. As compared with the list for the Maritime Provinces, the preponderance of species belonging to the red group, as the result of higher temperature of the water, is very evident. Of the total species occurring on the coast of Vancouver island, Collins states that 38 p.c. of the brown and 25 p.c. of the red occur also on the Atlantic coast.

The various papers by Setchell and Gardner<sup>101</sup> include the names of all species found on the coast from Alaska to California. It is noteworthy that several brown species such as *Postelsia palmaeformis*, *Pterygophora californica*, *Egregia Menziesii*, and *Pelvetiopsis limitata* find their northern limit on the southern coast of Vancouver island.

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## PART V.—FAUNAS OF CANADA.

An article under this heading, by Rudolph M. Anderson, Ph.D., Chief, Division of Biology, Department of Mines and Resources, appeared at pp. 29-52 of the 1937 Year Book.

## PART VI.—LANDS, SCENIC, AND GAME RESOURCES OF CANADA.

Canada is distinctly a new country, and her resources are for the most part in the early stages of development. The fur, fishery, and forest resources have, it is true, been the basis of trade for two or three hundred years, but exploitation on the present commercial scale is of relatively recent growth. A notable feature, especially in so young a country, has been the effort directed to conservation and, in the cases of those resources which admit of such methods, the actual replenishment or augmentation of the sources of supply by the practice of reforestation, silviculture, fur farming or the establishment of fish hatcheries.

Numerous surveys and investigations of the extent and value of the resources have been made and broad outlines of the resources of the provinces supplement the information on physical geography given on pp. 1 to 16. Detailed information regarding individual natural resources will be found in the later chapters—Agriculture, Furs, Fisheries, Forestry, Minerals, Water Powers—of this volume.

The treatment of resources considered below is concerned only with those phases of the subject which can be properly regarded as falling under the definition of physiography used in its wider interpretation, and which do not specifically relate to individual subjects treated elsewhere in this volume. A classification of lands resources (where there is naturally overlapping since much land suitable for agriculture remains under forest cover), information on the National Parks, and resources in game and scenery properly fall under this head.

**Lands Resources.**—Table 1 presents a broad classification of the potential lands resources of Canada, by provinces. The figures are, in the main, based on estimates prepared by the Dominion Forest Service, Lands, Parks, and Forests Branch, and by the Surveyor General and Chief, Hydrographic and Map Service of the Surveys and Engineering Branch, Department of Mines and Resources; they show how the total land area of Canada is made up as between existing and potential agricultural lands, existing and potential forest lands, and lands which are unproductive as regards surface resources. Between the totals of existing and potential agricultural lands and the totals of existing and potential forest lands there is, of course, duplication to the extent of the agricultural lands under forest.

## 1.—Land Area of Canada, Classified as Agricultural, Forested, or Unproductive.

NOTE.—The land area of Canada is shown classified by tenure in Chapter XXVIII.

| Description.                          | Prince<br>Edward<br>Island. | Nova<br>Scotia. | New<br>Brun-<br>swick. | Quebec.        | Ontario.       | Mani-<br>toba. |
|---------------------------------------|-----------------------------|-----------------|------------------------|----------------|----------------|----------------|
|                                       | sq. miles.                  | sq. miles.      | sq. miles.             | sq. miles.     | sq. miles.     | sq. miles.     |
| <b>Agricultural Land—</b>             |                             |                 |                        |                |                |                |
| Occupied.....                         | 1,861                       | 6,722           | 6,498                  | 27,038         | 35,680         | 23,644         |
| Improved and pasture.....             | 1,331                       | 2,811           | 2,686                  | 17,608         | 23,342         | 20,480         |
| Forested.....                         | 530                         | 3,911           | 3,802                  | 9,430          | 7,347          | 3,155          |
| Unoccupied.....                       | 105                         | 5,922           | 10,250                 | 41,314         | 67,181         | 20,950         |
| Grass, brush, etc.....                | 25                          | 2,922           | 759                    | 1,314          | 7,181          | 10,950         |
| Forested.....                         | 80                          | 3,000           | 9,500                  | 40,000         | 60,000         | 16,000         |
| <b>Totals, Agricultural Land.....</b> | <b>1,966</b>                | <b>13,644</b>   | <b>16,747</b>          | <b>68,352</b>  | <b>192,870</b> | <b>50,594</b>  |
| Improved, grass, etc.....             | 1,356                       | 3,733           | 3,445                  | 18,922         | 35,523         | 31,489         |
| Forested.....                         | 610                         | 6,911           | 13,302                 | 49,430         | 67,347         | 19,155         |
| <b>Forested Land—</b>                 |                             |                 |                        |                |                |                |
| Productive.....                       | 725                         | 11,950          | 21,773                 | 303,500        | 170,000        | 30,500         |
| Unproductive.....                     | —                           | 50              | 189                    | 70,000         | 70,000         | 62,500         |
| <b>Tenure Classification—</b>         |                             |                 |                        |                |                |                |
| Privately owned.....                  | 723                         | 10,473          | 11,100                 | 31,048         | 7,972          | 8,500          |
| Crown land.....                       | 2                           | 1,527           | 10,862                 | 342,452        | 232,028        | 84,500         |
| <b>Size Classification—</b>           |                             |                 |                        |                |                |                |
| Merchantable.....                     | 485                         | 7,470           | 13,353                 | 213,500        | 56,100         | 4,615          |
| Young growth.....                     | 240                         | 4,480           | 8,390                  | 90,000         | 113,000        | 25,885         |
| <b>Type Classification—</b>           |                             |                 |                        |                |                |                |
| Softwood.....                         | 725                         | 8,000           | 8,329                  | 218,400        | 65,000         | 10,950         |
| Mixed wood.....                       | —                           | 1,150           | 11,223                 | 66,100         | 83,000         | 6,220          |
| Hardwood.....                         | —                           | 2,800           | 2,221                  | 19,000         | 22,000         | 13,330         |
| <b>Totals, Forested Land.....</b>     | <b>725</b>                  | <b>12,000</b>   | <b>21,862</b>          | <b>373,500</b> | <b>216,000</b> | <b>63,000</b>  |
| <b>Net Productive Land.....</b>       | <b>2,681</b>                | <b>17,733</b>   | <b>25,407</b>          | <b>392,432</b> | <b>278,523</b> | <b>124,439</b> |
| <b>Waste and Other Land.....</b>      | <b>103</b>                  | <b>3,910</b>    | <b>2,066</b>           | <b>131,112</b> | <b>87,759</b>  | <b>95,284</b>  |
| <b>Totals, Land Area.....</b>         | <b>2,784</b>                | <b>20,743</b>   | <b>27,473</b>          | <b>523,544</b> | <b>366,282</b> | <b>219,723</b> |

| Description.                          | Saskat-<br>chewan. | Alberta.       | British<br>Colum-<br>bia. | Yukon<br>and<br>N.W.T. | Canada.          |
|---------------------------------------|--------------------|----------------|---------------------------|------------------------|------------------|
|                                       | sq. miles.         | sq. miles.     | sq. miles.                | sq. miles.             | sq. miles.       |
| <b>Agricultural Land—</b>             |                    |                |                           |                        |                  |
| Occupied.....                         | 86,089             | 60,901         | 5,534                     | 7                      | 254,873          |
| Improved and pasture.....             | 81,508             | 54,817         | 3,640                     | 4                      | 213,236          |
| Forested.....                         | 5,481              | 6,084          | 1,894                     | 3                      | 41,637           |
| Unoccupied.....                       | 38,127             | 75,740         | 15,166                    | 14,063                 | 294,827          |
| Grass, brush, etc.....                | 15,127             | 30,740         | 5,700                     | 10,063                 | 84,841           |
| Forested.....                         | 23,000             | 45,000         | 9,406                     | 4,000                  | 209,985          |
| <b>Totals, Agricultural Land.....</b> | <b>125,116</b>     | <b>136,641</b> | <b>20,700</b>             | <b>14,070</b>          | <b>549,700</b>   |
| Improved, grass, etc.....             | 96,635             | 85,557         | 9,300                     | 10,667                 | 298,077          |
| Forested.....                         | 28,481             | 51,084         | 11,300                    | 4,403                  | 251,623          |
| <b>Forested Land—</b>                 |                    |                |                           |                        |                  |
| Productive.....                       | 42,160             | 93,075         | 85,780                    | 10,000                 | 769,463          |
| Unproductive.....                     | 40,000             | 37,560         | 123,760                   | 50,000                 | 454,059          |
| <b>Tenure Classification—</b>         |                    |                |                           |                        |                  |
| Privately owned.....                  | 6,250              | 10,044         | 15,000                    | 3                      | 101,113          |
| Crown land.....                       | 75,910             | 120,591        | 194,540                   | 59,997                 | 1,123,400        |
| <b>Size Classification—</b>           |                    |                |                           |                        |                  |
| Merchantable.....                     | 7,305              | 20,680         | 36,010                    | 1,000                  | 360,548          |
| Young growth.....                     | 34,855             | 72,395         | 49,470                    | 9,000                  | 408,915          |
| <b>Type Classification—</b>           |                    |                |                           |                        |                  |
| Softwood.....                         | 8,900              | 31,770         | 85,780                    | 4,500                  | 442,354          |
| Mixed wood.....                       | 9,385              | 40,800         | —                         | 3,250                  | 221,138          |
| Hardwood.....                         | 23,865             | 20,565         | —                         | 2,250                  | 105,971          |
| <b>Totals, Forested Land.....</b>     | <b>82,160</b>      | <b>130,635</b> | <b>209,540</b>            | <b>60,000</b>          | <b>1,233,332</b> |
| <b>Net Productive Land.....</b>       | <b>178,795</b>     | <b>216,192</b> | <b>218,910</b>            | <b>70,067</b>          | <b>1,521,589</b> |
| <b>Waste and Other Land.....</b>      | <b>59,189</b>      | <b>32,603</b>  | <b>110,339</b>            | <b>1,398,196</b>       | <b>1,914,957</b> |
| <b>Totals, Land Area.....</b>         | <b>237,975</b>     | <b>248,800</b> | <b>359,279</b>            | <b>1,468,563</b>       | <b>3,466,556</b> |

<sup>1</sup> Total agricultural land plus forested land, minus forested agricultural land.

rains, rock, road allowances, urban land, etc.

<sup>2</sup> An estimate from provincial sources places the

total area of land suitable for tillage at 6,890 sq. miles.

**National Parks of Canada.\***—The Dominion Government maintains, as the medium through which some of the most outstanding natural beauties of the country may be preserved and popularized, the National Parks Bureau, Lands, Parks, and Forests Branch of the Department of Mines and Resources, which administers the scenic and recreational parks set aside for this purpose. Under the supervision of this same body are the national wild-animal preserves—large fenced areas established for the protection and propagation of species in danger of extinction—the national historic parks, and the historic sites of great national interest which have been acquired throughout the country (see pp. 78 to 90).

The mountain parks include regions of unsurpassed grandeur in the Rocky and Selkirk mountains of Western Canada. Among these are the Banff, Jasper, and Waterton Lakes National Parks in Alberta, located on the eastern slopes of the Rockies; the Kootenay and Yoho parks in British Columbia on the western slopes of the Rockies; and the Glacier and Mount Revelstoke Parks, also in British Columbia, located in the Selkirks. While these parks have a general resemblance to each other, each possesses individual characteristics, varying flora and fauna, and different types of scenery.

Prince Albert National Park in Saskatchewan forms a typical example of the lake country bordering the northwestern prairies, and the Riding Mountain National Park in Manitoba, having a general elevation of 2,000 feet above sea-level, contrasts sharply with the fertile plains to the east. In Ontario are located three small park units, the Point Pelee, Georgian Bay Islands, and the St. Lawrence Islands National Parks, which were established primarily as recreational areas. Fort Anne National Park in Nova Scotia and Fort Beauséjour National Park in New Brunswick, surround sites notable in early Canadian history.

A recent addition to Canada's National Park system is the Cape Breton Highlands National Park, an area of 458 square miles, situated on the northern limits of Cape Breton island, Nova Scotia. An area of approximately 10 square miles has also been set aside as a national park on the north shore of Prince Edward island.

The special animal parks were established for the protection of such vanishing species of mammalian wild life as the buffalo, wapiti (elk), and pronghorned antelope, which now thrive under natural conditions in large enclosures especially suited to their requirements. These parks include the Buffalo and Elk Island parks in Alberta, which contain large herds of buffalo, elk, moose, and deer, and the Nemiskam and Wawaskesey parks also in Alberta, which form sanctuaries for the pronghorned antelope.

In the national parks all wild life is given rigid protection and primal natural conditions are maintained as far as possible. The local administration of the larger parks is carried out by resident superintendents, assisted by park wardens who are responsible for the necessary game and forest patrols. Recreational facilities are many and varied, and in some parks natural attractions have been augmented by the provision of golf courses, tennis courts, swimming pools, bath-houses, and other features. A number of the parks also possess well-equipped motor camp grounds, which are available to visitors desiring this type of accommodation.

The national parks of Canada are accessible either by railway or motor highway. In addition to being served by the Canadian Pacific or Canadian National

\* Prepared under the direction of F. H. H. Williamson, Controller, National Parks Bureau, Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.



Railway systems, most of the parks are either traversed by or linked up with the main arteries of motor travel. More than 600 miles of all-weather motor roads have been built by the National Parks Bureau, which have been instrumental in opening up many of the outstanding beauty spots, while other regions have been made accessible by the construction of more than 2,000 miles of trails.

*Migratory Birds Treaty.*—This treaty and the legislation making it effective throughout Canada are administered by the National Parks Bureau of the Department of Mines and Resources. The treaty, which has been effective since 1916, has as its object the protection of the valuable migratory bird life of Canada and the United States. Information concerning the treaty, and regulations enacted for its enforcement, may be obtained from the Controller, National Parks Bureau, Ottawa.

**Provincial Parks.**—In addition to the national parks throughout Canada administered by the Dominion Government, most of the provinces also maintain provincial parks for the protection of wild life and as recreational areas. Among the largest of these are the Algonquin Park (2,740 square miles) in Ontario, and the Laurentides Park (3,565 square miles) in Quebec.

## 2.—Details Regarding Locations, Dates Established, Areas, and Characteristics of the National Parks of Canada and Dominion Reserves, 1937.

(Twenty-two in number with a total area of 29,831 square miles.)

| Park.                  | Location.  | Date Established. | Area.<br>sq. miles. | Characteristics.   |
|------------------------|--|-------------------|---------------------|--|
| <b>Scenic Parks.</b>   |  |                   |                     |  |
| Banff .....            | Western Alberta, on east slope of Rockies.                         | 1885              | 2,585.00            | Mountain playground containing two famous resorts—Banff and Lake Louise. Massive ranges, upper slopes bare and worn, or glacier crowned, lower slopes covered with luxuriant forests and flowered alplands; glacier-fed lakes. Wild deer, goat, sheep, elk, etc. Recreations—alpine climbing, riding, swimming, golf, tennis, motoring, fishing, skiing, skating, curling. |
| Yoho .....             | Eastern British Columbia, on west slope of Rockies.                | 1886              | 507.00              | Rugged scenery on west slope of Rockies; Kicking Horse valley; lofty peaks, large number with permanent ice-caps or glaciers; famous Yoho valley with numerous waterfalls, one over 1,200 feet in height. Natural bridge, Emerald lake, lakes O'Hara and McArthur.   |
| Glacier .....          | Southeastern British Columbia, on the summit of the Selkirk range. | 1886              | 521.00              | Massive formations of the old Selkirk range; luxuriant forests, alpine flower gardens. Centre for alpine climbers. Illecillewaet and Asulkan glaciers and valleys; Nakimu caves. Marion lake, Rogers and Baloo passes.   |
| Mount Revelstoke ..... | Southeastern British Columbia, on the summit of mount Revelstoke.  | 1914              | 100.00              | Nineteen-mile drive up Mt. Revelstoke affording panoramic views of the Columbia and Illecillewaet valleys, Clachnac-dainn ice-field, lakes Eva and Miller. Game sanctuary and winter sports resort.  |
| Kootenay .....         | Southeastern British Columbia, along Banff-Windermere highway.     | 1920              | 587.00              | Park extends five miles on each side of Vermilion-Sinclair section of Banff-Windermere highway. Deep canyons, Iron Gates, Briscoe range, Sinclair canyon, famed Radium Hot Springs. Bear, deer, caribou, and Rocky Mountain sheep.   |

2.—Details Regarding Locations, Dates Established, Areas, and Characteristics of the National Parks of Canada and Dominion Reserves, 1937—continued.

| Park.   | Location.   | Date Established. | Area.<br>sq. miles. | Characteristics.  |
|---|---|-------------------|---------------------|---|
| <b>Scenic Parks—con.</b>                                  |   |                   |                     |   |
| Jasper.....   | Western Alberta, on east slope of Rockies.                      | 1907              | 4,200-00            | Immense mountain wilderness, rich in historical associations. Numbers of unclimbed peaks; glaciers, snowfields, canyons, lakes of wonderful colouring; Athabasca valley, Maligne lake, Mount Edith Cavell; Miette Hot Springs; big game sanctuary. Recreation—alpine climbing, riding, swimming, golf, tennis, motoring, fishing. |
| Waterton Lakes.....                                       | Southern Alberta, adjoining Glacier Park in Montana, U.S.A.     | 1895              | 220-00              | Canadian action, Waterton-Glacier International Peace Park. Mountains noted for beauty of colouring; lovely lakes, picturesque trails, waterfalls, trout fishing, camping, Government golf course.  |
| St. Lawrence Islands.                                     | In St. Lawrence river between Morrisburg and Kingston, Ontario. | 1904              | 185-60 (acres)      | Thirteen islands among the "Thousand Islands" in the St. Lawrence river. Recreational area, camping, fishing.   |
| Point Pelee.....  | Southern Ontario, on lake Erie.                                 | 1918              | 6-04                | Most southerly mainland point in Canada, 41° 54' N. Resting place of many migratory birds; unique flora. Recreational area, camping, bathing.   |
| Georgian Bay Islands (including Flowerpot Island Reserve) | In Georgian bay, near Midland, Ontario.                         | 1929              | 5-37                | Thirty islands in Georgian Bay; Beausoleil, largest of the group, is a popular camping resort. Fine bathing beaches, beautiful groves of trees, varied bird and plant life. Flowerpot island, at head of Bruce peninsula, has interesting limestone formations and numerous caves.  |
| Riding Mountain.....                                      | Southwestern Manitoba, west of lake Winnipeg.                   | 1929              | 1,145-04            | Rolling woodland country in western Manitoba dotted with several beautiful lakes. Natural home of big game including one of the largest herds of wild elk in Canada. Summer resort, fine bathing and camping, Government golf course.   |
| Prince Albert.....  | Central Saskatchewan, north of Prince Albert.                   | 1927              | 1,800-00            | Forest country of northwestern Canada, birch, spruce, jack pine, poplar; lakes and streams; moose, deer, bear, beaver, and interesting bird life. Excellent fishing—northern pike, pickerel, and lake trout; summer resort; sand beaches, campgrounds, Government golf course.  |
| Cape Breton Highlands.                                    | Northern part of Cape Breton island.                            | 1930              | 453-00              | Outstanding examples of rugged coast-line with mountain background. Magnificent views of Atlantic ocean and gulf of St. Lawrence.   |
| Area in Prince Edward Island.                             | North shore of Prince Edward island.                            | 1936              | 10-00 (approx.)     | Strip approximately twenty miles long on north shore. Some of finest bathing beaches in Eastern Canada.   |
| National Parks Tar Sands Reservation.                     | Alberta.....  | 1926              | 2,068-20 (acres)    | Four areas comprising in all 2,068 acres in the Fort McMurray District, Alberta, have been reserved for the National Parks Branch to provide a supply of tar sands for road construction purposes in the National Parks.  |
| <b>Animal Parks and Reserves.</b>                         |   |                   |                     |   |
| Buffalo.....  | Eastern Alberta, near Wainwright.                               | 1908              | 197-50              | Fenced enclosure; home of the Dominion Government buffalo herd. Over 5,000 buffalo, also moose, deer, elk, yak, and hybrids.  |

2.—Details Regarding Locations, Dates Established, Areas, and Characteristics of the National Parks of Canada and Dominion Reserves, 1937—concluded.

| Park.                                   | Location.   | Date Established. | Area.         | Characteristics.  |
|---|---|-------------------|---------------|---|
|   |   |                   | sq. miles.    |   |
| <b>Animal Parks and Reserves—concl.</b> |   |                   |               |   |
| Elk Island.....                         | Central Alberta, near Lamont.   | 1911              | 51-00         | Fenced enclosure, containing over 2,000 buffalo, also moose, elk, and deer; recreational area, camping, bathing. Government golf course.  |
| Nemiskam.....                           | Southern Alberta, near Foremost.  | 1922              | 8-50          | Fenced pronghorned antelope reserve, containing more than 300 head of this interesting animal, a species indigenous to the region.  |
| Wawaskesy.....                          | Southeastern Alberta.   | 1922              | 54-00         | Antelope reserve, as yet undeveloped.   |
| Wood Buffalo <sup>2</sup> .....         | Partly in Alberta (13,975 sq. miles) and partly in Northwest Territories (3,625 sq. miles), west of Athabasca and Slave rivers. | 1922              | 17,300-00     | Forests interspersed with rivers and open plains. Dotted with innumerable lakes and streams. The home of the wood buffalo, moose, deer, caribou, bear, beaver; waterfowl abundant. Area as yet undeveloped.     |
| <b>Historic Parks.</b>                  |   |                   |               |   |
| Fort Auno.....                          | Nova Scotia..... (Annapolis Royal)  | 1917              | 31-00 (acres) | National Historic Park—site of early Acadian settlement of Fort Royal; museum containing interesting relics of early days and fine historical library.  |
| Fort Beauséjour.....                    | New Brunswick, near Sackville.  | 1926              | 50-00 (acres) | National Historic Park—site of old French fort erected middle of 18th century. Renamed Fort Cumberland in 1755 by British; original name was later restored. Historical museum containing interesting exhibits. |

<sup>1</sup> Reserved by Order in Council and became a Dominion reserve by agreement with the province of Alberta in 1931.

<sup>2</sup> Administered by the Bureau of Northwest Territories and Yukon Affairs of the Lands, Parks, and Forests Branch, Department of Mines and Resources.

**Game and Scenery.**—Canada's resources as a country for the sportsman and tourist are both unique and varied. Owing to the growth of tourist travel and its demands (the statistics of the tourist trade are dealt with in Chapter XVI as a phase of External Trade), great areas of uninhabited land have become accessible, and hitherto almost unknown parts may now be reached and traversed with ease. In the wooded and unsettled areas of every province there are many moose, deer, bear, and smaller game, while in the western parts of the Dominion there are also wapiti, caribou, mountain sheep, mountain goat, grizzly bear, and lynx. Mountain lion, or cougar, are found in British Columbia and in the mountains of Alberta, while in the northwest and the far north there still exist herds of buffalo and musk-ox, which, however, are given absolute protection by the Dominion Government.

Ruffed and spruce grouse are found in the wooded areas of Canada from coast to coast. Prairie chicken and Hungarian partridge inhabit the open prairies and the partly timbered areas of the three mid-western provinces. Franklin grouse are native to the mountains of the west and the ptarmigan, an Arctic grouse, lives in the treeless northern plains and is also found in the high mountains of Alberta and British Columbia.

Canada is the natural habitat of many kinds of waterfowl and it is difficult to imagine any finer field for the shot-gun sportsman than is afforded by many of the myriad lakes which form so large a feature of Canadian scenery. This is particularly true of the three mid-western provinces, where the lakes are of the shallow, surface type that furnishes the most abundant feed for waterfowl.

The valleys of Nova Scotia and New Brunswick, the broken lake country of northern Ontario and Quebec, northern Manitoba and Saskatchewan, as well as the mountain districts of British Columbia, offer to the tourist, the hunter and the fisherman new scenic effects and innumerable game preserves, and have won for the Dominion a reputation as a paradise for sportsmen and campers. And not only is this possible for those who travel by land; the series of lakes and rivers which form a network over the eastern part of the country particularly, has made water travel in smaller craft both feasible and attractive. Further, facilities for winter sports, the unusual attractions of winter scenery and the bracing though rigorous winter climate, have done much to add to the reputations of resorts formerly noted for their advantages in the summer season. In both Dominion and provincial parks, the hunting of game is forbidden, and the wild-life resources preserved. Elsewhere, however, there is available for the hunter and angler, at proper seasons, a wealth of game species.

## PART VII.—CLIMATE AND METEOROLOGY.

### Section 1.—The Climate of Canada.

An article on this subject by Sir Frederic Stupart, at that time Director of the Dominion Meteorological Service, Toronto, appeared in the 1929 edition of the Year Book at pp. 42-51.

### Section 2.—The Factors which Control Canadian Weather.

Under the above heading, Sir Frederic Stupart, at that time Director of the Dominion Meteorological Service, Toronto, contributed an article which appeared at pp. 26-31 of the 1924 edition of the Year Book, also at pp. 36-40 of the 1925 edition.

### Section 3.—The Distribution of Precipitation in Canada.

An article on "The Distribution of Precipitation in Canada," contributed by A. J. Connor, Climatologist, Dominion Meteorological Office, Toronto, appeared at pp. 42-46 of the 1926 edition of the Year Book.

### Section 4.—The Temperature and Precipitation of Northern Canada.

An article on the climate of northern Canada, accompanied by meteorological tables showing the normal temperature and precipitation at selected northern stations, was contributed by A. J. Connor, of the Meteorological Service of the Department of Marine, Toronto, to the 1930 edition of the Year Book, where it will be found at pp. 41-56.

### Section 5.—The Meteorological Service of Canada.

Under the above heading Sir Frederic Stupart contributed a short article descriptive of the growth and present activities of the Meteorological Service, to the 1922-23 edition of the Year Book (pp. 43-47); to it the interested reader is referred.

### Section 6.—Meteorological Tables.

Tables showing the normal temperature and precipitation at selected Canadian stations in each of the provinces, together with the recorded extremes, also the averages of sunshine, wind, and weather at such stations, will be found at pp. 51-63, inclusive, of the 1927-28 edition of the Year Book. The 1931 edition of the Year Book contains at pp. 48-76 additional and more comprehensive tables, contributed by A. J. Connor, of monthly average temperatures and precipitation throughout Canada, as well as of normal snowfall and duration of bright sunshine.

**Times of Sunrise and Sunset in Canada.\***—The table between pp. 68 and 69 gives the times of sunrise and sunset for places in latitudes 44°, 46°, 48°, 50°, and 52°. These latitudes cover what is pretty well the populated belt across Canada.

Times are given in mean solar time. The moment when the sun is over the meridian which passes through a certain place is not constant on any two consecutive days and a clock cannot be constructed to keep true meridian time. For this reason, mean or average time is used. It will be clear that no two places, unless they are exactly on the same meridian of longitude, have either the same meridian time or the same mean time. It follows that, for convenience in every-day life and to facilitate transportation schedules, a system of standard time has to be adopted.

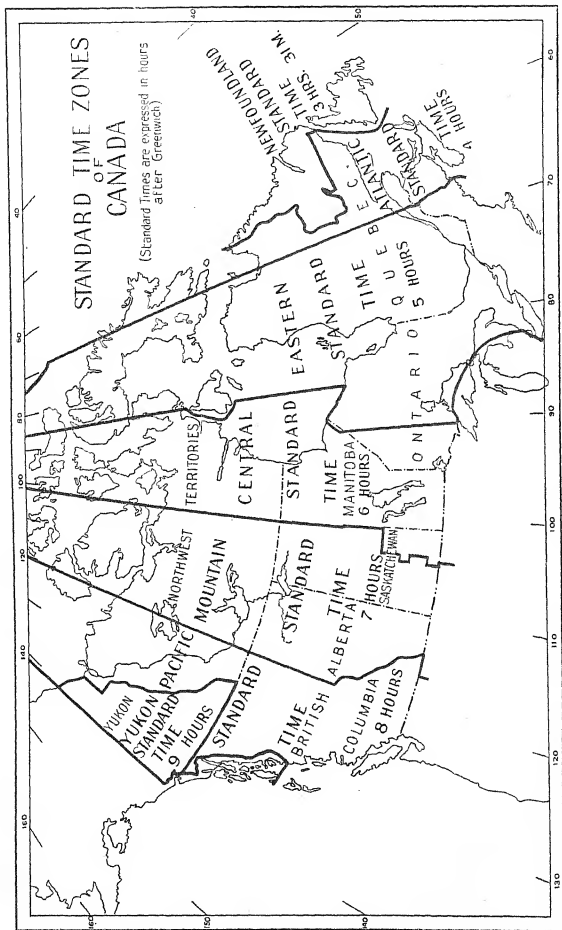
The surface of the earth is divided into belts each of which extends approximately 7½ degrees east and west of a central meridian whose local time is an exact number of hours from Greenwich time. These central meridians are, of course, 15°, 30°, 45°, etc. from Greenwich. On the ocean the boundaries of the belts are also true meridians, but on the land they are drawn to suit local circumstances. An examination of the map on page 67 will show this.

Within a certain belt or zone all the clocks are set to show the same time, and in passing from one such zone to another the hands of the clock are moved forward or backward one hour.

In Canada we have six standard time zones, as follows: the Atlantic (or 60th Meridian) Time Zone, which is 4 hours slower than Greenwich; the Eastern (or 75th Meridian) Time Zone, which is 5 hours behind Greenwich; the Central (or 90th Meridian) Time Zone, which is 6 hours behind; the Mountain (or 105th Meridian) Time Zone, which is 7 hours behind; the Pacific (or 120th Meridian) Time Zone, which is 8 hours behind; and the Yukon (or 135th Meridian) Time Zone, 9 hours slower than Greenwich. The boundaries of the zones are laid down in the Statutes of the several provinces and territories and are shown on the map.

Since, as stated, the tables are given in mean solar time for the five latitudes named, correction must be made, according to the following instructions, to change these times to standard or railroad times of cities and towns in the respective latitudes.

\* By permission of the Royal Astronomical Society of Canada, the calculations facing p. 68 and instructions for correction given below are reproduced from *The Observers' Handbook*, 1931, published by the Society.



*Instructions.*—In order to find the standard time of sunrise and sunset for any place on any day, first, from the list below, find the approximate latitude of the place from its position in relation to one of the cities listed and the correction, in minutes, which follows the name. Then find in the monthly table the time of sunrise and sunset for the proper latitude, on the desired day, and apply the correction.

| 44°               | 46°               | 48°               | 50°                | 52°                 |
|-------------------|-------------------|-------------------|--------------------|---------------------|
| min.              | min.              | min.              | min.               | min.                |
| Barrie.....+17    | Charlotte-        | Port Arthur...+57 | Brandon.....+40    | Calgary.....+36     |
| Brantford.....+21 | town.....+13      | Victoria.....+13  | Indian Head...- 5  | Edmonton.....+34    |
| Chatham.....+29   | Fredericton...+26 |                   | Kamloops.....+ 2   | Prince Albert...+ 4 |
| Goderich.....+27  | Montreal.....- 6  |                   | Kemora.....+18     | Saskatoon.....+ 6   |
| Guelph.....+21    | Ottawa.....+ 3    |                   | Medicine Hat...+22 |                     |
| Halifax.....+14   | Parry Sound...+20 |                   | Moosejaw.....+ 2   |                     |
| Hamilton.....+20  | Quebec.....-15    |                   | Moosomin.....+40   |                     |
| Kingston.....+ 6  | Sherbrooke...-12  |                   | Nelson.....-11     |                     |
| London.....+25    | Saint John....+24 |                   | Portage la         |                     |
| Orillia.....+18   | Sydney.....+ 1    |                   | Prairie.....+38    |                     |
| Owen Sound....+24 | Three Rivers.-10  |                   | Regina.....- 2     |                     |
| Peterboro.....+13 |                   |                   | Vancouver.....+12  |                     |
| Port Hope.....+14 |                   |                   | Winnipeg.....+23   |                     |
| Stratford.....+24 |                   |                   |                    |                     |
| Toronto.....+18   |                   |                   |                    |                     |
| Windsor.....+32   |                   |                   |                    |                     |
| Woodstock.....+23 |                   |                   |                    |                     |
| Yarmouth.....+24  |                   |                   |                    |                     |

*Example.*—Find the time of sunrise at Owen Sound, also at Regina, on Feb. 11. In the above list Owen Sound is under "44°", and the correction is +24 min. On the table between pp. 68-69 the time of sunrise on Feb. 11 for latitude 44° is 7·05; add 24 min. and we get 7·29 (Eastern Standard Time). Regina is under "50°", and the correction is -2 min. From the table the time is 7·18 and subtracting 2 min. we get the time of sunrise 7·16 (Mountain Standard Time).

### Section 7.—Droughts in Western Canada.

An article on the above subject by A. J. Connor, of the Meteorological Service of the Department of Marine, Toronto, accompanied by diagrams and tables showing the precipitation and sun-spot incidence in the Prairie Provinces, appeared at pp. 47-59 of the 1933 edition of the Year Book.

### Section 8.—Standard Time and Time Zones in Canada.

A summary, based on a paper "Standard Time and Time Zones in Canada" by C. C. Smith, Dominion Observatory, Ottawa, accompanied by a map diagram, appeared at pp. 50-53 of the 1934-35 edition of the Year Book.

## CHAPTER II.—HISTORY AND CHRONOLOGY.

### PART I.—HISTORY.

In the 1922-23 edition of the Canada Year Book, pp. 60-80, will be found an outline of the history of Canada, not reprinted here due to pressure on available space.

A select bibliography of historical works relating to Canada was contributed by the late Adam Shortt, C.M.G., LL.D., F.R.S.C., Chairman of the Historical Documents Publication Board, Ottawa, to the 1925 edition of the Canada Year Book, where it appears on pp. 53-55.

A special article "Canada on Vimy Ridge", prepared by Colonel A. Fortescue Duguid, D.S.O., B.Sc., R.C.A., Director of the Historical Section, Department of National Defence, was published on the occasion of the unveiling of the Vimy Memorial and appears on pp. 50-60 of the Canada Year Book, 1930.

### PART II.—CHRONOLOGY, 1497 to 1938.

1497. June 24, Eastern coast of North America discovered by John Cabot.  
1498. Cabot discovered Hudson strait.  
1501. Gaspar Corte Real visited Newfoundland and Labrador.  
1524. Verrazano explored the coast of Nova Scotia.  
1534. July 24, Jacques Cartier, on his first voyage, erected a cross at Gaspé, claiming the land for the King of France.  
1535. Cartier's second voyage. He ascended the St. Lawrence to Stadacona (Quebec), (Sept. 14), and Hochelaga (Montreal), (Oct. 2).  
1541. Cartier's third voyage. He planted wheat, cabbages, turnips, and lettuces near Cap Rouge river.  
1542-3. De Roberval and his party wintered at Cape Rouge, and were rescued by Cartier on his fourth voyage.  
1557. Sept. 1, Death of Cartier at St. Malo, France.  
1592. Straits of Juan de Fuca discovered by de Fuca.  
1603. June 22, Champlain's first landing in Canada, at Quebec.  
1604. De Monts settled colony on island in the St. Croix river.  
1605. Founding of Port Royal (Annapolis, N.S.).  
1608. Champlain's second visit. July 3, Founding of Quebec.  
1609. July, Champlain discovered lake Champlain.  
1610-11. Hudson explored Hudson bay and James bay.  
1611. Brûlé ascended the Ottawa river.  
1612. Oct. 15, Champlain made Lieutenant-General of New France.  
1613. June, Champlain ascended the Ottawa.  
1615. Champlain explored lakes Nipissing, Huron, and Ontario (discovered by Brûlé and Le Caron).  
1616. First schools opened at Tadoussac and on the site of the city of Three Rivers.  
1617. Arrival at Quebec of the first colonist, Louis Hébert and his family.  
1620. Population of Quebec, 60 persons.  
1621. Code of laws issued and register of births, deaths, and marriages opened in Quebec. Nova Scotia granted to Sir William Alexander by King James I.  
1622. Lake Superior discovered by Brûlé.  
1623. First British settlement of Nova Scotia.  
1627. New France and Acadia granted to the Company of 100 Associates.  
1628. Port Royal taken by Sir David Kirke.  
1629. April 24, Treaty of Susa between France and England. July 20, Quebec taken by Sir David Kirke.  
1632. Mar. 29, Canada and Acadia restored to France by the Treaty of St. Germain-en-Laye.  
1633. May 23, Champlain made first Governor of New France.  
1634. July 4, Founding of Three Rivers.  
1634-35. Exploration of the Great Lakes by Nicolet.  
1635. Dec. 25, Death of Champlain at Quebec. Founding of the first college at Quebec.  
1638. June 11, First recorded earthquake in Canada.  
1640. Discovery of lake Erie by Chaumonot and Brébeuf.  
1641. Resident population of New France, 240.  
1642. May 17, Founding of Ville-Marie (Montreal), by Maisonneuve.  
1646. Exploration of the Saguenay by Dablon.  
1647. Lake St. John discovered by de Quen.  
1648. Mar. 5, Council of New France created.  
1649. Mar. 16-17, Murder of Fathers Brébeuf and Lalumière by Indians and massacre of the Hurons.  
1654. August, Acadia taken by an expedition from New England.  
1656. Acadia granted by Cromwell to La Tour, Temple, and Crowne.  
1659. June 18, François de Laval arrived in Canada as Vicar-Apostolic.  
1660. May 21, Dollard des Ormeaux and sixteen companions killed by Iroquois at the Long Sault, Ottawa river.



1663. Company of 100 Associates dissolved. Feb. 5, severe earthquake. April, Sovereign Council of New France established. Population of New France, 2,500, of whom 500 were in Quebec. Foundation of the "Grand Seminary" at Quebec, by Laval.
1664. May, Company of the West Indies founded.
1665. Mar. 23, Talon appointed Intendant.
1666. Feb.-Mar., First census; population of New France, 3,215.
1667. July 21, Acadia restored to France by the Treaty of Breda. Sept.-Oct., Second census; white population of New France, 3,918.
1668. Foundation of the "Little Seminary" at Quebec by Laval. Mission at Sault Ste. Marie founded by Marquette.
1670. May 2, Charter of the Hudson's Bay Company granted.
1671. Population of Acadia, 441.
1672. Population of New France, 6,705. April 6, Comte de Frontenac, Governor.
1673. June 13, Cataract (Kingston) founded.
1674. Oct. 1, Laval became first Bishop of Quebec.
1675. Population of New France, 7,832.
1678. Niagara falls visited by Hennepin.
1679. Ship *Le Griffon* built on Niagara river above the falls by La Salle. Third census; population of New France, 9,400; of Acadia, 515.
1681. Fourth census; population of New France, 9,677.
1682. Frontenac recalled.
1683. Population of New France, 10,251.
1685. First issue of card money. Fifth census; population of New France, 12,363, including 1,538 settled Indians.
1686. Population of New France, 12,373; of Acadia, 885.
1687. Mar. 18, La Salle assassinated.
1688. Sixth census; population of New France, 11,562, including 1,259 settled Indians.
1689. June 7, Frontenac re-appointed Governor. Aug. 5, Massacre of whites by Indians at Lachine.
1690. May 21, Sir William Phips captured Port Royal, but was repulsed in an attack on Quebec (Oct. 16-21).
1692. Seventh census; population of New France, 12,431. Oct. 22, Defence of Verchères against Indians by Madeleine de Verchères.
1693. Population of Acadia, 1,009.
1695. Eighth census; population of New France, 13,639, including 853 settled Indians.
1697. Sept. 20, By the treaty of Ryswick, places taken during the war were mutually restored. D'Iberville defeated the Hudson's Bay Co.'s ships on Hudson Bay.
1698. Nov. 28, Death of Frontenac. Ninth census; population of New France, 15,355.
1701. La Motte Cadillac built a fort at Detroit.
1703. June 16, Sovereign Council of Canada became Superior Council and membership increased from 7 to 12.
1706. Tenth census; population of New France, 16,417.
1708. Death of Laval.
1709. British invasion of Canada.
1710. Oct. 13, Port Royal taken by Nicholson.
1711. Sept. 1, Part of Sir H. Walker's fleet, proceeding against Quebec, wrecked off the Seven Islands.
1713. April 11, Treaty of Utrecht; Hudson Bay, Acadia, and Newfoundland ceded to Great Britain. August, Louisbourg founded by the French. Population of New France, 18,119.
1718. Foundation of New Orleans in carrying out French plan to control the Mississippi as well as the St. Lawrence.
1719. Census population of New France, 22,530.
1720. Population of New France, 24,234; of Ile St. Jean (P.E.I.), about 100. April 25, Governor and Council of Nova Scotia appointed.
1721. June 19, Burning of about one-half of Montreal. Census population of New France, 24,951.
1727. Population of New France, 30,613.
1728. Population of Ile St. Jean (P.E.I.), 330.
1731. Population of the north of the peninsula of Acadia, 6,000.
1733. Discovery of lake Winnipeg by La Vérendrye.
1734. Road opened from Quebec to Montreal. Census population of New France, 37,716.
1737. Iron smelted on St. Maurice. French population of the north of the Acadia peninsula, 7,598.
1739. Census population of New France, 42,701.
1743. The younger La Vérendrye discovered the Rocky mountains.
1745. June 17, Taking of Louisbourg by Pepperell and Warren.
1748. Oct. 18, Treaty of Aix-la-Chapelle. Louisbourg restored to France in exchange for Madras.
1749. June 21, Founding of Halifax—British immigrants brought to Nova Scotia by Governor Cornwallis, 2,544 persons. Fort Rouillé (Toronto) built.
1750. St. Paul's Church, Halifax (oldest Anglican church in Canada), built.
1752. Mar. 25, Issue of the *Halifax Gazette*, first newspaper in Canada. British and German population of Nova Scotia, 4,203.
1754. Census population of New France, 55,009.
1755. Establishment at Halifax of first post office in what is now Canada, together with direct mail communication with Great Britain. June 16, Surrender of Fort Beauséjour on the isthmus of Chignecto to the British. Sept. 10, Expulsion of the Acadians from Nova Scotia.

1756. Seven Years' War between Great Britain and France began.
1758. July 26, Final capture of Louisbourg by the British. Oct. 7, First meeting of the Legislature of Nova Scotia.
1759. July 25, Taking of Fort Niagara by the British. July 26, Beginning of the siege of Quebec. July 31, French victory at Beauport Plains. Sept. 13, Defeat of the French on the Plains of Abraham. Death of Wolfe. Sept. 14, Death of Montcalm. Sept. 18, Surrender of Quebec.
1760. April 28, Victory of the French under Lévis at Ste. Foy. Sept. 8, Surrender of Montreal. Military rule set up in Canada.
1762. British population of Nova Scotia, 8,104. First British settlement in New Brunswick.
1763. Feb. 10, Treaty of Paris, by which Canada and its dependencies were ceded to the British. May, Rising of Indians under Pontiac, who took a number of forts and defeated the British at Bloody Run (July 31). Oct. 7, Civil government proclaimed. Cape Breton and Ile St. Jean annexed to Nova Scotia; Labrador, Anticosti, and Magdalen islands to Newfoundland. Nov. 21, General James Murray appointed Governor-in-Chief. Canadian post-offices established at Montreal, Three Rivers, and Quebec.
1764. June 21, First issue of the *Quebec Gazette*. Aug. 13, Civil government established.
1765. Publication of the first book printed in Canada, "Catéchisme du Diocèse de Sens". May 18, Montreal nearly destroyed by fire. Population of Canada, 69,810.
1766. July 24, Peace made with Pontiac at Oswego.
1768. Charlottetown, Ile St. Jean (P.E.I.), founded. April 11, Great fire at Montreal. April 12, Sir Guy Carleton (Lord Dorchester) Governor-in-Chief.
1769. Ile St. Jean (P.E.I.) separated from Nova Scotia.
- 1770-72. Hearne's journey to the Coppermine and Slave rivers and Great Slave lake.
1773. Suppression of the order of Jesuits in Canada and escheat of their estates.
1774. June 22, The Quebec Act passed.
1775. May 1, The Quebec Act came into force. Outbreak of the American Revolution. Montgomery and Arnold invaded Canada. Nov. 12, Montgomery took Montreal; Dec. 31, was defeated and killed in an attack on Quebec.
1776. The Americans were defeated and driven from Canada by Carleton.
1777. Sept. 18, General Frederick Haldimand Governor-in-Chief.
1778. Captain Jas. Cook explored Nootka sound and claimed the northwest coast of America for Great Britain.
- June 3, First issue of the *Montreal Gazette*.
1783. Sept. 3, Treaty of Versailles, recognizing the independence of the United States. Organization of the Northwest Company at Montreal. Kingston, Ont., and Saint John, N.B., founded by the United Empire Loyalists.
1784. Population of Canada, 113,012. Aug. 16, New Brunswick and (Aug. 26) Cape Breton separated from Nova Scotia.
1785. May 18, Incorporation of Parrottown (Saint John, N.B.).
1786. April 22, Lord Dorchester again Governor-in-Chief. Oct. 23, Government of New Brunswick moved from Saint John to Fredericton.
1787. C. Inglis appointed Anglican Bishop of Nova Scotia—the first colonial bishopric in the British Empire.
1788. King's College, Windsor, N.S., opened. Sailing packet service restored between Great Britain and Halifax.
1789. Quebec and Halifax Agricultural Societies established.
1790. Spain surrendered her exclusive rights on the Pacific coast. Population of Canada, 161,311. (This census did not include what became, in the next year, Upper Canada.)
1791. The Constitutional Act divided the province of Quebec into Upper and Lower Canada, each with a lieutenant-governor and legislature. The Act went into force Dec. 26. Sept. 12, Colonel J. G. Simcoe, first Lieutenant-Governor of Upper Canada.
1792. Sept. 17, First Legislature of Upper Canada opened at Newark (Niagara). Dec. 17, First Legislature of Lower Canada opened at Quebec. Vancouver island circumnavigated by Vancouver.
1793. April 18, First issue of the *Upper Canada Gazette*. June 28, Jacob Mountain appointed first Anglican Bishop of Quebec. July 9, Importation of slaves into Upper Canada forbidden. Rocky mountains crossed by (Sir) Alexander Mackenzie, who reached the Pacific ocean. York (Toronto) founded by Simcoe.
1794. Nov. 10, Jay's Treaty between Great Britain and the United States.
1795. Pacific coast of Canada finally given up by Spaniards.
1796. Government of Upper Canada moved from Niagara to York (Toronto).
1798. St. John's island (Ile St. Jean, population 4,500) renamed Prince Edward Island.
1800. Founding of New Brunswick College, Fredericton (now University of N.B.). The Rocky mountains crossed by David Thompson.
1803. Settlers sent by Lord Selkirk to Prince Edward Island.
1806. Nov. 22, Issue of *Le Canadien*—first wholly French newspaper. Popula-

- tion—Upper Canada, 70,718; Lower Canada, 250,000; New Brunswick, 35,000; P.E.I., 9,676.
1807. Simon Fraser explored the Fraser river. Estimated population of Nova Scotia, 65,000.
1809. Nov. 4, First Canadian steamer ran from Montreal to Quebec.
1811. Lord Selkirk's Red River settlement founded on land granted by Hudson's Bay Company.
1812. June 18, Declaration of war by the United States. July 12, Americans under Hull crossed the Detroit river. Aug. 16, Detroit surrendered by Hull to Brock. Oct. 13, Defeat of the Americans at Queenston Heights and death of General Brock.
1813. Jan. 22, British victory at Frenchtown. April 27, York (Toronto) taken and burned by the Americans. June 5, British victory at Stony Creek. June 24, British, warned by Laura Secord, captured an American force at Beaver Dams. Sept. 10, Commodore Perry destroyed the British flotilla on lake Erie. Oct. 5, Americans under Harrison defeated the British at Moravian town. Tecumseh killed. Oct. 26, Victory of French-Canadian troops under de Salaberry at Châteauguay. Nov. 11, Defeat of the Americans at Cryslers Farm. British stormed Fort Niagara and burned Buffalo.
1814. Mar. 30, Americans repulsed at La Colle. May 6, Capture of Oswego by the British. July 5, American victory at Chippawa. July 25, British victory at Lundy's Lane. July, British from Nova Scotia invaded and occupied northern Maine. Sept. 11, British defeat at Plattsburg on lake Champlain. Dec. 24, Treaty of Ghent ended the war. Population—Upper Canada, 95,000; Lower Canada, 335,000.
1815. July 3, Treaty of London regulated trade with the United States. The Red River settlement destroyed by the Northwest Company but restored by Governor Semple.
1816. June 19, Governor Semple killed. The Red River settlement again destroyed.
1817. July 18, First Treaty with the Northwest Indians. Lord Selkirk restored the Red River settlement. Opening of the Bank of Montreal; first note issue Oct. 1. Population of Nova Scotia, 81,351. Rush-Bagot Convention with the United States, limiting naval armament on the Great Lakes, signed.
1818. Oct. 20, Convention at London regulating North American fisheries. Dalhousie College, Halifax, founded. Bank of Quebec founded.
- 1819-22. Franklin's overland Arctic expedition.
1820. Oct. 16, Cape Breton re-annexed to Nova Scotia.
1821. Mar. 26, The Northwest Company absorbed by the Hudson's Bay Company. Charter given to McGill College.
1822. Population of Lower Canada, 427,465.
1824. Population of Upper Canada, 150,060; of New Brunswick, 74,176.
1825. Oct. 6, Great fire in the Miramichi district, N.B. Opening of the Lachine canal. Population of Lower Canada, 479,288.
1826. Founding of Bytown (Ottawa).
1827. Sept. 29, Convention of London relating to the territory west of the Rocky mountains. Population of Nova Scotia (including Cape Breton), 123,630.
1828. The Methodist Church of Upper Canada separated from that of the United States.
1829. Nov. 27, First Welland canal opened. McGill University opened. Upper Canada College founded.
1831. June 1, The North Magnetic Pole discovered by (Sir) James Ross. Population—Upper Canada, 236,702; Lower Canada, 553,131; Assiniboia, 2,390.
1832. Outbreak of cholera in Canada. Incorporation of Quebec and Montreal. Bank of Nova Scotia founded. May 30, Opening of the Rideau canal.
1833. Aug. 18, The steamer *Royal William*, built at Quebec, crossed the Atlantic from Pictou to England.
1834. Feb. 21, The Ninety-Two Resolutions on public grievances passed by the Assembly of Lower Canada. Mar. 6, Incorporation of Toronto. Population of Upper Canada, 321,145; of New Brunswick, 119,457; of Assiniboia, 3,356.
1836. July 21, Opening of the first railway in Canada from Laprairie to St. John's, Que. Victoria University opened at Cobourg (afterwards moved to Toronto).
1837. Report of the Canada Commissioners. Rebellion in Lower Canada (Papineau) and Upper Canada (W. L. Mackenzie). Nov. 23, Gas lighting first used in Montreal.
1838. Feb. 10, Constitution of Lower Canada suspended and Special Council created. Mar. 30, The Earl of Durham, Governor-in-Chief. April 27, Martial law revoked. June 28, Amnesty to political prisoners proclaimed. Nov. 1, Lord Durham, censured by British Parliament, resigned. Population—Upper Canada, 339,442; Assiniboia, 3,966; Nova Scotia, 202,575.
1839. Feb. 11, Lord Durham's report submitted to Parliament. John Strachan ordained first Anglican Bishop of Toronto. Oct. 19, Charles Poulett Thomson (Lord Sydenham) arrived in Canada as Governor-in-Chief.
1840. July 23, Passing of the Act of Union. First ship of the Cunard line arrived at Halifax.
1841. Feb. 10, Union of the two provinces as the Province of Canada, with

- Kingston as capital. Feb. 13, Draper-Ogden Administration. April 10, Halifax incorporated. June 13, Meeting of the first United Parliament. Sept. 19, Death of Lord Sydenham. Population of Upper Canada, 455,068; of P.E.I., 47,042.
1842. Mar. 10, Opening of Queen's University, Kingston. Aug. 9, The Ashburton Treaty. Sept. 16, Baldwin-Lafontaine Administration.
1843. June 4, Victoria, B.C., founded. Dec. 12, Draper-Viger Administration. King's (now University) College, Toronto, opened.
1844. May 10, Capital moved from Kingston to Montreal. Knox College, Toronto, founded. Population of Lower Canada, 697,084.
1845. May 28 and June 28, Great fires at Quebec. Franklin started on his last Arctic expedition.
1846. May 18, Kingston incorporated. June 15, Oregon Boundary Treaty. June 18, Draper-Papineau Administration. First telegraph, operated by Toronto, Hamilton and Niagara Electro-Magnetic Telegraph Co., opened.
1847. May 29, Sherwood-Papineau Administration. Nov. 25, Montreal-Lachine Railway opened.
1848. Mar. 11, Lafontaine-Baldwin Administration. May 30, Fredericton incorporated. St. Lawrence canals opened to navigation.
1849. April 25, Signing of the Rebellion Losses Act; rioting in Montreal and burning of the Parliament Buildings. Nov. 14, Toronto made the capital. Vancouver island granted to the Hudson's Bay Company. Population of Assiniboia, 5,391.
1851. April 6, Transfer of the postal system from the British to the Provincial Government; uniform rate of postage introduced. April 23, Postage stamps issued. Aug. 2, Incorporation of Trinity College, Toronto. Sept. 22, Quebec became the capital. Oct. 28, Hincks-Morin Administration. Responsible government granted to Prince Edward Island. Population—Upper Canada, 952,004; Lower Canada, 890,261; New Brunswick, 193,800; Nova Scotia, 276,854.
1852. July 8, Great fire at Montreal. Dec. 8, Laval University, Quebec, opened. Grand Trunk Railway chartered.
1853. Opening of Grand Trunk Railway from Montreal to Portland.
1854. June 5, Reciprocity Treaty with the United States. Sept. 11, MacNab-Morin Ministry. Seigneurial tenure in Lower Canada abolished. Secularization of the clergy reserves.
1855. Jan. 1, Incorporation of Ottawa. Jan. 27, MacNab-Taché Administration. Mar. 9, Opening of the Niagara Railway suspension bridge. April 17, Incorporation of Charlottetown. Oct. 20, Government moved to Toronto.
1856. The Legislative Council of Canada made elective. First meeting of the Legislature of Vancouver island. May 24, Taché-J. A. Macdonald Administration. Oct. 27, Opening of the Grand Trunk Railway from Montreal to Toronto. Population of Assiniboia, 6,601.
1857. Nov. 26, J. A. Macdonald-Cartier Administration. Dec. 31, Ottawa chosen by Queen Victoria as future capital of Canada.
1858. February, Discovery of gold in Fraser River valley. July 1, Introduction of Canadian decimal currency. Aug. 2, Brown-Dorion Administration. Aug. 5, Completion of the Atlantic cable; first message sent. Aug. 6, Cartier-J. A. Macdonald Administration. Aug. 20, Colony of British Columbia established. Control of Vancouver island surrendered by the Hudson's Bay Company.
1859. January, Canadian silver coinage issued. Sept. 24, Government moved to Quebec.
1860. Aug. 8, The Prince of Wales (King Edward VII) arrived at Quebec. Sept. 1, Laying of the corner-stone of the Parliament Buildings at Ottawa by the Prince of Wales. Prince of Wales College, Charlottetown, founded.
1861. Aug. 14, Great flood at Montreal. Sept. 10, Meeting of the first Anglican provincial synod. Population—Upper Canada, 1,396,091; Lower Canada, 1,111,566; New Brunswick, 252,047; Nova Scotia, 330,857; Prince Edward Island, 80,857.
1862. May 24, Sandfield Macdonald-Sicotte Administration. Aug. 2, Victoria, B.C., incorporated.
1863. May 16, Sandfield Macdonald-Dorion Administration.
1864. Mar. 30, Taché-J. A. Macdonald Administration. Conferences on confederation of British North America; Sept. 1, at Charlottetown; Oct. 10-29, at Quebec. Oct. 19, Raid of American Confederates from Canada on St. Albans, Vermont.
1865. Feb. 3, The Canadian Legislature resolved on an address to the Queen praying for union of the provinces of British North America. Aug. 7, Belieu-J. A. Macdonald Administration. Oct. 20, Proclamation fixing the seat of government at Ottawa.
1866. Mar. 17, Termination of the Reciprocity Treaty by the United States. May 31, Raid of Fenians from the United States into Canada; they were defeated at Ridgeway (June 2) and retreated across the border (June 3). June 8, First meeting at Ottawa of the Canadian Legislature. Nov. 17, Proclamation of the union of Vancouver Island with British Columbia.

NOTE.—*The Ministries, and the dates of elections and lengths of sessions of all Dominion Parliaments following Confederation are given in Tables 2 and 4, respectively, of Chapter III. Changes in Provincial Governments are indicated in Table 11 of that chapter. References regarding these matters have therefore been dropped from the chronology below.*

1867. Mar. 29, Royal Assent given to the British North America Act, July 1, The Act came into force; Union of the provinces of Canada, Nova Scotia and New Brunswick as the Dominion of Canada; Upper and Lower Canada made separate provinces as Ontario and Quebec; Viscount Monck first Governor General; Sir John A. Macdonald, Premier. Nov. 6, Meeting of the first Dominion Parliament.
1868. April 7, Murder of D'Arcy McGee at Ottawa. July 31, The Rupert's Land Act authorized the acquisition by the Dominion of the Northwest Territories.
1869. June 22, Act providing for the government of the Northwest Territories. Nov. 19, Deed of surrender to the Crown of the Hudson's Bay Company's territorial rights in the Northwest. Outbreak of the Red River Rebellion under Riel.
1870. May 12, Act to establish the province of Manitoba. July 15, Northwest Territories transferred to the Dominion and Manitoba admitted into Confederation. Aug. 24, Wolseley's expedition reached Fort Garry (Winnipeg); end of the rebellion.
1871. April 2, First Dominion Census (populations at this and succeeding enumerations given on p. 126). April 14, Act establishing uniform currency in the Dominion. May 8, Treaty of Washington, dealing with questions outstanding between the United Kingdom and the United States. July 20, British Columbia entered Confederation.
1873. May 23, Act establishing the North West Mounted Police. July 1, Prince Edward Island entered Confederation. Nov. 8, Incorporation of Winnipeg.
1874. May, Ontario Agricultural College, Guelph, opened.
1875. April 8, The Northwest Territories Act established a Lieutenant-Governor and a Northwest Territories Council. April-May, Letting of first contract and commencement of work upon the Canadian Pacific railway as a Government line; work commenced at Fort William. June 15, Formation of the Presbyterian Church in Canada.
1876. June 1, Opening of the Royal Military College, Kingston. June 5, First sitting of the Supreme Court of Canada. July 3, Opening of the Intercolonial Railway from Quebec to Halifax. Branch of Laval University established at Montreal.
1877. June 20, Great fire at Saint John, N.B. October, First exportation of wheat from Manitoba to the United Kingdom. Founding of the University of Manitoba.
1878. July 1, Canada joined the International Postal Union.
1879. May 15, Adoption of a protective tariff ("The National Policy").
1880. Royal Canadian Academy of Arts founded; first meeting and exhibition, Mar. 6. May 11, Sir A. T. Galt appointed first Canadian High Commissioner in London. Sept. 1, All British possessions in North America and adjacent islands except Newfoundland and its dependencies annexed to Canada by Imperial Order in Council of July 31. Oct. 21, Signing of the contract with the present Canadian Pacific Railway Co. for the completion of the Canadian Pacific railway.
1881. April 4, Second Dominion Census. May 2, First sod of the Canadian Pacific railway as a company line turned.
1882. May 8, Provisional districts of Assiniboia, Saskatchewan, Athabasca, and Alberta formed. May 25, First meeting of the Royal Society of Canada. Aug. 23, Regina established as seat of government of Northwest Territories.
1883. Sept. 5, Formation of the Methodist Church in Canada; united conference.
1884. May 24, Sir Charles Tupper, High Commissioner in London. Aug. 11, Order in Council settling the boundary of Ontario and Manitoba.
1885. Mar. 26, Outbreak of Riel's second rebellion in the Northwest. April 24, Engagement at Fish Creek. May 2, Engagement at Cut Knife. May 12, Taking of Batoche. May 16, Surrender of Riel. Aug. 24, First census of the Northwest Territories. Nov. 7, Last spike of Canadian Pacific Railway main line driven at Craigellaachie. Nov. 16, Execution of Riel.
1886. April 6, Incorporation of Vancouver. June 7, Archbishop Taschereau of Quebec made first Canadian Cardinal. June 13, Vancouver destroyed by fire. June 28, First through train of the Canadian Pacific Railway left Montreal for Port Moody. July 31, First quinquennial census of Manitoba.
1887. Interprovincial Conference at Quebec. April 4, First Colonial Conference in London.
1888. Feb. 15, Signing of Fishery Treaty between United Kingdom and United States at Washington. August, Rejection of Fishery Treaty by United States' Senate.

1890. Mar. 31, The Manitoba School Act abolished separate schools.
1891. April 5, Third Dominion Census. June 6, Death of Sir John A. Macdonald.
1892. Feb. 29, Washington Treaty, providing for arbitration of the Bering Sea Seal Fisheries question. July 23, Boundary Convention between Canada and United States.
1893. April 4, First sitting of the Bering Sea Arbitration Court. Dec. 18, Archbishop Macphray, of Rupert's Land, elected first Anglican Primate of all Canada.
1894. June 28, Second Colonial Conference at Ottawa. Dec. 12, Death of Sir John Thompson at Windsor Castle.
1895. Sept. 10, Opening of new Sault Ste. Marie canal.
1896. April 24, Sir Donald Smith (Lord Strathcona) High Commissioner in London. August, Gold discovered in the Klondyke.
1897. June 22, Celebration throughout the Empire of the Diamond Jubilee of H.M. Queen Victoria. July, Third Colonial Conference in London. Dec. 17, Award of the Bering Sea Arbitration Court.
1898. June 13, The Yukon district established as a separate Territory. Aug. 1, The British Preferential Tariff went into force. Aug. 23, Meeting at Quebec of the Joint High Commission between Canada and the United States. Dec. 25, British Imperial penny (2 cent) postage introduced.
1899. Oct. 1, Mgr. Diomède Falconio arrived at Quebec as first permanent Apostolic Delegate to Canada. Oct. 11, Beginning of the South African War. Oct. 29, First Canadian contingent left Quebec for South Africa.
1900. Feb. 27, Battle of Paardeberg. April 20, Great fire at Ottawa and Hull.
1901. Jan. 22, Death of Queen Victoria and accession of King Edward VII. April 1, Fourth Dominion Census. Sept. 16-Oct. 21, Visit to Canada of the Duke and Duchess of Cornwall and York (King George V and Queen Mary).
1902. May 31, End of South African War; peace signed at Vereeniging. June 30, Meeting of fourth Colonial Conference in London. Aug. 9, Coronation of H. M. King Edward VII. Dec., First message sent by wireless from Canada to the United Kingdom via Cape Breton, N.S.
1903. Jan. 24, Signing of the Alaskan Boundary Convention. June 19, Incorporation of Regina. Oct. 20, Award of the Alaskan Boundary Commission.
1904. Feb. 1, Dominion Railway Commission established. April 19, Great fire in Toronto. Oct. 8, Incorporation of Edmonton.
1905. Sept. 1, Creation of the provinces of Alberta and Saskatchewan.
1906. University of Alberta founded. Oct. 8, Interprovincial Conference at Ottawa.
1907. April 15-May 14, Fifth Colonial Conference in London. New customs tariff, including introduction of intermediate tariff. Oct. 17, Transatlantic wireless open for limited public service. University of Saskatchewan founded. Dec. 6, First recorded flight in Canada of a heavier-than-air machine carrying a passenger (Dr. Graham Bell's tetrahedral kite, *Cygnus*).
1908. Jan. 2, Establishment of Ottawa Branch of Royal Mint. June 21-23, Bicentenary of Bishop Laval celebrated at Quebec. July 20-31, Quebec tercentenary celebrations. Visit of Prince of Wales to Quebec. Aug. 2, Great fire in Kootenay valley, B.C. University of British Columbia founded.
1909. Jan. 11, Signing of International Boundary Waters Convention between Canada and United States. Feb. 23, First flight in Canada of a heavier-than-air machine under its own power (McCurdy's *Silver Dart*).
1910. May 6, Death of King Edward VII and accession of King George V. Sept. 7, North Atlantic Coast Fisheries Arbitration Award of The Hague Tribunal. New trade agreements made with Germany, Belgium, Holland, and Italy. Oct. 11, Inauguration at Kitchener of Ontario hydro-electric power transmission system.
1911. May 23-June 20, Imperial Conference in London. June 1, Fifth Dominion Census. June 22, Coronation of H.M. King George V. July 11, Disastrous fires in Porcupine district.
1912. Mar. 29-April 9, First Canada-West Indies Trade Conference held at Ottawa. April 15, Loss of the steamship *Titanic*. Appointment of Dominions Royal Commission. May 15, Extension of the boundaries of Quebec, Ontario, and Manitoba.
1914. May 20, Loss of the steamship *Empress of Ireland*. Aug. 4, War with Germany; Aug. 12, with Austria-Hungary; Nov. 5, with Turkey. Aug. 18-22, Special war session of Canadian Parliament. Oct. 10, First Canadian contingent of over 33,000 troops landed at Plymouth, England.
1915. February, First Canadian contingent landed in France and proceeded to Flanders. April 22, Second Battle of Ypres. April 24, Battle of St. Julien. May 20-26, Battle of Festubert. June 15, Battle of Givenchy.
1916. Jan. 12, Order in Council authorizing increase in number of Canadian troops to 500,000. Feb. 3, Destruction of the Houses of Parliament at Ottawa by fire. April 3-20, Battle of St. Eloi. June 1, Census of Prairie Provinces. June 1-3, Battle of Sanctuary Wood. July 1, Commencement of the Battle of the Somme.

- Sept. 1, Corner-stone of new Houses of Parliament laid by Duke of Connaught.
1917. Feb. 12-May 15, Imperial Conference. Mar. 20-May 2, Meetings in London of Imperial War Cabinet. Mar. 21-April 27, Imperial War Conference. April 6, United States declared war against Germany. April 9, Capture of Vimy Ridge. June 21, Appointment of Food Controller. Aug. 15, Battle of Loos, capture of Hill 70. Aug. 29, Passing of Military Service Act. Sept. 20, Completion of Quebec Bridge. Parliamentary franchises extended to women. Oct. 26-Nov. 10, Battle of Passchendaele. Dec. 6, Serious explosion at Halifax, N.S.
1918. Mar. 31, Germans launched critical offensive on West Front. March-April, Second Battle of the Somme. April 17, Secret session of Parliament. June-July, Prime Minister and colleagues attended Imperial War Conference in London. July 18, Allies assumed successful offensive on West Front. Aug. 12, Battle of Amiens. Aug. 26-28, Capture of Monchy le Preux. Sept. 2-4, Breaking of Drocourt-Quéant line. Sept. 16, Austrian peace note. Sept. 27-29, Capture of Bourlon Wood. Sept. 30, Bulgaria surrendered and signed armistice. Oct. 1-9, Capture of Cambrai. Oct. 6, First German peace note. Oct. 20, Capture of Denain. Oct. 25-Nov. 2, Capture of Valenciennes. Oct. 31, Turkey surrendered and signed armistice. Nov. 4, Austria-Hungary surrendered and signed armistice. Nov. 11, Capture of Mons. Germany surrendered and signed armistice.
1919. Feb. 17, Death of Sir Wilfrid Laurier. May 1-June 15, General strike at Winnipeg and other western cities. June 28, Signing at Versailles of Peace Treaty and Protocol. Aug. 15, Arrival of the Prince of Wales for official tour in Canada. Aug. 22, Formal opening of Quebec Bridge by the Prince of Wales. Sept. 1, The Prince of Wales laid foundation stone of Peace Tower, Parliament Buildings, Ottawa. Sept. 1-Nov. 10, Special peace session, thirteenth Parliament of Canada. Dec. 20, Organization of "Canadian National Railways" by Order in Council.
1920. Jan. 10, Ratifications of the Treaty of Versailles. Feb. 19, Shareholders ratified agreement for sale of the Grand Trunk Railway to the Dominion Government. May 31-June 18, Trade Conference at Ottawa between Dominion and West Indian Governments. July 10, Sir Robert Borden succeeded by Rt. Hon. Arthur Meighen as Prime Minister. July 16, Ratifications of the Treaty of St. Germain-en-Laye.
- Aug. 9, Ratifications of the Treaty of Neuilly-sur-Seine. Nov. 15, First meeting of League of Nations Assembly began at Geneva, Switzerland.
1921. May 10, Preferential tariff arrangement with British West Indies became effective. June 1, Sixth Dominion Census. June 20-Aug. 5, Imperial Conference. Nov. 11, Opening of Conference on limitation of armament at Washington.
1922. Feb. 1, Arms Conference at Washington approved 5-power treaty, limiting capital fighting ships and disapproving unrestricted submarine warfare and use of poison gas. April 10, General Economic Conference opened at Geneva. July 13, Conference between Canada and the United States re perpetuating the Rush-Bagot Treaty regarding armament on the Great Lakes. Aug. 7, Allies' Conference on war debts and reparations opened at London. Oct. 10, Mudania Armistice signed by Britain, France, and Turkey. Dec. 9, Reparations Conference opened at London.
1923. April 1, Removal of British embargo on Canadian cattle effective. Oct. 1, Imperial Conference and Economic Conference at London.
1924. April 23, British Empire Exhibition opened by King George at Wembley, England, with the Prince of Wales as President. Aug. 6-16, Meeting of the British Association for the Advancement of Science at Toronto. Aug. 11-16, Meeting of International Mathematical Congress at Toronto.
1925. June 10, Inauguration of the United Church of Canada. Nov. 20, Death of Queen Alexandra.
1926. June 1, Census of Prairie Provinces. July 1, Two-cent domestic rate of postage restored. Oct. 19-Nov. 23, Imperial Conference in London. Nov. 26, Hon. C. Vincent Massey appointed Envoy Extraordinary and Minister Plenipotentiary to the United States.
1927. June 1, Hon. Wm. Phillips, first U.S. Minister to Canada, reached Ottawa. July 1-3, Diamond Jubilee of Confederation celebrated throughout the Dominion. July 30, The Prince of Wales, Prince George, the Rt. Hon. Stanley Baldwin and party, arrived at Quebec on a visit to Canada. September, Canada elected as a non-permanent member of the Council of the League of Nations at Geneva. November, Dominion-Provincial Conference on the relations between the Dominion and the provinces.
1928. April 25, Sir Wm. H. Clark appointed first British High Commissioner to Canada. May 31, Legislative Council of Nova Scotia ceased to

- exist, leaving Quebec the only province with a bi-cameral legislature.
1929. Oct. 15-25, The Rt. Hon. J. Ramsay MacDonald, Prime Minister of Great Britain, visited Canada. Dec. 14, Transfer of natural resources to Manitoba and Alberta.
1930. Jan. 21, Five-power naval arms conference opened at London; Canada represented by Hon. J. L. Ralston. Feb. 20, Transfer of natural resources to British Columbia. Mar. 20, Transfer of natural resources to Saskatchewan. Aug. 1, H.M. Airship R-100 arrived at Montreal, being the first transatlantic lighter-than-air craft to reach Canada. Oct. 1, Imperial Conference in London.
1931. June 1, Seventh Dominion Census. June 30, The Statute of Westminster exempting the Dominion and the provinces from the operation of the Colonial Laws Validity Act and the Merchant Shipping Act approved by the House of Commons. Sept. 21, Great Britain suspended specie payments, following which Canada restricted the export of gold. Nov. 21, Abnormal Importations Act, extending preference to Empire products, assented to in the United Kingdom. Dec. 12, Statute of Westminster establishing complete legislative equality of the Parliament of Canada with that of the United Kingdom became effective.
1932. July 21-Aug. 20, Imperial Economic Conference at Ottawa. Aug. 6, Official opening of the Welland Ship Canal.
1933. Jan. 17-19, Dominion-Provincial Conference. May 18, Celebration of the 150th anniversary of the landing of the Loyalists at Saint John.
1934. August, Celebration at Gaspé of the 400th anniversary of the first landing of Jacques Cartier.
1935. Mar. 11, Bank of Canada commenced business. May 6, Celebrations throughout the Empire of the 25th anniversary of the accession of King George V to the Throne. Sept. 15, Conference of British Commonwealth Statisticians met in Ottawa. Dec. 9, Dominion-Provincial Conference met in Ottawa; Naval Limitation Conference met in London.
1936. Jan. 20, Death of H.M. King George V and accession of H. M. King Edward VIII. Mar. 8, German forces reoccupied the Rhineland in defiance of the Treaty of Versailles. June 1, Quinquennial Census of the Prairie Provinces taken. July 1-Sept. 7, Celebration in Vancouver of the Golden Jubilee of that city and of the C.P.R. July 26, Unveiling of Vimy Memorial in France by H.M. King Edward VIII. Dec. 11, Abdication of H. M. King Edward VIII and accession of H. M. King George VI.
1937. Jan. 1, Belgium represented in Canada by a Minister Plenipotentiary. Jan. 28, Decision of the Judicial Committee of the Privy Council declaring certain legislation, passed by the former Administration, on unemployment insurance, hours of labour, minimum wages, and marketing, *ultra vires* of the Dominion Parliament. Mar. 30, The Governor General and Lady Tweedsmuir visited the White House at Washington to return the official visit made by President Roosevelt at Quebec on July 30, 1936. May 12, Coronation of H. M. King George VI. July 8, Imperial Airways flying boat *Caledonia* arrived at Montreal from Southampton, inaugurating the experimental phase of the Transatlantic Airways. Aug. 14, Announcement of the appointment of a Royal Commission on Dominion-Provincial Relations, with Chief Justice Rowell as chairman. Aug. 17, Dominion Government disallows three Alberta statutes on the ground of invasion of the legislative field assigned to the Dominion Parliament. Oct. 28, The question of whether the power of disallowance vested in the Governor General by the B.N.A. Act is still subsisting, referred to the Supreme Court. Nov. 2, The question of the competency of the Provincial Government of Alberta to enact certain legislation referred to the Supreme Court in the form of three bills. Nov. 9, Reference to the Supreme Court of a question as to whether the power of a Lieutenant-Governor to reserve approval of provincial legislation still subsists. Nov. 29, Rowell Commission on Constitutional Relations opens sittings at Winnipeg.
1938. Mar. 4, Unanimous judgments of the Supreme Court of Canada on the Alberta constitutional references made in favour of the Dominion Government regarding each of the questions submitted: powers of the Governor General in Council to disallow provincial legislation, and powers of the Lieutenant-Governor to reserve provincial legislation for the signification of the pleasure of the Governor General, were found to be valid and unrestricted; the press, credit regulation, and banking taxation measures were found unconstitutional. The Court also held the Social Credit Act unconstitutional, although this was not a subject of specific reference. Mar. 11, Alberta Government appealed to the Privy Council against the judgments of the Supreme Court.



### PART III.—HISTORIC SITES AND MONUMENTS IN CANADA.\*

The work of restoring and preserving sites of national historic interest in Canada was inaugurated about eighteen years ago, after representations had been made to the Government concerning the need for acquiring, as a great national heritage, sites and relics associated with the early history of the Dominion. The National Parks Bureau of the Lands, Parks, and Forests Branch, Department of Mines and Resources, is now entrusted with the task of marking and preserving such sites and monuments as have been acquired. In the important work of weighing and considering the historic background and associations of sites and memorials, the Bureau is assisted by the Historic Sites and Monuments Board of Canada, an honorary body whose members, resident in various parts of the country, are historians of recognized standing.

Since the inception of its work, the Board has weighed and considered the circumstances surrounding more than a thousand sites of which over three hundred, most of which are listed below, have been judged to be of sufficient national importance to warrant their being suitably marked and maintained. These include: Indian earthworks, forts, and villages; French forts, trading posts, and mission enterprises; sites connected with British exploration and naval and military operations in the long struggle for the possession of Canada; posts of the Hudson's Bay Company; and sites related to the economic and industrial development of the Dominion.

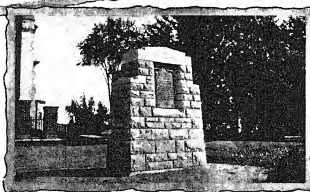
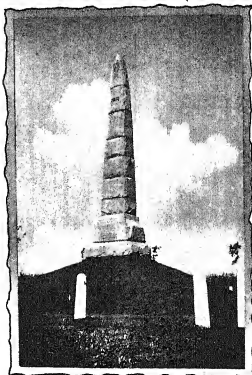
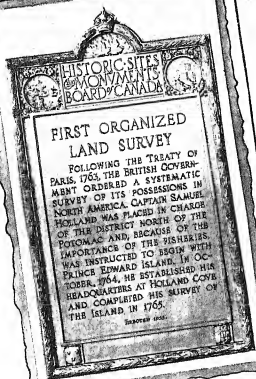
For the marking of these sites a finely designed tablet of bronze is used; the tablet in most cases is affixed to a field-stone cairn or a cut-stone monument, although in some instances it is placed on an existing structure associated with the site.

Among the outstanding historic sites preserved and maintained by the National Parks Bureau, the Fortress of Louisbourg in Cape Breton takes high place, for here were enacted the early stages of the long struggle which culminated in the possession of Canada by the British Crown. Louisbourg was one of the most keenly disputed fortresses in North America. It was erected more than two centuries ago by the French, who had named the settlement in honour of Louis the Fourteenth, King of France. It was captured by the British forces in 1745, but was subsequently handed back to the French. It was again besieged by the English and finally captured by them in 1758. It is interesting to recall that one of the brigades of infantry engaged in the recapture of Louisbourg was commanded by General Wolfe, who was later to die heroically at Quebec. Most of the original area of the fortress has now been acquired by the Dominion Government. Careful excavation work has been carried out and a museum established at the site. From a visit to this museum and a tour of the grounds the visitor can reconstruct in imagination a little of the historic past of Louisbourg.

Another notable historic site in Nova Scotia is Fort Anne in Annapolis Royal. Before the Pilgrim Fathers landed at Plymouth Rock, a thriving village stood on the shores of the Annapolis Basin, and here one of the first vessels built on this continent unfolded its sails. Annapolis Royal, too, saw the departure of 1,600 Acadians in the expulsion of 1755, the event so strikingly portrayed in Longfellow's *Evangeline*. The museum building recently restored was originally the Officers' Quarters and was built in 1797-98 under the supervision of Edward, Duke of Kent, the father of

\*Prepared under the direction of the National Parks Bureau, Department of Mines and Resources.

# TYPICAL MEMORIALS AND TABLETS USED IN MARKING HISTORIC SITES



(For description see page 4.)

## CHARACTERISTIC HISTORIC SITES AND MONUMENTS.

*Left of the double-page layout reading downwards.*—(1) The Jacques Cartier Memorial Cross at Gaspé, Que. Here Cartier landed on July 24, 1534, and laid claim to the land for the King of France; the cross was erected on the occasion of the 400th. anniversary of the landing. (2) Interior view of Fort Chambly, on the Richelieu river about 20 miles south-east of Montreal. The first wooden fort on this site was built by the French in 1665 as a protection against the Iroquois. The inset view shows the caretaker's quarters and part of the museum. (3) Fort Wellington, at Prescott, Ont. completed in 1838, was built as a main base for the defence of communications between Kingston and Montreal after the experiences of the War of 1812-14. The picture shows the old blockhouse and officers' quarters.

*Upper centre*—Fort Anne, at Annapolis Royal, N.S., associated with early French settlement on the shores of Annapolis Basin. The picture shows officers' quarters (now the museum) viewed through the old gate. These quarters, recently restored, were originally built in 1797-98 under the supervision of Edward, Duke of Kent, the father of Queen Victoria. Inset is a view of Fort Louisbourg, on Cape Breton island. The original French settlement at Fort Louisbourg was established in 1713 and it became one of the most keenly disputed fortresses in North America.

*Lower centre*—An interior view of the museum at Fort Beauséjour, near Sackville, N.B., showing the old Beaubassin church bell.

*Right, reading downwards*—(1) Reproduction of an old print of Fort Walsh, Sask.—a North West Mounted Police post, built in 1875, to establish Canadian authority among the Indians of the Cypress hills. (2) Fort Prince of Wales, the old Hudson's Bay Company fort near Churchill, Man., with an inset showing the gateway of old Fort Garry, another early Hudson's Bay Company post established on the Red river, where the city of Winnipeg now stands. (3) The obelisk near Bella Coola, B.C., marking the spot where Sir Alexander Mackenzie reached the shores of the Pacific ocean to complete the first overland crossing of continental North America. The inset shows the remaining building of Fort Langley, established by the Hudson's Bay Company in 1827 to control the trade of the lower Fraser river and Puget sound. It was the first post of the Company on what is now the British Columbia coast.

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## TYPICAL MEMORIALS AND TABLETS.

The single-page layout at the left shows several forms of memorials that have been erected to mark historic sites in Canada. At the top is shown a boulder cairn with tablet affixed. This particular cairn marks the site of Jasper House at Jasper National Park, Alta. At left centre is a view of a typical bronze tablet and at right centre is the obelisk memorial at Chrysler's Farm battlefield site, near Morrisburg, Ont. The lowest picture shows a cut-stone monument, this being the Bishop Macdonell Memorial at St. Raphael, Ont. The sketches show (top) the monument to Sieur de Monts at Annapolis Royal, N.S. and (bottom) the memorial erected to the memory of Madeleine de Verchères at Verchères, Que.

Queen Victoria, when he was Commander-in-Chief of the British Forces in North America with headquarters at Halifax, Nova Scotia.

In New Brunswick, the site of Fort Beauséjour has been acquired. Built by the French, the fort was intended to be an Acadian stronghold against the undefined claims of the English to Acadia. Around the fort, Acadians had their homes and farms. It was captured by the British in 1755 and renamed Fort Cumberland. Restoration work in connection with the ruins of the fort has been carried out and a new museum built at the site.

Another historic fortress which has been placed under the care of the National Parks Bureau is Fort Chambly in the province of Quebec. Fort Chambly lies about twenty miles southeast of Montreal on a conspicuous headland on the Richelieu river. The first fort, built as a protection from the terror of the Iroquois by the French in 1665, was of wooden construction. After many vicissitudes, it was rebuilt of stone, this work being completed in 1711. In 1760 the fort was surrendered to the British who, with a small armed force, held it until 1775. In that year the Americans captured the fort; they evacuated it the following year, but burned everything that was combustible leaving only the four walls standing. The fort was later repaired and garrisoned by Governor Carleton and played an important part in the War of 1812. Under the administration of the National Parks Bureau, steps have been taken to arrest the disintegration of the massive structure and a new museum building has been erected within the walls of the fort.

On an island in the Richelieu river about ten miles from the United States border is the site of another fortress erected by the French, Fort Lennox, on Ile-aux-Noix. The present fort, which was rebuilt by the Imperial authorities in the period from 1812 to 1827, is administered by the National Parks Bureau, and stands majestically in memory of the defence of the Richelieu Gateway.

Fort Wellington, at Prescott, Ontario, which is also under the care of the National Parks Bureau, remains as it was when finally completed in 1838, an impressive landmark. Named after the great Duke of Wellington, it was erected when the British authorities decided to fortify Prescott as one of the most vulnerable points of attack in the War of 1812 and as the main base for the defence of communications between Kingston and Montreal. The fort is now an object of great interest to tourists and is visited annually by thousands of people.

In Manitoba, Fort Prince of Wales, opposite the port of Churchill, has been acquired. This, the most northerly fortress on the American continent, was built in the years between 1733 and 1771 in order to secure control of Hudson bay for the Hudson's Bay Company. It was surrendered to, and partially destroyed by, a French naval force in 1782. Its ruins, which are among the most interesting military remains on the continent, are gradually being restored.

The following are other sites which have been marked and are being maintained by the National Parks Bureau. Locations are approximate and all are marked by bronze tablets, though this fact is not specifically mentioned in the description when a cairn or monument has been erected on the site.

#### PRINCE EDWARD ISLAND.

**Brudenell Point.**—Cut-stone monument to mark the site where Jean Pierre Roma founded a base for control of the Gulf fisheries and for trade with France, Quebec, and the West Indies, 1732.

**Charlottetown.**—*Provincial Legislature Grounds*—Cut-stone monument to commemorate the four-hundredth anniversary of the landing of Jacques Cartier on the Island, 1534; also a cut-stone monument to commemorate the distinguished

## PRINCE EDWARD ISLAND—concluded.

service to navigation of Admiral Henry Wolsey Bayfield, 1795-1885. *Provincial Building*—Tablets to commemorate: (a) the laying of the first submarine telegraph in America, 1852; and (b) outstanding historical events connected with the Island.

**Rocky Point.**—*Near South Shore Road*—Cairn to commemorate the events connected with the survey of Prince Edward Island by Captain Samuel Holland in 1764-65.

## NOVA SCOTIA.

**Annapolis Royal.**—*Fort Anne Park*—Cut-stone monument to commemorate the services of Samuel Vetch, Adjutant-General of the force which captured Port Royal, 1710, and who later was a notable figure in colonial history; also a cut-stone monument to commemorate the faithful services of Jean Paul Mascarene, 1684-1760, a French Huguenot in the army of Britain.

**Bridgetown.**—Cairn to commemorate the two combats at Bloody Creek in 1711 and 1757 between the British garrison at Annapolis Royal and allied French and Indians.

**Canso.**—*Public School Grounds, School St.*—Cairn to commemorate its fortification by the British in 1720 and later combats between them and the French and Indians.

**Englishtown.**—*St. Anne, Baddeck, Cape North Highway*—Cairn to commemorate settlement established by Captain Charles Daniel, 1629, and selection as a naval base, 1713, when it was named Port Dauphin.

**Fort La Have.**—*Lighthouse Reserve, Mouth of La Have River*—Cairn to mark the site of the fort built by Isaac de Razilly, where the capital of the colony was established.

**Port Lawrence.**—*Main Highway from Sackville to Amherst*—Cairn to mark the site of the fort built by the British, 1750, for the defence of the isthmus of Chignecto.

**Halifax.**—*Admiralty House Grounds*—Cut-stone monument in honour of the officers and men of H.M.S. *Shannon*, which defeated the United States frigate *Chesapeake* off Boston harbour, June 1, 1813. *Bedford and French Landing Roads*—Cairn to mark the site of the encampment of the storm-shattered expedition sent from France in 1746, under Admiral the Duc d'Anville. *Naval Barracks*—Monument on small green to mark the site of the first Royal Dockyard in what is now the Dominion of Canada. *Post Office Building, Hollis St.*—Tablet to commemorate the establishment of the first Post Office in Canada, 1755. *Province House*—Tablet to mark the site of the first printing press in British North America.

**Kennington Cove.**—*Near Louisbourg Highway*—Cairn to mark the landing place of Brig.-Gen. James Wolfe's Brigade, June 8, 1758.

**Liverpool.**—*Fort Point Park*—Cairn to the memory of the Privateersmen of Liverpool bay, who maintained and defended their trade with the West Indies and waged successful war upon the enemies of Great Britain, in ships fitted and armed at their own expense.

**Lower Granville.**—Cairn to mark the site of the first fort or "habitation" of Port Royal, built in 1605 by the French under de Monts and Champlain.

**North Sydney.**—*Western Union Telegraph Company's Cable Building*—Tablet to commemorate the successful laying of a submarine telegraph cable between Cape Breton and Newfoundland, 1856.

**Port la Tour.**—*Near Bacarra Point, Port la Tour Highway*—Cairn to mark the site of the last foothold of France in Acadia, built prior to 1627.

**Port Morien.**—*Long Beach Road*—Cairn to mark the site of the first regular coal-mining operations in America, established by the French, 1720.

**St. Peters.**—*Canal Reserve*—Cairn to mark the site of Nicolas Denys' fort and trading post, 1650, and to commemorate the construction of the St. Peter's canal.

**Shelburne.**—*Foot of King St.*—Boulder to commemorate the founding of the town by United Empire Loyalists, 1783.

**Sydney.**—*Post Office Building*—Tablet to commemorate the public services of Joseph Frederick Wallet des Barres, 1722-1824, a distinguished military engineer.

## NOVA SCOTIA—concluded.

**Wallace Bridge.**—*Main Highway from Wallace to Pugwash*—Cut-stone monument to mark the birthplace of Simon Newcomb, one of the world's greatest scientists.

**Windsor.**—*King's College Grounds*—Tablet on chapel to mark the site of the oldest university in the King's Overseas Dominions, founded in 1789. *King St.*—Cairn on military reserve to mark the site of Fort Edward, built by the British in 1750. *King's Square*—Cut-stone monument to commemorate the literary achievements of Thomas Chandler Haliburton, 1796-1865. *Park between King and Gerrish Sts.*—Cut-stone monument to commemorate the events connected with the first agricultural fair in Canada, which was held on Fort Edward Hill, May 21, 1765.

## NEW BRUNSWICK.

**Aulac.**—Fort Beausejour Park—Monument to mark the site of Tonge's island, once the capital of Acadia. Monument in memory of settlers who came to Chignecto from Yorkshire, England, 1772-76.

**Bathurst.**—*Main and Murray Sts.*—Cairn to commemorate the services of Nicolas Denys, appointed Governor and Lieutenant-General of the coasts and islands of the gulf of St. Lawrence from Canso to Gaspé, 1654.

**Campbellton.**—*Riverside Park*—Cairn to commemorate the last naval battle of the Seven Years' War in North American waters, 1760.

**Devon.**—*Gibson and Albert Sts.*—Cairn to mark the site of Fort Nashwaak, erected by Governor Villebon, 1692.

**Fredericton.**—*Parliament Buildings*—Tablet to the memory of Sir Howard Douglas, Lieutenant-Governor of New Brunswick, 1823-31. *Brunswick and King Sts.*—Cut-stone monument in public park to commemorate the distinguished services of the 104th New Brunswick Regiment in the defence of Canada in 1813-14.

**Hillsborough.**—*Near C. N. R. Station*—Cut-stone monument to commemorate the engagement which took place near there, Sept. 3, 1755.

**Lower Jemseg.**—*Main Highway*—Cut-stone monument to mark the site of Fort Jemseg built in 1659 by Thomas Temple during the English possession of Acadia.

**Minto.**—*Near C.P.R. Station*—Monument to commemorate the first export of coal, before middle of 17th century.

**North West Bridge.**—*Newcastle-Fredericton Highway*—Cairn to commemorate events connected with Beaubears island which served as a concentration camp for refugee Acadians, 1756-59.

**Petitcodiac.**—*Moncton-Saint John Highway*—Cut-stone monument to mark the ancient Indian portage route from Acadia to the Upper St. John and Quebec, which was later used by the French.

**Port Elgin.**—Cairn to mark the site of Fort Gaspereau built by French troops, 1751, renamed Fort Monckton, 1755.

**Saint John.**—*West Saint John*—A boulder on Town Hall Square to mark the site of Fort Charnisay, built by Sieur d'Aulnay de Charnisay, 1645. Also tablet on Martello Tower, built for the defence of Saint John during the War of 1812-14, which is being preserved as an example of that type of fortification. *Fort Howe Grounds*—Cairn to commemorate the public services of Major Gilfrid Studholme who built Fort Howe in 1778 and was its commander. Also tablet on Rockland Road to mark the site of Fort la Tour, erected by Charles de la Tour, 1631. *Royal Hotel*—Tablet to mark the site of Mallard House, in which the first Legislature of New Brunswick met in February, 1786. *Customs House Building*—Tablet to commemorate the first compound marine engine designed by Benjamin Tibbits, built in 1842. Also tablet to commemorate the invention of the first steam fog horn by Robert Foulis, 1854. *King Square*—Granite cross to commemorate the founding of the province, Aug. 16, 1784. *Market Square*—Boulder to mark the site of the landing of United Empire Loyalists, 1783.

**Westfield.**—*Fredericton-Saint John Highway*—Cairn to mark the site of Fort Boishebert (Nerepis), an ancient Indian stronghold strengthened by the French in 1749 and used by them against the British.

**Woodstock.**—*Highway, Ten Miles South of City*—Cairn to mark the site of Fort Meductic, chief Maliseet stronghold in Acadia in the 17th and 18th centuries.

## QUEBEC.

**Allan's Corners.**—Granite obelisk to commemorate the Battle of Châteauguay, Oct. 26, 1813.

**Beauport.**—*Royal Ave.*—Tablet affixed to house in which Lieut.-Col. Charles de Salaberry, the hero of Châteauguay, was born, Nov. 19, 1778.

**Cabano.**—*Caldwell Road*—Cairn to mark the Témiscouata portage, longest and most difficult on the overland route between Acadia and Quebec.

**Cap Rouge.**—Cairn to mark the site of Fort Charlesbourg Royal, built by Jacques Cartier, where he spent the winter of 1541-42.

**Carillon.**—*Canal Reserve*—Cairn to commemorate the construction of the Carillon canal.

**Cascades Point.**—*Main Highway*—Cairn to commemorate the events connected with the construction of the Soulanges canal in 1892-1900, to overcome the Cascades, Cedars, and Coteau rapids.

**Caughnawaga.**—Tablet on east wall of the old fort to commemorate the events connected with the construction of Fort St. Louis in 1725.

**Cedars.**—*Cedars-Cascades Point Road*—Cairn to mark the site of the Battle of the Cedars, May, 1776, between Canadian and American troops.

**Chambly.**—*Canal Reserve*—Cairn to commemorate the construction of the canal, connecting lake Champlain with the St. Lawrence river. *Chambly-St. Johns Highway*—Boulder to mark the site of Fort Ste. Thérèse, built in 1665 for defence against the Iroquois.

**Coteau-du-Lac.**—Cairn to mark the site of the fort and blockhouse built for the protection of the canal constructed in 1779-80.

**Frelighsburg.**—*Main Highway to Franklin, Vt.*—Monument to commemorate the battle of Eccles Hill, May 25, 1870, between Fenian Raiders and Canadian volunteers.

**Gaspe.**—*Main Highway*—Thirty-foot granite cross to commemorate the four-hundredth anniversary of the landing of Jacques Cartier, July 24, 1534.

**Grenville.**—*Canal Reserve*—Cairn to commemorate the construction of the Grenville canal.

**Howick.**—*Montreal-Malone Highway*—Cairn to commemorate the battle of Châteauguay Ford, between Canadian and American troops, Oct. 26, 1813.

**Hull.**—*Eddy Park*—Cairn to mark the site of the first portage of the Chaudière, traversed by Champlain and other early explorers.

**Ile-aux-Coudres.**—Granite cross to mark the site where Jacques Cartier landed, Sept. 6, 1535.

**Ile-aux-Noix.**—*Fort Lennox*—Tablets to commemorate the battle of Ile-aux-Noix, June 3, 1813, which resulted in the capture of two United States sloops and in memory of the officers, soldiers, and seamen of the Royal Navy and Provincial Marines who fought on lake Champlain during the years 1776-77 and 1812-14.

**Kingsmere.**—*King Mountain.*—Cairn to mark the site of the first Geodetic Survey station, established in 1905.

**Lachine.**—*Highway No. 2*—Cairn to commemorate the construction of the Lachine canal. *St. Joseph St.*—Cut-stone monument to commemorate the events connected with the massacre of the inhabitants by Indians on the night of Aug. 4-5, 1689. *Opposite City Hall*—Monument to commemorate the services of Robert Cavalier de La Salle, who founded Lachine in 1667.

**Lacolle.**—*Highways Nos. 14 and 52*—Cairn to commemorate the battle of Lacolle, Mar. 30, 1814.

**Laprairie.**—*Foch Square*—Cairn to mark the site of Fort Laprairie, 1687, a refuge for the settlers during a quarter-century of wars. *Intersection of the Chambly-St. Philippe and Laprairie-St. Johns roads*—Cairn to commemorate the second battle of Laprairie, Aug. 11, 1691.

**Les Vieilles Forges.**—*Three Rivers and Les Vieilles Forges Roads*—Cairn marking the site of the St. Maurice Forges, established by Poulin de Francheville, 1730.

## QUEBEC—continued.

**Lévis.**—*230 St. Laurent St.*—Tablet to mark the place where Louis Frechette, the Canadian poet, was born, Nov. 16, 1839.

**Longueuil.**—*Church of St. Antoine de Longueuil*—Tablet to mark the site of the stone fort built by the French, 1688-90.

**Montreal.**—*Molson's Brewery, Notre Dame St. E.*—Tablet to mark the site where the *Accommodation*, the first steamship in Canada, was built in 1809. *McGill Campus, Sherbrooke St.*—Boulder to mark the site of Hochelaga, the fortified Indian village visited by Cartier in 1535. *Customs Building, Youville Square*—Tablet to mark the site where Sieur de Maisonneuve laid the foundation of Montreal, May 18, 1642. *St. Paul and St. Sulpice Sts.*—Tablet to mark the birthplace of Pierre Le Moyne, Sieur d'Iberville, July 20, 1661.

**Notre Dame de Pierreville.**—*Main Road*—Cairn to mark the site of Fort Crevier, built in 1687, and to commemorate the battles which took place there, 1689 and 1693.

**Odelltown.**—Cairn to perpetuate the memory of the officers and men of the loyal Militia of Canada who took part in the battle of Odelltown, Nov. 7-9, 1838.

**Percé.**—*Logan Park*—Tablet to the memory of Sir William Logan, founder and first Director of the Geological Survey of Canada.

**Quebec.**—*Laval University Building*—Tablet to mark the site of the Quebec Seminary, the oldest educational house for boys in Canada, established in 1663. *Princess Louise Docks*—Tablet on waiting room to record the opening of the river St. Lawrence to the shipping of all nations, Jan. 1, 1850. *Hôtel Dieu, Charlevoix St.*—Tablet to mark the site of the first hospital established in America north of Mexico, which was founded Aug. 16, 1637. *Laval-Montmorency Park, Côte de la Montagne St.*—Tablet on stone wall at entrance to commemorate the events connected with the issue of the first patent in Canada, June 8, 1824.

**Rivière des Prairies.**—*Main Highway*—Cairn to mark the site of the battle of Coulée Grou, July 2, 1690, between the French and Iroquois.

**St. Andrews East.**—*Town Park*—Cairn to mark the site of the first paper mill in Canada, built by a group of New Englanders, 1803-5.

**St. Hubert.**—*Chamby Highway*—Cairn near entrance to airport to mark the site of Chamby Road, the first highway of importance in Canada, which was opened in 1665.

**St. Johns.**—*C. N. R. Station*—Tablet to mark one terminal of the first railway in Canada which ran from St. Johns to Laprairie and which was opened for traffic, July 21, 1836. *Champlain St.*—Boulder to mark the site of Fort St. Jean, built by the French, 1748, and rebuilt by the British, 1775. In the latter year it withstood a forty-five day siege by American troops. *St. John's Golf Club*—Cairn to commemorate the battle of Montgomery Creek, Sept. 6, 1775, when a group of Canadian militia and Indians defeated invading American troops.

**St. Lin.**—Cairn in front of Town Hall in memory of Sir Wilfrid Laurier, 1841-1919. Sir Wilfrid was born here on Nov. 20, 1841.

**St. Louis de Blandford.**—Monument to Charles Héon who settled there Mar. 14, 1825. His pioneer efforts paved the way for many who followed.

**St. Patrick.**—*Highway No. 2*—Tablet on iron standard to mark the place where Sir John A. Macdonald spent many of his summers between 1873 and 1890.

**Senneville.**—*Adjacent to Gouin Boulevard*—Cairn to commemorate the battle of the Lake of Two Mountains, 1689, when French troops defeated a band of Iroquois.

**Sorel.**—*Canada Steamship Lines Wharf*—Cairn to mark the site of Fort Richelieu, built by Pierre de Saurel, 1665, which proved an important defence post against the Iroquois.

**Tadoussac.**—*Front St.*—Cairn to mark the site of the oldest French establishment and Christian mission station in Canada.

**Three Rivers.**—*City Hall*—Tablet to commemorate the services of Benjamin Sulte, historian and poet, 1841-1923. *Customs Building*—Boulder to mark the site



## QUEBEC—concluded.

of Fort Three Rivers, built by the French, 1634, which became a centre for fur trade with the Indians. *Lejeune St.*—Boulder to commemorate the battle of Three Rivers, June 8, 1776, when British troops repulsed an attack by an American column.

*Verchères.*—Large monument with bronze statue, near the St. Lawrence river, to Madeleine de Verchères, who for eight days defended, against the Iroquois, the fort which stood there in 1692.

*Ville La Salle.*—*La Salle Boulevard*—Cairn in front of Novitiate Building to mark the site of the fief granted to La Salle in 1669, from which he started on his distant expeditions.

## ONTARIO.

*Adolphustown.*—*Hay Bay*—Cairn to the memory of Sir John A. Macdonald. There he drew inspiration to weld together the weak and scattered colonies of the day into a strong and ambitious Dominion.

*Allanburg.*—*Near the Bridge*—Cairn to mark the site where the first sod of the old Welland canal was cut, Nov. 30, 1824.

*Amherstburg.*—*Waterworks Park*—Monument to the memory of those who served on lakes Erie and Huron in the defence of Canada during the War of 1812-14, and to mark the site of the Navy Yard.

*Bath.*—*Adjacent to the Public Road*—Cairn to mark the site where the *Fron-tenac*, the first steamship that navigated lake Ontario, was built. It was launched Sept. 7, 1816.

*Bay of Quinte.*—*Intersection of the Trenton and Carrying Place Roads*—Cairn to commemorate the treaty concluded with the Mississauga Indians, 1787, by which a large tract of land on the north shore of lake Ontario was ceded to the Crown for settlement purposes.

*Blenheim.*—*Entrance to Town Park, Highway No. 3*—Cairn to commemorate the treaty concluded with the Indians in 1790, whereby a great tract of land was acquired to provide homes for expatriated United Empire Loyalists.

*Bridgeburg.*—*Niagara Boulevard*—Boulder to mark the site of the battle of Frenchman's Creek, Nov. 27, 1812, and to mark the landing place of the Fenian Raiders, May 31, 1866.

*Chatham.*—*River Road*—Cairn to commemorate the engagement at McRae's House, Dec. 15, 1813.

*Chippawa.*—*Niagara Boulevard*—Boulder in memory of the officers and men killed in the battle of July 5, 1814, and a boulder to mark the site of the shipyard on Navy island where the first vessels to navigate the Upper Lakes under the British flag were built, 1763-64.

*Christian Island.*—Boulder to mark the site of Fort Ste. Marie II, the Jesuit Mission to the Hurons, 1649-50. Here the Huron nation made its last stand against the Iroquois, 1649-51.

*Cornwall.*—*Highway No. 2*—Cairn to mark the site of Glengarry House, the home of Lieut.-Col. John Macdonell, a gallant and distinguished officer in the War of the American Revolution, 1775-84; he was later first Speaker of the Legislative Assembly of Upper Canada. *Collegiate Institute, Sydney St.*—Tablet to commemorate the distinguished public services of Hon. and Rt. Rev. John Strachan, 1778-1867, who opened his famous grammar school in Cornwall, 1803. *Post Office Building*—Tablet in commemoration of the unswerving fidelity and eminent services of the pioneer Loyalists who subdued the wilderness and laid the foundations of the present province of Ontario.

*Deseronto.*—*Tyendinaga Indian Reserve*—Cairn to commemorate the arrival, May 22, 1784, of a band of Mohawk Indians, expelled from their homes in the Mohawk valley for their fidelity to the unity of the Empire.

*Dundas.*—*Governor's Road*—Cairn to commemorate the events connected with Dundas Street, which was planned to promote the settlement of the province by Lieutenant-Governor Simcoe, 1793.

## ONTARIO—continued.

**Edenvale.**—*Highway No. 26*—Cairn to mark the site of Glengarry Landing, where Lieut.-Col. Robert McDouall built the flotilla of boats with which he effected the relief of the British garrison at Fort Michilimackinac, May, 1814.

**Fort Erie.**—*Ruined Walls of Old Fort*—Two tablets, one setting forth its history, the other commemorating the capture of the United States ships of war *Ohio* and *Somers*, on lake Erie, Aug. 12 and 13, 1814.

**Fort William.**—*Heath Park*—Cairn to commemorate the early historic events which took place in that city. *Kaministiquia River*—Cairn to mark the site of the canoe landing and the beginning of the long portage to the west. It was used by the Indians for ages and later by French, British, and Canadian discoverers, explorers, and traders.

**Goderich.**—*Entrance to Town, Highway No. 8*—Tablet to commemorate the life work of the men and women in the Huron Tract during the years 1828-1928.

**Hamilton.**—*Harvey Park*—Monument to mark the site of the fortification built on Burlington Heights for the defence of the Niagara peninsula during the War of 1812-14.

**Iona.**—Tablet on stone gateway to mark the site of Southwold Earthworks, the only double-walled Indian earthwork known in Canada.

**Kingston.**—*Whig Publishing Company Building, King St.*—Tablet to mark the site of St. George's Anglican Church, in which the first meeting of the Executive Council of the Province of Upper Canada was held, July 8, 1792. *Macdonald Park*—Murney Tower, erected by the Royal Engineers, 1840-46 for the defence of Kingston. *Gateway of Tête du Pont Barracks*—Tablet to mark the site of Fort Frontenac, built by Count Frontenac, July, 1673, and rebuilt by La Salle in 1675. Also a tablet to commemorate the treaty concluded with the Mississauga Indians, 1783, whereby a large tract of land was obtained for the settlement of the Loyalists. *Kingston Harbour*—Martello Shoal Tower, built about 1845 to complete the defences of the Port of Kingston as the chief naval station on lake Ontario. *Rideau St., No. 102*—Tablet to mark the stone house where Sir John A. Macdonald lived as a boy. *Kingston General Hospital Grounds*—Cut-stone monument to commemorate the public services of Lord Sydenham and Sir Charles Bagot, Governors-in-Chief of United Canada. *Royal Military College Grounds*—Tablet on Frigate Building to mark the site of the British naval station for lake Ontario, 1788-1818. *Highway No. 2, Barriefield*—Cairn at entrance to Fort Henry to commemorate the services of the officers and seamen of the Royal Navy who served on lake Ontario during the War of 1812-14.

**Kitchener.**—*Memorial Tower, Grand River, opposite Doon*—Tablet to commemorate the pioneers of the county of Waterloo.

**Leamington.**—*Point Pelee National Park*—Cairn to commemorate a number of early historic events which occurred at Point Pelee.

**Lyndhurst.**—*Adjacent to Public Road*—Cairn to mark the site of the Lansdowne Iron Works, built in 1801 and which operated there for ten years.

**Maitland.**—*Highway No. 2*—Cairn to mark the site of the shipyard at Pointeau-Baril, in which were built the last French ships of war which navigated lake Ontario.

**Mallorytown Landing.**—*National Park Reserve*—Cairn to mark the site of Bridge Island, which was fortified and garrisoned in 1814 for the protection of the vital line of supply by water from Lower Canada.

**Mattawa.**—*Memorial Park*—Cairn to mark the site of the historic canoe route from Montreal to the Great Lakes and beyond, which was used by early explorers and traders.

**Morrisburg.**—*Highway No. 2*—Granite obelisk in memory of the officers and men killed at the battle of Chrysler's Farm,\* 1812.

**Nanticoke.**—*School House*—Tablet to commemorate the engagement of Nov. 13, 1813, when the Norfolk militia routed a band of enemy marauders.

**Niagara-on-the-Lake.**—*Military Reserve*—Tablet on outer wall of Fort Mississauga, built in 1814 for the defence of that frontier, and occupied until 1845.

\*The name is spelled "Chrysler" on the tablet erected, but "Crysler" is the proper form of the name as written by Captain Crysler, himself.

## ONTARIO—continued.

Also cairn to mark the site of Fort George, built 1797-1801, captured by an invading army during the War of 1812-14, and later regained and maintained as a military post until 1845. *Queen St.*—Cairn to commemorate the battle of Fort George, May 27, 1813. *Niagara Historical Museum*—Tablet to commemorate the treaties concluded with the Indians, 1781 and 1784, by which a large tract of fertile land was purchased for settlement purposes. *Butler's Burying Ground*—Monument in memory of the officers and soldiers of Butler's Corps of Rangers, 1777-84, and to commemorate the action at Butler's Farm, July 8, 1813.

*Normandale.*—*Fish Hatchery*—Tablet to mark the site of the old furnace founded by Samuel Mason, 1818, which remained in operation until the local supply of bog ore was exhausted, about 1853.

*Ohsweken.*—*Council House Grounds*—Cut-stone monument to commemorate the loyal services of the Six Nations of Iroquois Indians to the British Empire.

*Ottawa.*—*Bridge near Chateau Laurier*—Tablet to commemorate the events connected with the construction of the Rideau canal. *Entrance to Dominion Archives*—Tablet in memory of those who perished on Canadian Arctic Expeditions, 1913-18. *Dominion Archives*—Tablet in commemoration of the valour and sacrifice of Allan Rudyard Crawford, commander and scientist of an Arctic expedition to Wrangel island, 1921-23. *Nepean Point*—Monument to commemorate the services of Samuel de Champlain, the first great Canadian.

*Penetanguishene.*—*Huron Park*—Cairn to commemorate the events connected with the capture of the United States warships, *Tigress* and *Scorpion*, Sept. 3-6, 1814.

*Port Arthur.*—*Gore Park*—Cairn to commemorate early historic events. Wolsey's Red River Expeditionary Force camped here May 19, 1870.

*Port Dover.*—*Near Quay St.*—Cross to mark the place where Dollier and Galinee landed in March, 1670, and erected a cross with the Arms of France, claiming possession of the lands of the Lake Erie district for the King of France. *Black Creek*—Cairn to mark the place where Dollier and Galinee, with seven other Frenchmen, the first Europeans known to have ascended the Great Lakes, wintered, 1669-70. *Powell Park*—Cairn to mark the point from which General Brock set out with his small army, Aug. 8, 1812, to relieve the invaded western frontier.

*Port Stanley.*—*Intersection of Bridge, Main, and Colburne Sts.*—Cairn to commemorate the historic events which took place in that vicinity.

*Port Talbot.*—*Talbot Road*—Cairn to mark the site of the residence of Hon. Col. Thomas Talbot, who there began, in 1803, the foundation of the Talbot Settlement.

*Prescott.*—*Highway No. 2*—Cairn to mark the site of Fort de Lévis, built by the French on Ile Royale in the St. Lawrence river, 1760. *Lighthouse Tower, Shore of St. Lawrence*—Tablet in memory of officers and men killed at the battle of the Windmill, Nov. 13, 1838.

*Queenston.*—*Niagara Boulevard*—Boulder to mark the site of Vrooman's Battery, engaged in the battle of Queenston Heights, Oct. 13, 1812.

*Queenston Heights Park.*—Boulder to mark the site of Fort Drummond, built in 1814 for the defence of the Niagara frontier, and named after Sir Gordon Drummond.

*Richmond.*—*Richmond Road*—Cairn in memory of the services and tragic death of Charles Lennox, fourth Duke of Richmond, who died there Aug. 28, 1819.

*Richmond Hill.*—*Highway No. 11*—Cairn to commemorate the events connected with the construction of Yonge Street, the military road and highway built in 1794-96, between lakes Ontario and Huron, to promote the settlement of the province.

*Ridgeway.*—*Main Highway*—Cairn in memory of the officers and men who fought against Fenian Raiders, June 2, 1866.

*St. Joseph's Island.*—Tablet on old chimney to mark the site of Fort St. Joseph, the most westerly military post in Upper Canada, built 1796-99. It was garrisoned until 1812 and became a noted trading station and resort for Indians.

## ONTARIO—concluded.

**St. Raphael.**—Cut-stone monument to commemorate the public services of Hon. and Rt. Rev. Alexander Macdonell, 1760-1840.

**Sandwich.**—*Intersection of Sandwich and Main Sts.*—Cairn to mark the site from which Gen. Brock's troops embarked to attack Fort Detroit, Aug. 16, 1812.

**Sault Ste. Marie.**—*Huron Street.*—Cairn to mark the site of the first Sault Ste. Marie canal, which was in use for canoes and bateaux before 1802.

**South Lancaster.**—*Monument Island, St. Lawrence River.*—Cairn erected by the members of the Glengarry Militia who took part in the suppression of the Rebellion of 1837.

**Stamford.**—*Village Green.*—Boulder to mark Niagara portage road, opened by United Empire Loyalists, 1788, which was the principal route of travel to Upper Lakes region until the opening of the Welland canal, 1829.

**Thorold.**—*Niagara Falls - Hamilton Highway.*—Cairn to commemorate the battle of Beaver Dams, June 24, 1813.

**Toronto.**—*Near Province of Ontario Building, Exhibition Grounds.*—Tablet in memory of the officers and men killed in action in the defence of the capital of Upper Canada, April 27, 1813. *Postal Station "K", North Yonge St.*—Tablet to mark the site of Montgomery's Tavern, the original headquarters of William Lyon Mackenzie, leader in the Upper Canada Rebellion. *Old City Hall Building, Front St.*—Tablet commemorating the first electric telegraph line in Canada, which ran between Toronto and Hamilton, inaugurated Dec. 19, 1846. *Parliament Buildings.*—Tablet to commemorate the eminent public service of Sir Gordon Drummond, who administered the Government of the province, 1813-15.

**Turkey Point.**—*Normandale-St. Williams Highway.*—Cairn to mark the site of Fort Norfolk, British military and naval station, 1814-15.

**Victoria Harbour.**—*Mission of St. Ignace.*—Cairn to mark the site of the palisaded Huron village and Jesuit mission which were destroyed by the Iroquois, March, 1849.

**Wardsville.**—*Highway No. 2.*—Cairn to mark the site of the battle of the Longwoods which took place at Battle Hill, Mar. 4, 1814.

**Wasaga Beach.**—*Wasaga Ave.*—Cairn to mark the site of Fort Nottawasaga, a blockhouse built in 1814 and destroyed the same year by enemy forces after a spirited defence.

**Welland.**—*Main Highway.*—Cairn in memory of the officers and soldiers killed at the battle of Cook's Mills, Oct. 19, 1814.

**Windsor.**—*Dominion Bank Building, facing Ouellette Ave.*—Tablet to mark an important terminal of the "Underground Railway" which functioned prior to the Civil War in the United States, and which was the means of many coloured people finding a haven and freedom in Canada.

## MANITOBA.

**Churchill.**—*Battery Point.*—Cairn to mark the site of Port Churchill, discovered in 1619 by the ill-fated Danish expedition under Jens Munck. The first fort was built there by the Hudson's Bay Company in 1689. This was rebuilt in 1717, and for nearly two hundred years was the Company's most northerly post on the bay.

**Fort Alexander.**—*Hudson's Bay Company Post.*—Cairn to mark the site of Fort Maurepas, one of La Vérandrye's trading posts built in 1738, and Fort Alexander, built by the Hudson's Bay Company in 1792.

**Headingley.**—*Portage la Prairie-Winnipeg Highway.*—Cairn to mark the site of the first monument on the Dominion Lands Survey system. It was placed on the First Meridian, July 10, 1871.

**Letellier.**—*Jefferson Highway.*—Cairn to mark the site of the War Road of the Sioux leading to the Lake of the Woods. It was the earliest route to the West. First used in 1733 by the French.

**Lower Fort Garry.**—*West Wall of Fort.*—Tablet to commemorate the signing of Indian Treaty No. 1, Aug. 3, 1871, whereby the Chippewa and Swampy Cree Indians surrendered their rights to lands comprised within the boundaries of Manitoba as then existing.

## MANITOBA—concluded.

**Norway House.**—*Hudson's Bay Company Post*—Cairn to mark the site of the post constructed in 1825. Here the Cree Syllabic system was invented and Treaty No. 5 made with the Indians in 1875.

**Portage la Prairie.**—*Near Pumping Station*—Cairn to mark the site of Fort La Reine, built by La Vérendrye, the French-Canadian explorer and discoverer, October, 1738.

**The Pas.**—*Devon Park*—Cairn in memory of Henry Kelsey, Hudson's Bay Company fur trader and explorer.

**Wawanesa.**—*Sunshine Highway*—Cairn to mark the site of seven forts, built by the North West, Hudson's Bay, and XY Companies between 1785 and 1828. From there ran the trade route to the Mandan country on the Missouri.

**Winnipeg.**—*Sir William Whyte Park*—Cairn to mark the site of Fort Douglas, headquarters of the first British Settlement west of the Great Lakes. *Main St.*—Cut-stone monument to commemorate the battle of Seven Oaks, between the rival fur-trading companies, June 19, 1816. *Gateway of Old Fort Garry, Main St.*—Tablet to mark the sites of Fort Rouge, established in 1738; Fort Gibraltar, built 1804; Old Fort Garry, headquarters of the Hudson's Bay Company after the coalition with the North West Company, 1821; and New Fort Garry, constructed 1836-39.

## SASKATCHEWAN.

**Batoche.**—*Church Grounds*—Cairn to mark the site of the headquarters of the rebels during the North West Rebellion of 1885. Its capture by General Middleton in May of that year ended the uprising.

**Battleford.**—*Intersection of 24th St. and 2nd Ave.*—Cairn to commemorate the events which took place there during the North West Rebellion. Poundmaker and his band surrendered there May 26, 1885.

**Carleton.**—Cairn to commemorate the events connected with Indian Treaty No. 6, negotiated with the Crees by Commissioners of the Crown, whereby an area of 120,000 square miles of territory was surrendered.

**Coule.**—Cairn to mark the site of Fort Walsh, a North West Mounted Police post, built in 1875, for the purpose of enforcing law and order among the hunting bands of Indians in the Cypress Hills.

**Cut Knife Hill.**—*Poundmaker Indian Reserve*—Cairn to commemorate the engagement which took place May 2, 1885, between Government troops and the Indians during the North West Rebellion.

**Pelly.**—Cairn to mark the site of Fort Livingstone, the first capital of the North West Territories, 1876-77. The first session of the North West Council was held there, Mar. 8, 1877.

**Rosthern.**—Cairn to commemorate the events connected with the engagement which took place at Fish Creek on April 24, 1885, during the North West Rebellion.

## ALBERTA.

**Calgary.**—*Central Park*—Cairn to commemorate the arrival of the North West Mounted Police, August, 1875, and the establishment of their post on the west bank of the Elbow river.

**Cluny.**—*Blackfoot Indian Reserve*—Cairn to commemorate the signing of the treaty with the Indians, Sept. 22, 1877, whereby they surrendered their rights to 50,000 square miles of territory in the southwest corner of Alberta.

**Edmonton.**—*Near Provincial Administration Building*—Cut-stone monument to commemorate the services of the Alberta Field Force during the North West Rebellion. These operations averted the danger of an Indian uprising in Alberta.

## ALBERTA—concluded.

**Fort McMurray.**—*Public School Grounds*—Cairn to commemorate the events connected with the ancient Methye portage trade route, discovered by Peter Pond in 1778 and used continuously for more than a century by fur traders and explorers.

**Frog Lake.**—*Cemetery*—Cairn to the memory of those massacred there April 2, 1885, by rebel Indians under Big Bear during the North West Rebellion.

**Jasper National Park.**—*Near Bridge over the Athabaska River*—Cairn to mark the site of Henry House, a post founded by the North West Company in 1811, which later became an important point in the transportation system. *Mouth of the Rocky River*—Cairn to mark the site of Jasper House, a post built by the North West Company between 1827 and 1829. *Old Fort Point, Eastern End of the Bridge over the Athabaska River*—Cairn to commemorate the public services of David Thompson.

**L'Amoureux.**—*Main Road*—Cairn to mark the site of Fort Augustus, established by the North West Company, 1794, and Fort Edmonton, established by the Hudson's Bay Company, 1795.

**Lethbridge.**—*Galt Park*—Cairn to mark the site of the first coal mine in Alberta, which was opened on the west bank of the Oldman river by Nicholas Sheran, 1872.

**Macleod.**—*Intersection of 2nd Ave. and 23rd St.*—Cairn to commemorate the arrival of the North West Mounted Police, October, 1874, and their establishment of this post, which brought law and order into a wild and lawless country.

**Peace River.**—*Lot 9, Shaftesbury Settlement*—Cairn to mark the site of Fort Fork, in which Sir Alexander Mackenzie wintered in 1792-93, and from which he set out on his quest for the Western Sea.

**Rocky Mountain House.**—*Main Highway*—Cairn to mark the site of the post built by the North West Company, 1799, which was occupied on different occasions by David Thompson.

**Wetaskiwin.**—*Edward St.*—Cut-stone monument to commemorate the public services of Rev. Father Lacombe and Rev. John McDougall whose influence with the Indians, during the troublous days of 1885, was a powerful factor in the preservation of peace in Alberta.

## BRITISH COLUMBIA.

**Alexandria.**—*Cariboo Road*—Cairn to mark the site of Fort Alexandria, 1821, the last post established by the North West Company west of the Rocky mountains, and Sir Alexander Mackenzie's farthest point in the descent of the Fraser river, 1793.

**Bamfield.**—*Cable Building*—Tablet to commemorate the events connected with the laying of the British state-owned cable, the movement for which was initiated by Sir Sandford Fleming in 1879.

**Barkerville.**—*Main Road*—Cairn to commemorate the events connected with the centre of old Cariboo. The Cariboo gold fields, discovered in 1861, have been an important source of gold production.

**Bella Coola.**—*North Shore of Dean Channel*—Monument to mark the western terminus of the first journey across the continent of North America; it was reached by Alexander Mackenzie of the North West Company, with nine companions, on July 21, 1793.

**Fort Steele.**—*Fort Steele-Fernie Highway*—Cairn to mark the site of the first North West Mounted Police fort in British Columbia, 1887.

**Friendly Cove.**—*Entrance to Nootka Sound*—Cairn to commemorate its discovery in March, 1778, by Captain James Cook. Spain took possession in 1789 and maintained a settlement until 1795.

**Hope.**—*Intersection of Wallace and Water Sts.*—Cairn to mark the site of Fort Hope, built by the Hudson's Bay Company, 1848.

## BRITISH COLUMBIA—concluded.

**Kamloops.**—*Riverside Park*—Boulder to mark the site of Fort Kamloops and in memory of the pioneer fur traders, who, by establishing themselves in that locality, aided in securing the country for Great Britain.

**Kootenay National Park.**—*Banff-Windermere Highway*—Cairn in recognition of the public services of Sir George Simpson, Governor of the Hudson's Bay Company's territories, 1821-60.

**Langley.**—*Mavis St.*—Cairn to mark the site of Fort Langley, the first trading post on the Pacific coast, built by the Hudson's Bay Company in 1827. The only remaining building has been acquired for preservation.

**Nanaimo.**—*Dallas Square*—Monument to mark the site of the first commercial coal mine in British Columbia, discovered in 1852.

**New Westminster.**—*Penitentiary Grounds*—Cairn to commemorate the early historic events associated with that city, which was the first capital of the Colony of British Columbia, 1859-68.

**Prince George.**—*Near Railway Station*—Cairn to commemorate the services of Sir Alexander Mackenzie, the first white man to cross the Rocky mountains and reach the Pacific coast.

**Quesnel.**—*Park on Front St.*—Cairn to commemorate the events connected with Collins' Overland Telegraph, and the plan to connect America and Asia by telegraph and cable across Bering strait, 1865-66.

**Vancouver.**—*Stanley Park*—Cairn to mark the place where the S.S. *Beaver*, the pioneer steamship on the Pacific ocean, was wrecked, July 26, 1888. *Marine Drive*—Monument to mark the place where Simon Fraser of the North West Company ended his dangerous exploration of the Fraser river from Fort George in July, 1808. *Near University of British Columbia*—Cut-stone monument to commemorate the first friendly meeting of the British and Spaniards in Pacific waters, June 22, 1792. *Marpole Park*—Cairn to mark the site of one of the largest prehistoric middens on the Pacific coast of Canada. Bone and stone implements and utensils found in it have thrown much light upon the culture status of prehistoric man in that vicinity.

**Victoria.**—*Gonzales Hill, Summit of a Rocky Point Adjacent to Denison Road*—Cairn to commemorate the exploration of the straits of San Juan de Fuca by the fur-trading companies and the British and Spanish Navies, 1787-92.

**Yale.**—*Near C.P.R. Station*—Boulder to mark the site of Fort Yale, one terminal of the Cariboo Wagon Road built in 1862-65, which extended northward four hundred miles to the gold mines of Cariboo.

## YUKON TERRITORY.

**Dawson City.**—*Administration Building*—Tablet to the memory of the prospectors and miners who crossed the Chilkat and Chilkoot passes and paved the way for the discovery, in 1896, of the rich gold fields of the Yukon.

## CHAPTER III.—CONSTITUTION AND GOVERNMENT.

The Government of the Dominion of Canada was established under the provisions of the British North America Act of 1867. This Statute of the Imperial Parliament, as from time to time amended, forms the written basis of the Constitution of Canada. Subsequent sections of this chapter describe in some detail the institutions and processes by which Canada is governed.

The several stages in the development of its status as a Dominion have been authoritatively described in the reports of successive Imperial Conferences including that held in London in 1926, which defined the group of self-governing communities consisting of Great Britain and the Dominions as "autonomous communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or foreign affairs, though united by a common allegiance to the Crown and freely associated as members of the British Commonwealth of Nations". That Conference also recognized that as a consequence of this equality of status, the Governor General of a Dominion "is the representative of the Crown, holding in all essential respects the same position in relation to the administration of public affairs in the Dominion as is held by His Majesty the King in Great Britain", and that "it is the right of the Government of each Dominion to advise the Crown in all matters relating to its own affairs". Simultaneously, with this change in the constitutional relationship between the several parts of the British Commonwealth of Nations, there developed as a complementary aspect of nationhood the assumption by the several Dominions of further responsibilities and rights of sovereign States in their relations with other members of the community of nations. Membership in the League of Nations, the exercise of treaty-making powers and the establishment of separate diplomatic representation in a number of foreign countries have characterized this phase in the growth of the Dominion of Canada. More explicit recognition of the implications of the principles of equality of status was accorded in the Statute of Westminster of 1931 which provided for the removal of the remaining limitations on the legislative autonomy of the Dominions.

### PART I.—CONSTITUTION AND GENERAL GOVERNMENT.

Under the above heading a brief historical and descriptive account of the evolution of the general government of Canada was given on pp. 89-100 of the Canada Year Book, 1922-23.

### PART II.—PROVINCIAL AND LOCAL GOVERNMENT.

Under the heading "Provincial and Local Government in Canada", a brief account of the government of each of the provinces of Canada and of its municipal institutions and judicial organization was published on pp. 101-115 of the 1922-23 edition of the Year Book.



## Section 1.—The Government of Canada's Arctic Territory.\*

The Arctic islands, which constitute part of Canadian territory, are situated to the north of her mainland. They comprise an area in excess of 500,000 square miles. They are a vast number of islands, the principal ones being Baffin, Victoria, Ellesmere, Banks, Devon, Southampton, Somerset, Prince of Wales, Melville, and Axel Heiberg.

These Arctic islands, known as the "Canadian Archipelago", were held previous to 1880 by Great Britain through right of discovery. In 1880 were transferred to Canada. From this date they have been part of Canadian territory. The Dominion first legislated with regard to them in October, 1895. This legislation divided what was then known as the Northwest Territories into four established districts. The District of Franklin included all the then known islands lying to the north of Canada. (Canadian Order in Council, Oct. 2, 1895.)

In 1904 a map was published by the Department of Interior, Canada, setting out practically all the activities of the early explorers and showing the boundary of Canada on the west as the 141st meridian of west longitude extending northerly to the Pole and the boundary on the east as the 60th meridian of west longitude, extending from just east of Ellesmere island northerly to the Pole. This was the first map that clearly indicated the extent of Canadian jurisdiction. Subsequent maps issued by the Dominion Government likewise show these regions as being part of Canada.

Subsequent to the transfer of the northern islands to Canada by the United Kingdom, the Canadian Government manifested its interest by sponsoring and sending into this northern section a number of expeditions for the purpose of further exploration and scientific investigation—1884, S.S. *Neptune*; 1885 and 1886, S.S. *Alert*; 1897, S.S. *Diana*; 1903-05, S.S. *Neptune*; 1906-07, C.G.S. *Arctic*; 1908-09, C.G.S. *Arctic*; 1910, C.G.S. *Arctic*. (See the official publications, *Southern Baffin Island*, 1930, and *Canada's Eastern Arctic*, 1934.)

The above expeditions entered the northern archipelago from the east and carried on scientific investigations and exploration on practically all of the known islands. From 1913 to 1918, extensive studies were made in the Western Arctic. (Report of the Canadian Arctic Expedition, 1913-18.)

The information obtained by these expeditions clearly indicated to the Canadian Government that it was necessary for Canada to establish police supervision and postal conveniences. As a result of this decision police posts, customs offices and postal stations were established at Pond Inlet, Baffin island; Craig Harbour, Ellesmere island; Pangnirtung, Baffin island; Dundas Harbour, Devon island; Bache Peninsula, Ellesmere island; Lake Harbour, Baffin island; Cambridge Bay, Victoria island, and a radio direction station on Resolution island. (*Canada's Eastern Arctic*, 1934.)

In 1922 the Canadian Government inaugurated a yearly patrol to Canada's northern islands. Each year this patrol has carried Government officials including administrative officers, doctors, scientists, and officers and constables of the Royal Canadian Mounted Police to maintain Canadian authority in these regions. Cana-

\* Prepared under the direction of R. A. Gibson, Esq., Deputy Commissioner, Northwest Territories, Ottawa.

dian laws and regulations have been progressively introduced into this far-distant north until at the present time Canada has established and equipped administrative offices including Royal Canadian Mounted Police detachments, customs offices, postal stations, hospitals, scientific posts, wireless stations, and schools for the education and convenience of the inhabitants.

The Canadian Government has passed legislation making the laws applicable to the territorial districts on the mainland applicable also to the Arctic islands constituting the District of Franklin, and, through the medium of her police posts and yearly patrols, has assumed the obligation of seeing that the said laws and regulations are complied with by those living or entering into the northern regions.

Game preserves have been established for the protection of the wild life in order that an adequate supply may at all times be readily available to the natives. Laws have been passed requiring that any foreign national entering the Canadian archipelago must first obtain the permission of the Canadian Government authorities at Ottawa. It is also compulsory before such a permit is issued that the proposed entrants undertake to abide by the laws of Canada in force in these regions.

From year to year, as new conditions are brought to light, further steps are thus being taken by the Canadian Government to develop administrative services in this northern territory. The aeroplane is at present playing an important part in this respect, and, as necessity warrants, this method of transportation will be increased. The Royal Canadian Mounted Police are being equipped with a number of aeroplanes for use in the northern districts and the year 1938 finds administrative, medical, and police officers carried to points within the archipelago which heretofore have not been regularly visited.

## PART III.—LEGISLATIVE AND EXECUTIVE AUTHORITIES.

### Section 1.—Dominion Parliament and Ministry.

The Dominion Parliament is composed of the King, represented by the Governor General, the Senate, and the House of Commons. The Governor General is appointed by the King on the advice of the Government of Canada. Members of the Senate are appointed for life by the Governor General in Council and members of the House of Commons are elected by the people. As a result of the working out of the democratic principle, the part played by the King's Representative and the Upper Chamber of Parliament in the country's legislation has been, in Canada as in the United Kingdom, a steadily decreasing one, the chief responsibilities involved in legislation being assumed by the House of Commons.

In Subsections 3 and 4, pp. 98 to 108, a brief résumé of the history of parliamentary representation will be found. Attention may be drawn to the growth in the number of members of both the Senate and the House of Commons since Confederation and to the greatly increased unit of representation in the Lower House.

#### Subsection 1.—The Governor General of Canada.

The Governor General is appointed by the King as his representative in Canada, usually for a term of five years, with a salary fixed at £10,000 sterling per annum, which is a charge against the consolidated revenue of the country. The Governor General is bound by the terms of his commission and can exercise only such authority as is expressly entrusted to him. He acts under the advice of his Ministry, which

is responsible to Parliament, and, as the acting head of the Executive, summons, prorogues, and dissolves Parliament and assents to or reserves bills. In the discharge of these and other executive duties, he acts entirely by and with the advice of his Ministry (the Governor General in Council). The royal prerogative of mercy in capital cases, formerly exercised on the Governor General's own judgment and responsibility, is now exercised pursuant to the advice of the Ministry. The practice whereby the Governor General served as the medium of communication between the Canadian and the British Governments has been given up; since July 1, 1927, direct communication between His Majesty's Government in Canada and His Majesty's Government in Great Britain has been instituted.

A list of the Governors General from the time of Confederation, with the dates of their appointment and assumption of office, is given in Table 1.

1.—Governors General of Canada, 1867-1938.

| Name.   | Date of Appointment. | Date of Assumption of Office. |
|---|----------------------|-------------------------------|
| Viscount Monck, G.C.M.G.....                                  | June 1, 1867         | July 1, 1867                  |
| Lord Lisgar, G.C.M.G.....                                     | Dec. 29, 1868        | Feb. 2, 1869                  |
| The Earl of Dufferin, K.P., K.C.B., G.C.M.G.....              | May 22, 1872         | June 25, 1872                 |
| The Marquis of Lorne, K.T., G.C.M.G.....                      | Oct. 5, 1878         | Nov. 25, 1878                 |
| The Marquis of Lansdowne, G.C.M.G.....                        | Aug. 18, 1883        | Oct. 23, 1883                 |
| Lord Stanley of Preston, G.C.B.....                           | May 1, 1888          | June 11, 1888                 |
| The Earl of Aberdeen, K.T., G.C.M.G.....                      | May 22, 1893         | Sept. 18, 1893                |
| The Earl of Minto, G.C.M.G.....                               | July 30, 1898        | Nov. 12, 1898                 |
| Earl Grey, G.C.M.G.....                                       | Sept. 26, 1904       | Dec. 10, 1904                 |
| Field Marshall H.R.H. the Duke of Connaught, K.G.....         | Mar. 21, 1911        | Oct. 13, 1911                 |
| The Duke of Devonshire, K.G., G.C.M.G., G.C.V.O.....          | Aug. 19, 1916        | Nov. 11, 1916                 |
| General the Lord Byng of Vimy, G.C.B., G.C.M.G., M.V.O.....   | Aug. 2, 1921         | Aug. 11, 1921                 |
| Viscount Willingdon of Rattou, G.C.S.I., G.C.I.E., G.B.E..... | Aug. 5, 1926         | Oct. 2, 1926                  |
| The Earl of Bessborough, G.C.M.G.....                         | Feb. 9, 1931         | April 4, 1931                 |
| Lord Tweedsmuir of Elsfield, G.C.M.G., C.H.....               | Aug. 10, 1935        | Nov. 2, 1935                  |

### Subsection 2.—The Ministry.

A system of government based upon the British, by which a Cabinet or Ministry (composed of members of the House of Commons or the Senate), responsible to Parliament, holds office while it enjoys the confidence of the people's representatives, is found in Canada. The Cabinet is actually a committee of the King's Privy Council for Canada. Without enlarging upon the features of the system, it may be sufficient to note that the Cabinet is responsible to the House of Commons, and, following established precedent, resigns office when it becomes evident that it no longer holds the confidence of the people's representatives. Members of the Cabinet are chosen by the Prime Minister; each generally assumes charge of one of the various Departments of Government, although one Minister may hold more than one portfolio at the same time, while other Ministers may be without portfolio.

The Prime Ministers since Confederation and the dates of their tenures of office, together with the members of the Sixteenth Ministry, are given in Table 2. The complete list of the members of the King's Privy Council for Canada, as at Mar. 1, 1938, is added as Table 3.

## 2.—Ministries since Confederation and Members of the Sixteenth Ministry.

NOTE.—A complete list of the members of Dominion Ministries from Confederation to 1913 appeared in the Year Book of 1913, pp. 422-429. A list of the members of Dominion Ministries from 1911 to 1921 appeared in the Year Book of 1920, pp. 651-653. A list of the members of the Twelfth and Thirteenth Ministries appeared on pp. 76-77 of the 1927-28 Year Book. Members of the Fourteenth Ministry are listed at p. 69 of the 1930 Year Book and members of the Fifteenth Ministry on p. 67 of the 1934-35 Year Book.

1. Rt. Hon. Sir John A. Macdonald, Prime Minister. From July 1, 1867, to Nov. 6, 1873.
2. Hon. Alexander Mackenzie, Prime Minister. From Nov. 7, 1873, to Oct. 16, 1878.
3. Rt. Hon. Sir John A. Macdonald, Prime Minister. From Oct. 17, 1878, to June 6, 1891.
4. Hon. Sir John J. C. Abbott, Prime Minister. From June 16, 1891, to Dec. 5, 1892.
5. Hon. Sir John S. D. Thompson, Prime Minister. From Dec. 5, 1892, to Dec. 12, 1894.
6. Hon. Sir Mackenzie Bowell, Prime Minister. From Dec. 21, 1894, to April 27, 1896.
7. Hon. Sir Charles Tupper, Prime Minister. From May 1, 1896, to July 8, 1896.
8. Rt. Hon. Sir Wilfrid Laurier, Prime Minister. From July 11, 1896, to Oct. 6, 1911.
9. Rt. Hon. Sir Robert L. Borden, Prime Minister. (Conservative Administration.) From Oct. 10, 1911, to Oct. 12, 1917.
10. Rt. Hon. Sir Robert L. Borden, Prime Minister. (Unionist Administration.) From Oct. 12, 1917, to July 10, 1920.
11. Rt. Hon. Arthur Meighen, Prime Minister. (Unionist—"National Liberal and Conservative Party".) From July 10, 1920, to Dec. 29, 1921.
12. Rt. Hon. William Lyon Mackenzie King, Prime Minister. From Dec. 29, 1921, to June 23, 1926.
13. Rt. Hon. Arthur Meighen, Prime Minister. From June 29, 1926, to Sept. 25, 1926.
14. Rt. Hon. William Lyon Mackenzie King, Prime Minister. From Sept. 25, 1926, to Aug. 5, 1930.
15. Rt. Hon. Richard Bedford Bennett, Prime Minister. From Aug. 7, 1930, to Oct. 23, 1935.
16. Rt. Hon. William Lyon Mackenzie King, Prime Minister. From Oct. 23, 1935.

## SIXTEENTH DOMINION MINISTRY.

(According to precedence of the Ministers as at the formation of the Cabinet.)

| Office.  | Occupant.                                   | Date of Appointment. |
|--|---|----------------------|
| Prime Minister, President of the Privy Council, Secretary of State for External Affairs..... | Right Hon. W. L. Mackenzie King, C.M.G..... | Oct. 23, 1935        |
| Member of the Administration and Minister without portfolio.....                             | Hon. Raoul Dandurand, K.C....               | Oct. 23, 1935        |
| Minister of Mines and Resources <sup>1</sup> .....   | Hon. Thomas Alexander Crerar, K.C.....      | Oct. 23, 1935        |
| Minister of Justice and Attorney General of Canada.....                                      | Right Hon. Ernest Lapointe, K.C.....        | Oct. 23, 1935        |
| Minister of Public Works.....  | Hon. Pierre Joseph Arthur Cardin, K.C.....  | Oct. 23, 1935        |
| Minister of Finance.....   | Hon. Charles Avery Dunning... ..            | Oct. 23, 1935        |
| Postmaster General.....  | Hon. John Campbell Elliott, K.C.....        | Oct. 23, 1935        |
| Minister of Trade and Commerce.....  | Hon. William Daum Euler.....                | Oct. 23, 1935        |
| Secretary of State of Canada.....  | Hon. Fernand Rinfret.....                   | Oct. 23, 1935        |
| Minister of National Defence.....  | Hon. Ian Alistair Mackenzie... ..           | Oct. 23, 1935        |
| Minister of Pensions and National Health.....  | Hon. Charles Gavan Power, M.C., K.C.....    | Oct. 23, 1935        |
| Minister of National Revenue.....  | Hon. James Lorimer Hsley, K.C.....          | Oct. 23, 1935        |
| Minister of Fisheries.....   | Hon. Joseph Enoil Michaud, K.C.....         | Oct. 23, 1935        |
| Minister of Labour.....  | Hon. Norman McLeod Rogers... ..             | Oct. 23, 1935        |
| Minister of Transport <sup>2</sup> .....   | Hon. Clarence Decatur Howe... ..            | Oct. 23, 1935        |
| Minister of Agriculture.....   | Hon. James Garfield Gardiner... ..          | Oct. 23, 1935        |

<sup>1</sup> The Departments of Mines, Interior, Immigration and Colonization, and Indian Affairs were organized into the new Department of Mines and Resources on Dec. 1, 1936.

<sup>2</sup> The Department of Railways and Canals and the Department of Marine, together with the Civil Aviation Branch of the Department of National Defence were organized into the new Department of Transport on Nov. 2, 1936.

### 3.—Members of the King's Privy Council for the Dominion of Canada, According to Seniority Therein,<sup>1</sup> as at Mar. 1, 1935.

Note.—In this list the prefix Rt. Hon. indicates membership in the British Privy Council. Besides those mentioned in this list, the Rt. Hon. Sir Lyman P. Duff, G.C.M.G., Chief Justice of the Supreme Court, is a Canadian member of the British Privy Council.

| Name.   | Date When Sworn In. | Name.   | Date When Sworn In. |
|---|---------------------|---|---------------------|
| The Rt. Hon. Sir William Mulock.                  | July 13, 1896       | The Hon. Charles Vincent Massey <sup>7</sup>    | Sept. 16, 1925      |
| The Rt. Hon. Sir Charles Fitzpatrick <sup>2</sup> | Feb. 11, 1902       | The Hon. Walter Edward Foster.                  | Sept. 26, 1925      |
| The Hon. Sir A. B. Aylesworth.                    | Oct. 16, 1905       | The Hon. Philippe Roy <sup>2</sup>              | Feb. 9, 1926        |
| The Rt. Hon. George P. Graham.                    | Aug. 30, 1907       | The Hon. Charles A. Dunning <sup>2</sup>        | Mar. 1, 1926        |
| The Hon. R. Dandurand <sup>2</sup>                | Jan. 20, 1909       | The Hon. John C. Elliott <sup>2</sup>           | Mar. 8, 1926        |
| The Rt. Hon. W. L. Mackenzie King <sup>2</sup>    | June 2, 1909        | The Hon. George Burpee Jones.                   | July 13, 1926       |
| The Rt. Hon. Sir Thomas White.                    | Oct. 10, 1911       | The Hon. Donald Sutherland.                     | July 13, 1926       |
| The Hon. Wilfrid Bruno Nantel.                    | Oct. 10, 1911       | The Hon. Raymond Ducharme                       | July 13, 1926       |
| The Hon. Martin Burrell.                          | Oct. 16, 1911       | Morand.   | July 13, 1926       |
| The Hon. Pierre Edouard Blondin.                  | Oct. 29, 1914       | The Hon. John Alexander Macdonald.              | July 13, 1926       |
| The Rt. Hon. Arthur Meakins.                      | Oct. 2, 1915        | The Hon. Eugène Paquet.                         | Aug. 23, 1926       |
| The Hon. Esioff Léon Patenaude.                   | Oct. 6, 1915        | The Hon. Guillaume André Fautaux.               | Aug. 23, 1926       |
| The Rt. Hon. William Morris Hughes.               | Feb. 18, 1916       | The Hon. Lucien Cannon.                         | Sept. 25, 1926      |
| The Hon. Albert Sévigny.                          | Jan. 8, 1917        | The Hon. William D. Euler <sup>2</sup>          | Sept. 25, 1926      |
| The Hon. Charles Colquhoun                        | Oct. 3, 1917        | The Hon. Fernand Rinfret <sup>2</sup>           | Sept. 25, 1926      |
| Ballantyne.                                       | Oct. 12, 1917       | The Hon. Peter Heenan.                          | Sept. 25, 1926      |
| The Hon. James Alexander Calder.                  | Oct. 12, 1917       | The Hon. James Layton Ralston.                  | Oct. 8, 1926        |
| The Hon. Newton Wesley Rowell.                    | Oct. 12, 1917       | The Rt. Hon. Stanley Baldwin.                   | Aug. 2, 1927        |
| The Hon. Sydney Chilton Newburn.                  | Oct. 12, 1917       | The Hon. Thomas Ahearn.                         | Jan. 16, 1930       |
| The Hon. Thomas Alexander Cresser <sup>2</sup>    | Oct. 12, 1917       | The Hon. William Frederick Kay.                 | June 17, 1930       |
| The Hon. Alexander K. Maclean.                    | Oct. 23, 1917       | The Hon. Cyrus Macmillan.                       | June 17, 1930       |
| The Hon. Hugh Guthrie.                            | July 5, 1919        | The Hon. Ian Alistair MacKenzie <sup>2</sup>    | June 27, 1930       |
| The Hon. Sir Henry Lumley Drayton.                | Aug. 2, 1919        | The Hon. Arthur C. Hardy.                       | July 31, 1930       |
| The Hon. Fleming Blanchard                        | July 13, 1920       | The Hon. Arthur Sauvé.                          | Aug. 7, 1930        |
| McCurdy.  | July 13, 1920       | The Hon. Murray MacLaren.                       | Aug. 7, 1930        |
| The Hon. Rupert W. Wigmore.                       | Feb. 22, 1921       | The Hon. Hugh Alexander Stewart.                | Aug. 7, 1930        |
| The Hon. Edgar N. Rhodes.                         | Sept. 21, 1921      | The Hon. Charles Haigitt Cahan.                 | Aug. 7, 1930        |
| The Hon. John Babbington                          | Sept. 21, 1921      | The Hon. Donald Matheson                        | Aug. 7, 1930        |
| Macnulty Baxter.                                  | Sept. 21, 1921      | Sutherland.                                     | Aug. 7, 1930        |
| The Hon. Henry Herbert Stevens.                   | Sept. 22, 1921      | The Hon. Alfred Duranseau.                      | Aug. 7, 1930        |
| The Hon. Robert James Manion.                     | Sept. 26, 1921      | The Hon. Thomas Gerow Murphy                    | Aug. 7, 1930        |
| The Hon. James Robert Wilson.                     | Oct. 4, 1921        | The Hon. Maurice Dupré.                         | Aug. 7, 1930        |
| The Rt. Hon. Richard Bedford Bennett <sup>2</sup> | Dec. 29, 1921       | The Hon. Wesley Ashton Gordon.                  | Aug. 7, 1930        |
| The Rt. Hon. Ernest Lapointe <sup>2</sup>         | Dec. 29, 1921       | The Hon. Robert Weir.                           | Aug. 8, 1930        |
| The Hon. Arthur Bliss Copp.                       | Dec. 29, 1921       | The Hon. G. Howard Ferguson.                    | Jan. 14, 1931       |
| The Hon. Charles Stewart.                         | Dec. 29, 1921       | The Hon. W. D. Herridge.                        | June 17, 1931       |
| The Hon. William Richard Motherwell.              | Dec. 29, 1921       | The Hon. Robert Charles Matthews.               | Dec. 6, 1933        |
| The Hon. James Murdoch.                           | Dec. 29, 1921       | The Hon. Richard Burpee Hanson                  | Nov. 17, 1934       |
| The Hon. John Ewan Sinclair.                      | Dec. 30, 1921       | The Hon. Groote Stirling.                       | Nov. 17, 1934       |
| The Hon. James H. King.                           | Feb. 3, 1922        | The Hon. George Reginald Murray                 | Aug. 14, 1935       |
| The Hon. Edward Mortimer Macdonald.               | April 12, 1923      | The Hon. William Gordon Ernst                   | Aug. 14, 1935       |
| The Hon. Edward James McMurray                    | Nov. 14, 1923       | The Hon. James Earl Lawson.                     | Aug. 14, 1935       |
| The Hon. Pierre Joseph Arthur Cardin <sup>2</sup> | Jan. 30, 1924       | The Hon. Samuel Gobeil.                         | Aug. 14, 1935       |
| The Hon. George Newcombe Gordon.                  | Sept. 7, 1925       | The Hon. Lucien Henri Gendron.                  | Aug. 30, 1935       |
| The Hon. Sir Herbert Marle <sup>2</sup> .         | Sept. 9, 1925       | The Hon. William Earl Rowe.                     | Aug. 30, 1935       |
|   |                     | The Hon. Onésime Gagnon.                        | Aug. 30, 1935       |
|   |                     | The Hon. Charles Gavan Power <sup>2</sup> .     | Oct. 23, 1935       |
|   |                     | The Hon. James Lorimer Uley <sup>2</sup> .      | Oct. 23, 1935       |
|   |                     | The Hon. Joseph Enoll Michaud <sup>2</sup> .    | Oct. 23, 1935       |
|   |                     | The Hon. Norman McLeod Rogers.                  | Oct. 23, 1935       |
|   |                     | The Hon. Clarence Deaneur Howe <sup>2</sup> .   | Oct. 23, 1935       |
|   |                     | The Hon. James Garfield Gardiner <sup>2</sup> . | Nov. 4, 1935        |

<sup>1</sup> As in the case of Privy Counsellors of the United Kingdom, members of His Majesty's Privy Council for Canada take rank *inter se* according to the dates of their being sworn in.

<sup>2</sup> Ranks as retired Chief Justice of Canada. <sup>3</sup> Ranks as a member of the Cabinet.

<sup>4</sup> Ranks as the Prime Minister of Canada. <sup>5</sup> Ranks as the Leader of the Opposition.

<sup>6</sup> Canadian Ministers abroad. <sup>7</sup> High Commissioner in Great Britain.

In Table 4 are given the dates of the opening and prorogation of the sessions of the various Dominion Parliaments from 1867 to 1938.

4.—Duration and Sessions of Dominion Parliaments, 1867-1938.

| Order of Parliament. | Session. | Date of Opening. | Date of Prorogation. | Days of Session.  | Date of Election, Write Returnable, Dissolution and Length of Parliament. <sup>1</sup>     |
|----------------------|----------|------------------|----------------------|-------------------|--|
| 1st Parliament.....  | 1st      | Nov. 1, 1867     | May 22, 1868         | 18 <sup>2</sup>   | Aug. Sept., 1867. <sup>3</sup>   |
|                      | 2nd      | April 15, 1869   | June 22, 1869        | 69                | Sept. 24, 1869. <sup>4</sup>   |
|                      | 3rd      | Feb. 15, 1870    | May 12, 1870         | 87                | July 8, 1872. <sup>5</sup>   |
|                      | 4th      | Feb. 15, 1871    | April 14, 1871       | 59                | 4 y., 9 m., 15 d. <sup>6</sup>   |
|                      | 5th      | April 11, 1872   | June 14, 1872        | 65                |  |
| 2nd Parliament.....  | 1st      | Mar. 5, 1873     | Aug. 13, 1873        | 31 <sup>7</sup>   | July, Aug., Sept., 1873. <sup>8</sup>  |
|                      | 2nd      | Oct. 23, 1873    | Nov. 7, 1873         | 16                | Sept. 3, 1872. <sup>4</sup><br>Jan. 2, 1874. <sup>5</sup><br>1 y., 4 m., 0 d. <sup>6</sup> |
| 3rd Parliament.....  | 1st      | Mar. 26, 1874    | May 26, 1874         | 62                | Jan. 22, 1874. <sup>5</sup>  |
|                      | 2nd      | Feb. 4, 1875     | April 8, 1875        | 64                | Feb. 21, 1874. <sup>4</sup>  |
|                      | 3rd      | Feb. 10, 1876    | April 12, 1876       | 63                | Aug. 17, 1878. <sup>5</sup>  |
|                      | 4th      | Feb. 9, 1877     | April 23, 1877       | 80                | 4 y., 5 m., 25 d. <sup>6</sup>   |
|                      | 5th      | Feb. 7, 1878     | May 10, 1878         | 93                |  |
| 4th Parliament.....  | 1st      | Feb. 13, 1879    | May 15, 1879         | 92                | Sept. 17, 1878. <sup>5</sup>   |
|                      | 2nd      | Feb. 12, 1880    | May 7, 1880          | 86                | Nov. 21, 1878. <sup>4</sup>  |
|                      | 3rd      | Dec. 9, 1880     | Mar. 21, 1881        | 103               | May 15, 1882. <sup>5</sup>   |
|                      | 4th      | Feb. 9, 1882     | May 17, 1882         | 98                | 3 y., 5 m., 28 d. <sup>6</sup>   |
| 5th Parliament.....  | 1st      | Feb. 3, 1883     | May 25, 1883         | 107               | June 20, 1883. <sup>5</sup>  |
|                      | 2nd      | Jan. 17, 1884    | April 19, 1884       | 94                | Aug. 7, 1882. <sup>4</sup>   |
|                      | 3rd      | Jan. 20, 1885    | July 2, 1885         | 173               | Jan. 15, 1887. <sup>5</sup>  |
|                      | 4th      | Feb. 23, 1886    | June 2, 1886         | 88                | 4 y., 5 m., 10 d. <sup>6</sup>   |
| 6th Parliament.....  | 1st      | April 13, 1887   | June 23, 1887        | 72                | Feb. 22, 1887. <sup>5</sup>  |
|                      | 2nd      | Feb. 23, 1888    | May 23, 1888         | 90                | April 7, 1887. <sup>4</sup>  |
|                      | 3rd      | Jan. 31, 1889    | May 2, 1889          | 92                | Feb. 3, 1891. <sup>5</sup>   |
|                      | 4th      | Jan. 16, 1890    | May 16, 1890         | 121               | 3 y., 9 m., 27 d. <sup>6</sup>   |
| 7th Parliament.....  | 1st      | April 29, 1891   | Sept. 30, 1891       | 155               |  |
|                      | 2nd      | Feb. 25, 1892    | July 9, 1892         | 139               | Mar. 5, 1891. <sup>5</sup>   |
|                      | 3rd      | Jan. 1, 1893     | April 1, 1893        | 66                | April 25, 1891. <sup>4</sup>   |
|                      | 4th      | Mar. 15, 1894    | July 22, 1894        | 131               | April 24, 1896. <sup>5</sup>   |
|                      | 5th      | April 18, 1895   | July 22, 1895        | 96                | 5 y., 0 m., 0 d. <sup>6</sup>  |
|                      | 6th      | Jan. 2, 1896     | April 23, 1896       | 111               |  |
| 8th Parliament.....  | 1st      | Aug. 19, 1896    | Oct. 5, 1896         | 48                | June 23, 1896. <sup>5</sup>  |
|                      | 2nd      | Mar. 25, 1897    | June 29, 1897        | 97                | July 13, 1896. <sup>4</sup>  |
|                      | 3rd      | Feb. 3, 1898     | June 13, 1898        | 131               | Oct. 9, 1900. <sup>5</sup>   |
|                      | 4th      | Mar. 19, 1899    | Aug. 11, 1899        | 149               | 4 y., 2 m., 26 d. <sup>6</sup>   |
|                      | 5th      | Feb. 1, 1900     | July 18, 1900        | 168               |  |
| 9th Parliament.....  | 1st      | Feb. 6, 1901     | May 23, 1901         | 107               | Nov. 7, 1900. <sup>5</sup>   |
|                      | 2nd      | Feb. 13, 1902    | May 15, 1902         | 90                | Dec. 5, 1900. <sup>4</sup>   |
|                      | 3rd      | Mar. 12, 1903    | Oct. 24, 1903        | 237               | Sept. 29, 1904. <sup>5</sup>   |
|                      | 4th      | Mar. 10, 1904    | Aug. 10, 1904        | 154               | 3 y., 9 m., 26 d. <sup>6</sup>   |
| 10th Parliament..... | 1st      | Jan. 11, 1905    | July 20, 1905        | 181               | Nov. 3, 1904. <sup>5</sup>   |
|                      | 2nd      | Mar. 8, 1906     | July 23, 1906        | 128               | Dec. 15, 1904. <sup>4</sup>  |
|                      | 3rd      | Nov. 22, 1906    | April 27, 1907       | 157               | Sept. 17, 1908. <sup>5</sup>   |
|                      | 4th      | Nov. 28, 1907    | July 20, 1908        | 236               | 3 y., 9 m., 4 d. <sup>6</sup>  |
| 11th Parliament..... | 1st      | Jan. 20, 1909    | May 19, 1909         | 120               | Oct. 28, 1908. <sup>5</sup>  |
|                      | 2nd      | Nov. 11, 1909    | May 4, 1910          | 175               | Dec. 3, 1908. <sup>4</sup>   |
|                      | 3rd      | Nov. 17, 1910    | July 29, 1911        | 196 <sup>8</sup>  | July 29, 1911. <sup>5</sup><br>2 y., 7 m., 28 d. <sup>6</sup>                              |
| 12th Parliament..... | 1st      | Nov. 15, 1911    | April 1, 1912        | 139               |  |
|                      | 2nd      | Nov. 21, 1912    | June 6, 1913         | 178 <sup>9</sup>  | Sept. 21, 1911. <sup>5</sup>   |
|                      | 3rd      | Jan. 15, 1914    | June 12, 1914        | 145               | Oct. 7, 1911. <sup>4</sup>   |
|                      | 4th      | Aug. 18, 1914    | Aug. 22, 1914        | 5                 | Oct. 6, 1917. <sup>5</sup>   |
|                      | 5th      | Feb. 4, 1915     | April 15, 1915       | 71                | Oct. 4, 1921. <sup>5</sup>   |
|                      | 6th      | Jan. 12, 1916    | May 18, 1916         | 127               | 6 y., 0 m., 0 d. <sup>6</sup>  |
|                      | 7th      | Jan. 18, 1917    | Sept. 20, 1917       | 207 <sup>10</sup> |  |
| 13th Parliament..... | 1st      | Mar. 18, 1918    | May 24, 1918         | 65                | Dec. 17, 1917. <sup>5</sup>  |
|                      | 2nd      | Feb. 20, 1919    | July 7, 1919         | 133               | Feb. 27, 1918. <sup>4</sup>  |
|                      | 3rd      | Sept. 1, 1919    | Nov. 10, 1919        | 71                | Oct. 4, 1921. <sup>5</sup>   |
|                      | 4th      | Feb. 26, 1920    | July 1, 1920         | 127               | 3 y., 7 m., 9 d. <sup>6</sup>  |
|                      | 5th      | Feb. 14, 1921    | June 4, 1921         | 111               |  |

<sup>1</sup> The ordinary legal limit of duration for each Parliament is five years. <sup>2</sup> Adjourned from Dec. 21, 1897, to Mar. 12, 1898, to allow the local legislatures to meet. <sup>3</sup> Period of general elections.

<sup>4</sup> Writs returnable. <sup>5</sup> Dissolution of Parliament. <sup>6</sup> Duration of Parliament in years, months, and days.

The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive. <sup>7</sup> Adjourned May 23 until Aug. 13. <sup>8</sup> Not including days (59) of adjournment from May 19 to July 18. <sup>9</sup> Not including days (25) of adjournment from Dec. 19, 1912, to Jan. 14, 1913. <sup>10</sup> Not including days (30) of adjournment from Feb. 7 to Mar. 19, 1917.

## 4.—Duration and Sessions of Dominion Parliaments, 1867-1938—concluded.

| Order of Parliament. | Session. | Date of Opening. | Date of Prorogation. | Days of Session. | Date of Election, Writs Returnable, Dissolution and Length of Parliament. <sup>1</sup> |
|----------------------|----------|------------------|----------------------|------------------|--|
| 14th Parliament..... | 1st      | Mar. 8, 1922     | June 28, 1922        | 113              | Dec. 6, 1921. <sup>2</sup>   |
|                      | 2nd      | Jan. 31, 1923    | June 30, 1923        | 151              | Jan. 14, 1922. <sup>3</sup>  |
|                      | 3rd      | Feb. 28, 1924    | July 19, 1924        | 143              | Sept. 5, 1925. <sup>4</sup>  |
|                      | 4th      | Feb. 5, 1925     | June 27, 1925        | 143              | 3 y., 7 m., 26 d. <sup>5</sup>   |
| 15th Parliament..... | 1st      | Jan. 7, 1926     | July 2, 1926         | 177 <sup>6</sup> | Oct. 29, 1925. <sup>2</sup>  |
|                      |          |                  |                      |                  | Dec. 7, 1925. <sup>3</sup>   |
| 16th Parliament..... | 1st      | Dec. 9, 1926     | April 14, 1927       | 73 <sup>7</sup>  | Sept. 14, 1926. <sup>2</sup>   |
|                      | 2nd      | Jan. 26, 1928    | June 11, 1928        | 138              | Dec. 7, 1925. <sup>3</sup>   |
|                      | 3rd      | Feb. 7, 1929     | June 14, 1929        | 128              | July 2, 1926. <sup>4</sup>   |
|                      | 4th      | Feb. 20, 1930    | May 30, 1930         | 100              | 6 m., 26 d. <sup>5</sup>   |
| 17th Parliament..... | 1st      | Sept. 8, 1930    | Sept. 22, 1930       | 15               | Sept. 14, 1926. <sup>2</sup>   |
|                      | 2nd      | Mar. 12, 1931    | Aug. 3, 1931         | 145              | Nov. 2, 1926. <sup>3</sup>   |
|                      | 3rd      | Feb. 4, 1932     | May 26, 1932         | 113              | Aug. 13, 1930. <sup>4</sup>  |
|                      | 4th      | Oct. 6, 1932     | May 27, 1933         | 169 <sup>8</sup> | Aug. 15, 1935. <sup>4</sup>  |
|                      | 5th      | Jan. 25, 1934    | July 3, 1934         | 160              | 4 y., 11 m., 29 d. <sup>5</sup>  |
|                      | 6th      | Jan. 17, 1935    | July 5, 1935         | 170              |  |
| 18th Parliament..... | 1st      | Feb. 6, 1936     | June 23, 1936        | 139              | Oct. 14, 1935. <sup>2</sup>  |
|                      | 2nd      | Jan. 14, 1937    | April 10, 1937       | 87 <sup>9</sup>  | Nov. 9, 1935. <sup>3</sup>   |
|                      | 3rd      | Jan. 27, 1938    |                      |                  |  |

<sup>1</sup> The ordinary legal limit of duration for each Parliament is five years.

<sup>2</sup> Writs returnable. <sup>3</sup> Dissolution of Parliament. <sup>4</sup> Period of general elections.

<sup>5</sup> Duration of Parliament in years, months, and days. The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive.

<sup>6</sup> Including days (13) of adjournment from Mar. 3 to Mar. 15. <sup>7</sup> Not including days (54) of adjournment from Dec. 15 to Feb. 8. <sup>8</sup> Not including days (55) of adjournment from Nov. 25 to Jan. 30. <sup>9</sup> Not available at the time of going to press.

## Subsection 3.—The Senate.

The British North America Act, 1867, provides in Sections 21 and 22 that "the Senate shall consist of seventy-two members, who shall be styled Senators." In relation to the constitution of the Senate, Canada shall be deemed to consist of three divisions—(1) Ontario; (2) Quebec; (3) The Maritime Provinces—Nova Scotia, and New Brunswick; which three divisions shall be equally represented in the Senate as follows: Ontario by twenty-four senators; Quebec by twenty-four senators; and the Maritime Provinces by twenty-four senators, twelve thereof representing New Brunswick and twelve thereof representing Nova Scotia. In the case of Quebec, each of the twenty-four senators representing the province shall be appointed for one of the electoral divisions of Lower Canada, specified in Schedule A to Chapter I of the Consolidated Statutes of Canada". Further, under Section 147 of the same Act, it is provided that "in the case of the admission to Confederation of Newfoundland or Prince Edward Island, . . . each shall be entitled to a representation in the Senate of four members. Prince Edward Island, when admitted, shall be deemed to be comprised in the third of the three divisions into which Canada is divided by this Act" and on its admission "the representation of Nova Scotia and New Brunswick shall, as vacancies occur, be reduced from twelve to ten members, respectively". In case of the admission of Newfoundland, the normal membership of the Senate of 72 members was to be increased to 76, while the maximum number of 78 (Sec. 28) was to be 82, Sec. 26 containing a provision for the appointment of three or six additional members in certain cases, to represent equally the three divisions of Canada.

\* A senator's sessional indemnity is \$4,000.

By 33 Vict., c. 3, an Act to establish and provide for the government of the province of Manitoba, passed in 1870, the newly formed province was given representation of two members in the Senate, provision being made at the same time for increases in representation to three and four on increases of population, according to the decennial census, to 50,000 and 75,000, respectively. In the following year, British Columbia, on being admitted to the Union by an Imperial Order in Council of May 16, 1871, was given representation by three senators. Two years later, when Prince Edward Island was admitted to Confederation by an Imperial Order in Council of June 26, 1873, it was granted representation in the Senate of four members under the terms of the British North America Act, as cited above. Thus, in 1873, the seven provinces—Ontario, Quebec, Nova Scotia, New Brunswick, Manitoba, British Columbia, and Prince Edward Island—were represented by a total of 77 members in the Senate, their individual representation at the time being 24, 24, 10, 10, 2, 3, and 4 members, respectively.

In 1882, following the Census of 1881 and an increase of population in Manitoba to 62,260 persons, the representation of this province was increased to three members under authority of the Manitoba Act, 1870. Later, by 50-51 Vict., c. 38, an Act of 1887, the representation of the Northwest Territories in the Senate was fixed at two members. A subsequent increase resulted from the growth of population in Manitoba to 152,506, as shown by the Census of 1891, the province being granted a fourth senator under the terms of the Manitoba Act of 1870. An Act passed in the session of 1903 (3 Edw. VII, c. 42) provided for an increase in the representation of the Northwest Territories from two to four members, bringing the total representation at this date to 83 members.

On the establishment of the provinces of Alberta and Saskatchewan out of the former Northwest Territories in 1905, under 4-5 Edw. VII, cc. 3 and 42, provision was made for their representation in the Senate by 4 members each, which might be increased by Parliament to 6 on the completion of the next decennial census. This change in representation brought the membership of the Upper Chamber to a total of 87.

In 1915, by an amendment to the British North America Act (5-6 Geo. V, c. 45), an important change was made with regard to the constitution of the Senate. The number of divisions provided for by Section 22 of the original Act was increased from three to four, the fourth comprising the four western provinces of Manitoba, Saskatchewan, Alberta, and British Columbia. Each of these provinces was to be represented by 6 members under the Act, the division being thus represented by 24 members and placed on an equality with the others with respect to membership. A corresponding change was made in the number of additional senators provided for by the original British North America Act by substituting increases of four or eight members for the three or six cited in Section 26 of the Act of 1867. Normal representation, therefore, is at present fixed at 96, which number may be increased if necessary to 100 or to a maximum of 104.

The entry of Newfoundland to the Union is still provided for by the above Act, Subsection 6 of Section 1 of which sets out its representation as six members instead of the four granted by the Act of 1867. If Newfoundland were admitted to the Dominion, the normal number of senators would be 102 with a maximum of 110.

In Table 5 the growth of membership in the Senate is shown by divisions and provinces from 1867 to 1915, since when no change has taken place. The names and addresses of the senators from each province are given, as at Mar. 15, 1938, in Table 6.



## 5.—Growth of Representation in the Senate, 1867-1938.

| Province.                   | 1867. | 1870. | 1871. | 1873. | 1882. | 1887. | 1892. | 1903. | 1905. | 1915-1938. |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| (1) Ontario.....            | 24    | 24    | 24    | 24    | 24    | 24    | 24    | 24    | 24    | 24         |
| (2) Quebec.....             | 24    | 24    | 24    | 24    | 24    | 24    | 24    | 24    | 24    | 24         |
| (3) Maritime Provinces..... | 24    | 24    | 24    | 24    | 24    | 24    | 24    | 24    | 24    | 24         |
| Nova Scotia.....            | 12    | 12    | 12    | 10    | 10    | 10    | 10    | 10    | 10    | 10         |
| New Brunswick.....          | 12    | 12    | 12    | 10    | 10    | 10    | 10    | 10    | 10    | 10         |
| Prince Edward Island.....   | -     | -     | -     | 4     | 4     | 4     | 4     | 4     | 4     | 4          |
| (4) Western Provinces.....  | -     | 2     | 5     | 5     | 6     | 8     | 9     | 11    | 15    | 24         |
| Manitoba.....               | -     | 2     | 2     | 2     | 3     | 3     | 4     | 4     | 4     | 6          |
| British Columbia.....       | -     | -     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 6          |
| Saskatchewan.....           | -     | -     | -     | -     | -     | 2     | 2     | 4     | 4     | 6          |
| Alberta.....                | -     | -     | -     | -     | -     | -     | -     | -     | -     | -          |
| Totals.....                 | 72    | 74    | 77    | 77    | 78    | 80    | 81    | 83    | 87    | 96         |

## 6.—Representation in the Senate of Canada, by Provinces, as at Mar. 15, 1938.

| Name of Senator.                              | Post Office Address. | Name of Senator.                           | Post Office Address.      |
|---|----------------------|--|---------------------------|
| <b>Prince Edward Island—</b><br>(4 senators). |                      | <b>Quebec—concluded.</b>                   |                           |
| Hughes, James J.....                          | Souris.              | Morad, L.....                              | Quebec.                   |
| MacArthur, Creelman.....                      | Summerside.          | Sauvé, Arthur, P.C.....                    | St. Eustache.             |
| Simclair, John B., P.C.....                   | Emerald.             | Faquet, Eugène, P.C.....                   | Bonnaventure.             |
| Macdonald, John A., P.C.....                  | Cardigan.            | Bourgeois, Charles.....                    | Three Rivers.             |
|   |                      | Huggesen, A. K.....                        | Montreal.                 |
| <b>Nova Scotia—</b> (10 senators).            |                      | <b>Ontario—</b> (24 senators).             |                           |
| McLennan, John S.....                         | Sydney.              | Gordon, George.....                        | North Bay.                |
| Tanner, C. E.....                             | Pictou.              | Smith, E. D.....                           | Winona.                   |
| Logan, H. J.....                              | Parsonsboro.         | Donnelly, J. J.....                        | Pinkerton.                |
| Dennis, W. H.....                             | Halifax.             | Lynch-Staunton, G.....                     | Hamilton.                 |
| MacDonald, J. A.....                          | St. Peters.          | White, G. V.....                           | Pembroke.                 |
| Rhodes, Edgar N., P.C.....                    | Amherst.             | Macdonell, A. H., C.M.G.....               | Toronto.                  |
| Cantley, Thomas.....                          | New Glasgow.         | Hardy, A. C., P.C.....                     | Brockville.               |
| Quinn, Felix P.....                           | Bedford.             | Aylesworth, Sir A. B., P.C.....            | Toronto.                  |
| Robicheau, John L. P.....                     | Maxwellton.          | Graham, Rt. Hon. George P., P.C.....       | Brockville.               |
| Duff, William.....                            | Lumenburg.           | McGuire, William H.....                    | Toronto.                  |
| <b>New Brunswick—</b> (10 senators)           |                      | Spence, James H.....                       | Toronto.                  |
| Bourque, T. J.....                            | Richibucto.          | Little, Edgar S.....                       | London.                   |
| McDonald, J. A.....                           | Shediac.             | Lacasse, Gustave.....                      | Tecumseh.                 |
| Black, Frank B.....                           | Sackville.           | Horsley, H. H.....                         | Cressy.                   |
| Turgeon, Onesiphore.....                      | Bathurst.            | Wilson, Cairine R.....                     | Ottawa.                   |
| Robinson, C. W.....                           | Moncton.             | Murdoch, J., P.C.....                      | Ottawa.                   |
| Copp, A. B., P.C.....                         | Sackville.           | McGheh, Rt. Hon. A., P.C.....              | Toronto.                  |
| Foster, W. E., P.C. (Speaker)                 | Saint John.          | Brigg, A. B.....                           | Ottawa.                   |
| Jones, George B., P.C.....                    | Apoahqui.            | Côté, L.....                               | Ottawa.                   |
| Léger, Antoine J.....                         | Moncton.             | Sutherland, Donald, P.C.....               | Ingersoll.                |
| Smith, Benjamin F.....                        | East Florenceville.  | Fallis, Iva C.....                         | Peterborough, R.R. No. 3. |
| <b>Quebec—</b> (24 senators—two vacancies).   |                      | O'Connor, Frank P.....                     | Toronto.                  |
| Dandurand, R., P.C.....                       | Montreal.            | Lambert, Norman P.....                     | Ottawa.                   |
| Casgrain, J. P. B.....                        | Montreal.            | Marshall, Duncan M.....                    | Toronto.                  |
| Wilson, J. M.....                             | Montreal.            | <b>Manitoba—</b> (6 senators—one vacancy). |                           |
| Pope, Rufus H.....                            | Cookshire.           | Sharpe, W. H.....                          | Manitou.                  |
| Beaubien, C. P.....                           | Montreal.            | McMeuns, L.....                            | Winnipeg.                 |
| L'Espérance, D. O.....                        | Quebec.              | Molloy, J. P.....                          | Morris.                   |
| Blondin, P. E., P.C.....                      | St. François du Lac. | Mullins, Henry A.....                      | Winnipeg.                 |
| Chapais, Sir Thomas.....                      | Quebec.              | Haig, John T.....                          | Winnipeg.                 |
| Webster, L. C.....                            | Montreal.            | <b>Saskatchewan—</b> (6 senators).         |                           |
| Raymond, Donat.....                           | Montreal.            | Laird, H. W.....                           | Regina.                   |
| Tobin, E. W.....                              | Bromptonville.       | Calder, J. A., P.C.....                    | Regina.                   |
| Parent, G.....                                | Quebec.              | Gillis, A.B.....                           | Whitewood.                |
| Prévost, J.-E.....                            | St. Jérôme.          | Marcotte, E.....                           | Ponteix.                  |
| Ballantyne, C. C.....                         | Montreal.            | Horne, R. B.....                           | Blaine Lake.              |
| Rainville, J. H.....                          | St. Lambert.         | Aseltine, W. M.....                        | Rosetown.                 |
| Brown, A. J.....                              | Montreal.            |  |                           |
| Fauteux, G. A., P.C.....                      | Outremont.           |  |                           |

## 6.—Representation in the Senate of Canada, by Provinces, as at Mar. 15, 1938—concluded

| Name of Senator.                        | Post Office Address. | Name of Senator.                     | Post Office Address. |
|---|----------------------|--------------------------------------|----------------------|
| <b>Alberta—(6 senators—one vacancy)</b> |                      | <b>British Columbia—(6 senators)</b> |                      |
| Michener, Edward.....                   | Calgary.             | Barnard, G. H.....                   | Victoria.            |
| Hartner, William J.....                 | Edmonton.            | Taylor, J. D.....                    | New Westminster.     |
| Griesbach, W. A., C.B.,                 |                      | Green, R. F.....                     | Victoria.            |
| C.M.G.....                              | Edmonton.            | King, J. H., P.C.....                | Victoria.            |
| Buchanan, W. A.....                     | Lethbridge.          | McRae, A. D., C.B.....               | Vancouver.           |
| Riley, Daniel E.....                    | High River.          | Farris, J. W.....                    | Vancouver.           |

## Subsection 4.—The House of Commons.

In Section 37 of the original British North America Act of 1867 (30 Vict., c. 3), it was provided that "The House of Commons shall . . . consist of one hundred and eighty-one members, of whom eighty-two shall be elected for Ontario, sixty-five for Quebec, nineteen for Nova Scotia and fifteen for New Brunswick".\* Further, under Section 51, it was enacted that after the completion of the Census of 1871 and of each subsequent decennial census, the representation of the four provinces should be readjusted by such authority, in such manner, and from such time, as the Parliament of Canada provided, subject to and according to the following rules:—

- "(1) Quebec shall have the fixed number of Sixty-five Members;
- "(2) There shall be assigned to each of the other Provinces such a Number of Members as will bear the same Proportion to the Number of its Population (ascertained at such Census) as the Number Sixty-five bears to the Number of the Population of Quebec (so ascertained);
- "(3) In the Computation of the Number of Members for a Province a fractional Part not exceeding One Half of the whole Number requisite for entitling the Province to a Member shall be disregarded; but a fractional Part exceeding One Half of that Number shall be equivalent to the whole Number;
- "(4) On any such Re-adjustment the Number of Members for a Province shall not be reduced unless the Proportion which the Number of the Population of the Province bore to the Number of the aggregate Population of Canada at the then last preceding Re-adjustment of the Number of Members for the Province is ascertained at the then latest Census to be diminished by One Twentieth Part or upwards;
- "(5) Such Re-adjustment shall not take effect until the Termination of the then existing Parliament".

Again, in Section 52, it was enacted that "the number of members of the House of Commons may be from time to time increased by the Parliament of Canada, provided the proportionate representation of the Provinces prescribed by this Act is not thereby disturbed".

Later on, by the British North America Act of 1886 (49-50 Vict., c. 35), provision was made in Section 1 that "the Parliament of Canada may from time to time make provision for the representation in the Senate and House of Commons of Canada, or in either of them, of any territories which for the time being form part of the Dominion of Canada, but are not included in any province thereof".

\* The sessional indemnity of a member of the House of Commons is \$4,000.

Again in 1915, an amendment to the British North America Act (5-6 Geo. V, c. 45) was passed by the Imperial Parliament, providing that "notwithstanding anything in the said Act, a province shall always be entitled to a number of members in the House of Commons not less than the number of senators representing such province".

**Readjustments in Representation.**—As set out in the above-mentioned provisions of the British North America Act, the representation in the House of Commons has been readjusted following each of the seven decennial censuses since taken, also as a result of the admission of Manitoba, British Columbia, and Prince Edward Island to Confederation and the creation of portions of the Northwest into Saskatchewan, Alberta, and Yukon. At pp. 74-77 of the 1934-35 Year Book, the problems of redistribution are dealt with in detail, especially those arising out of the 1931 Census. Summarized accounts were also carried in later Year Books down to 1937 (see pp. 79 and 80 of the 1937 Year Book).

The number of representatives of each province elected at each of the eighteen general elections since Confederation is given in Table 7.

**7.—Representation in the House of Commons as at Dominion General Elections, 1867-1935.**

| Province.  | 1867. | 1872. | 1874. | 1878. | 1882. | 1887. | 1891. | 1896. | 1900. | 1904. | 1908. | 1911. | 1917. | 1921. | 1925. <sup>1</sup> | 1935. |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|
| Ont.....   | 82    | 88    | 88    | 88    | 92    | 92    | 92    | 92    | 92    | 86    | 86    | 86    | 82    | 82    | 82                 | 82    |
| Que.....   | 65    | 65    | 65    | 65    | 65    | 65    | 65    | 65    | 65    | 65    | 65    | 65    | 65    | 65    | 65                 | 65    |
| N.S.....   | 19    | 21    | 21    | 21    | 21    | 21    | 21    | 20    | 20    | 18    | 18    | 18    | 16    | 16    | 14                 | 13    |
| N.B.....   | 15    | 16    | 16    | 16    | 16    | 16    | 16    | 14    | 14    | 13    | 13    | 13    | 11    | 11    | 11                 | 10    |
| Man.....   | -     | 4     | 4     | 4     | 5     | 5     | 5     | 7     | 7     | 10    | 10    | 10    | 15    | 15    | 17                 | 17    |
| B.C.....   | -     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 7     | 7     | 7     | 13    | 13    | 14                 | 16    |
| P.E.I..... | -     | -     | 6     | 6     | 6     | 6     | 6     | 5     | 5     | 4     | 4     | 4     | 4     | 4     | 4                  | 4     |
| Sask.....  | -     | -     | -     | -     | -     | 4     | 4     | 4     | 4     | 10    | 10    | 10    | 16    | 16    | 21                 | 21    |
| Alta.....  | -     | -     | -     | -     | -     |       |       |       |       |       | 7     | 7     | 12    | 12    | 16                 | 17    |
| Yukon..... | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | 1     | 1     | 1     | 1     | 1                  | 1     |
| Totals..   | 181   | 200   | 206   | 206   | 211   | 215   | 215   | 213   | 213   | 214   | 221   | 221   | 235   | 235   | 245                | 245   |

<sup>1</sup> The representation at the general elections of 1926 and 1930 was the same as in 1925.

**The Unit of Representation.**—While the number of members of the House of Commons has been growing fairly steadily since Confederation, the unit of representation—one-sixty-fifth of the population of Quebec within its 1911 boundaries—has also been increased after each census in consequence of the growth of the population of Quebec. The units of representation, as determined by the decennial censuses taken since Confederation, are as follows: 1871, 18,331 persons; 1881, 20,908; 1891, 22,901; 1901, 25,368; 1911, 30,819; 1921, 36,283; 1931, 44,186, being one-sixty-fifth of the population of Quebec exclusive of Ungava.

**Constituencies and Representatives in the Eighteenth Parliament.**—A complete list of the constituencies, with their 1931 populations, the voters on the list and votes polled at the general election of Oct. 14, 1935, together with the names and addresses of those then elected to the House of Commons of the eighteenth Parliament of Canada, will be found in Table 8. Changes occurring at subsequent by-elections to Mar. 15, 1938, are indicated in the footnotes.

**8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935.**

| Province and Electoral District.          | Population, 1931. | Voters on List. | Votes Polled.       | Name of Member.                        | Party Affiliation. | P.O. Address.         |
|---|-------------------|-----------------|---------------------|--|--------------------|-----------------------|
| <b>Prince Edward Is.—</b><br>(4 members). |                   |                 |                     |  |                    |                       |
| Kings.....                                | 19,147            | 11,536          | 9,709               | Grant, T. V.....                       | Lib.....           | Montague, P.E.I.      |
| Prince.....                               | 31,500            | 18,281          | 14,355              | MacLean, A. E.....                     | Lib.....           | Summerside, P.E.I.    |
| Queens.....                               | 37,391            | 23,465          | 37,570 <sup>1</sup> | Larabee, J. J. <sup>2</sup> .....      | Lib.....           | Eldon, P.E.I.         |
|   |                   |                 |                     | (Sinclair, P. J.).....                 | Lib.....           | Charlottetown, P.E.I. |
| <b>Nova Scotia—</b><br>(12 members).      |                   |                 |                     |  |                    |                       |
| Antigonish-Guysborough.....               | 25,516            | 15,029          | 11,581              | Duff, W. J.....                        | Lib.....           | Lunenburg, N.S.       |
| Cape Breton North-Victoria.....           | 31,615            | 17,562          | 13,965              | Cameron, D. A. <sup>4</sup> .....      | Lib.....           | Sydney, N.S.          |
| Cape Breton South.....                    | 65,198            | 34,967          | 28,472              | Hartigan, D. J.....                    | Lib.....           | New Waterford, N.S.   |
| Colchester-Hants.....                     | 44,444            | 27,233          | 21,064              | Purdy, G. T.....                       | Lib.....           | Truro, N.S.           |
| Cumberland.....                           | 36,366            | 22,239          | 17,270              | Cochrane, K. J.....                    | Lib.....           | Port Greville, N.S.   |
| Digby-Annapolis-Kings.....                | 50,859            | 32,079          | 23,119              | Hsley, Hon. J. L.....                  | Lib.....           | Ottawa, Ont.          |
| Halifax.....                              | 100,204           | 60,197          | 55,988 <sup>1</sup> | Isenor, G. B.....                      | Lib.....           | Halifax, N.S.         |
|   |                   |                 |                     | (Finn, R. E.).....                     | Lib.....           | Halifax, N.S.         |
| Inverness-Richmond.....                   | 35,788            | 21,207          | 16,929              | McLennan, D.....                       | Lib.....           | Inverness, N.S.       |
| Pictou.....                               | 39,018            | 23,197          | 19,240              | MacCulloch, H. B.....                  | Lib.....           | New Glasgow, N.S.     |
| Queens-Lunenburg.....                     | 42,286            | 26,662          | 19,685              | Kinley, J. J.....                      | Lib.....           | Lunenburg, N.S.       |
| Shelburne-Yarmouth-Clare.....             | 41,572            | 24,044          | 17,937              | Pottier, V. J.....                     | Lib.....           | Yarmouth, N.S.        |
| <b>New Brunswick—</b><br>(10 members).    |                   |                 |                     |  |                    |                       |
| Charlotte.....                            | 21,337            | 13,674          | 10,622              | Hill, B. M.....                        | Lib.....           | St. Stephen, N.B.     |
| Gloucester.....                           | 41,914            | 20,342          | 15,993              | Veniot, Hon. P. J. <sup>5</sup> .....  | Lib.....           | Bathurst, N.B.        |
| Kent.....                                 | 23,478            | 12,375          | 9,628               | Robichaud, L. P. A. <sup>6</sup> ..... | Lib.....           | Richibucto, N.B.      |
| Northumberland.....                       | 34,124            | 17,859          | 12,744              | Barry, J. P.....                       | Lib.....           | Chatham, N.B.         |
| Restigouche-Madawaska.....                | 54,386            | 26,405          | 17,858              | Michaud, Hon. J. E. Lib.....           | Lib.....           | Ottawa, Ont.          |
| Royal.....                                | 31,026            | 19,442          | 15,723              | Brooks, A. J.....                      | Cons.....          | Sussex, N.B.          |
| St. John-Albert.....                      | 69,292            | 41,202          | 31,948              | Ryan, W. M. <sup>7</sup> .....         | Lib.....           | Saint John, N.B.      |
| Victoria-Carleton.....                    | 35,703            | 20,284          | 15,831              | Patterson, J. E. J.....                | Lib.....           | Florenceville, N.B.   |
| Westmorland.....                          | 57,506            | 32,547          | 26,177              | Emmerson, H. R.....                    | Lib.....           | Dorchester, N.B.      |
| York-Sunbury.....                         | 39,453            | 24,813          | 19,961              | Clark, W. G.....                       | Lib.....           | Fredericton, N.B.     |

<sup>1</sup> Each voter could vote for two members.

<sup>2</sup> Mr. Larabee having accepted an office of emolument under the Crown, Hon. Charles A. Dunning (Lib.) was elected by acclamation, Dec. 31, 1935.

<sup>3</sup> Mr. W. Duff was appointed to the Senate on Feb. 28, 1936, and Mr. J. R. Kirk (Lib.) was elected by acclamation, Mar. 16, 1936.

<sup>4</sup> Mr. Cameron died Sept. 4, 1937, and Mr. Matthew MacLean (Lib.) was elected by acclamation, Oct. 15, 1937.

<sup>5</sup> Hon. Mr. Veniot died July 6, 1936, and Mr. C. J. Veniot (Lib.) was elected by acclamation, Aug. 17, 1936.

<sup>6</sup> Mr. Ryan died Jan. 4, 1938, and Mr. Allan G. McAvity (Lib.) was elected by acclamation, Feb. 21, 1938.

<sup>7</sup> Mr. Sinclair died Mar. 8, 1938.

S.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

| Province and Electoral District.    | Population, 1931. | Voters on List. | Votes Polled. | Name of Member.                    | Party Affiliation. | P.O. Address.                     |
|-------------------------------------|-------------------|-----------------|---------------|------------------------------------|--------------------|-----------------------------------|
| <b>Quebec—</b>                      |                   |                 |               |                                    |                    |                                   |
| (65 members).                       |                   |                 |               |                                    |                    |                                   |
| Argenteuil.....                     | 19,379            | 11,122          | 9,059         | Perley, Rt. Hon. Sir George J..... | Cons.....          | Ottawa, Ont.                      |
| Beauce.....                         | 51,614            | 24,341          | 17,363        | Lacroix, E.....                    | Lib.....           | Lacroix, P.Q.                     |
| Beauharnois-Laprairie.....          | 42,104            | 20,580          | 14,158        | Raymond, M.....                    | Lib.....           | Montreal, P.Q.                    |
| Bellechasse.....                    | 27,480            | 13,394          | 9,313         | Boulanger, O. L.....               | Lib.....           | Quebec, P.Q.                      |
| Berthier-Maskinongé.....            | 35,545            | 19,650          | 15,607        | Ferron, J. E.....                  | Lib.....           | Louiseville, P.Q.                 |
| Bonaventure.....                    | 36,184            | 18,570          | 14,589        | Marcel, Hon. C. <sup>2</sup> ..... | Lib.....           | Ottawa, Ont.                      |
| Brome-Missisquoi.....               | 32,069            | 18,951          | 15,225        | Gosselin, L.....                   | Lib.....           | Notre Dame de Stanbridge, P.Q.    |
| Chambly-Rouville.....               | 30,648            | 23,169          | 18,395        | Dupuis, V.....                     | Lib.....           | Laprairie, P.Q.                   |
| Champlain.....                      | 37,526            | 18,860          | 15,598        | Bruneau, H. E.....                 | Lib.....           | Cap de la Madeleine, Centre, P.Q. |
| Chapleau.....                       | 24,328            | 13,120          | 9,101         | Blais, F., Sr.....                 | Ind.-Lib.....      | Amos, P.Q.                        |
| Charlevoix-Saguenay.....            | 55,504            | 25,591          | 18,869        | Cusgrain, Hon. P. F.....           | Lib.....           | Montreal, P.Q.                    |
| Châteauguay-Huntingdon.....         | 24,412            | 13,655          | 11,163        | Black, D. E.....                   | Lib.....           | Ambroy, P.Q.                      |
| Chicoutimi.....                     | 55,724            | 25,558          | 20,823        | Dubuc, J. E. A.....                | Lib.....           | Chicoutimi, P.Q.                  |
| Compton.....                        | 81,853            | 16,450          | 13,336        | Blanchette, J. A.....              | Lib.....           | Chartierville, P.Q.               |
| Dorchester.....                     | 27,159            | 12,775          | 10,588        | Tremblay, L. D.....                | Lib.....           | St. Malachie, P.Q.                |
| Drummond-Arthabaska.....            | 53,838            | 29,240          | 22,778        | Girouard, W.....                   | Lib.....           | Arthabaska, P.Q.                  |
| Gaspé.....                          | 47,160            | 23,116          | 17,904        | Brasnet, M.....                    | Lib.....           | Percé, P.Q.                       |
| Hull.....                           | 49,196            | 25,312          | 21,137        | Fournier, A.....                   | Lib.....           | Hull, P.Q.                        |
| Joliette-L'Assomption-Montcalm..... | 56,444            | 30,473          | 18,005        | Ferland, C. E.....                 | Lib.....           | Joliette, P.Q.                    |
| Kamouraska.....                     | 30,853            | 15,230          | 10,514        | Bouchard, G.....                   | Lib.....           | Ste. Anne de la Pocetière, P.Q.   |
| Labelle.....                        | 36,053            | 18,314          | 12,825        | Lalonde, M.....                    | Lib.....           | Mont Laurier, P.Q.                |
| Lake St. John-Roberval.....         | 50,283            | 22,690          | 19,672        | Sylvester, A.....                  | Lib.....           | Roberval, P.Q.                    |
| Laval-Two Mountains.....            | 26,224            | 13,828          | 11,649        | Lacombe, L.....                    | Lib.....           | Ste. Scholastique, P.Q.           |
| Lévis.....                          | 28,548            | 14,625          | 12,770        | Dussault, J. E.....                | Lib.....           | Lévis, P.Q.                       |
| Lotbinière.....                     | 38,546            | 20,377          | 15,249        | Verville, J. A. <sup>1</sup> ..... | Lib.....           | St. Flavien, P.Q.                 |
| Matapédia-Matane.....               | 39,977            | 18,624          | 14,433        | Lapointe, A. J.....                | Lib.....           | Price, P.Q.                       |
| Mégantic-Frontenac.....             | 44,440            | 20,368          | 15,304        | Roberge, E.....                    | Lib.....           | Laurierville, P.Q.                |
| Montmagny-L'Islet.....              | 30,560            | 15,638          | 11,843        | Pafard, J. F.....                  | Lib.....           | L'Islet, P.Q.                     |
| Nicolet-Yamaska.....                | 39,219            | 20,891          | 16,592        | Dubois, L.....                     | Lib.....           | Gentilly, P.Q.                    |
| Pontiac.....                        | 43,045            | 23,130          | 18,465        | McDonald, W. R.....                | Ind.-Lib.....      | Chapreau, P.Q.                    |
| Portneuf.....                       | 37,383            | 19,051          | 15,602        | Cannon, Hon. L. <sup>4</sup> ..... | Lib.....           | Quebec, P.Q.                      |
| Quebec East.....                    | 58,145            | 30,309          | 25,412        | Lapointe, Hon. E.....              | Lib.....           | Ottawa, Ont.                      |
| Quebec South.....                   | 33,441            | 22,829          | 18,167        | Power, Hon. C. G.....              | Lib.....           | Ottawa, Ont.                      |
| Quebec West and South.....          | 43,617            | 23,339          | 19,358        | Parent, C.....                     | Lib.....           | Quebec, P.Q.                      |
| Quebec-Montmagny.....               | 40,274            | 20,368          | 17,350        | Lacroix, W.....                    | Lib.....           | Quebec, P.Q.                      |
| Richelieu-Verchères.....            | 35,901            | 19,965          | 14,553        | Cardin, Hon. P. J.....             | Lib.....           | Ottawa, Ont.                      |
| Richmond-Wolfé.....                 | 36,508            | 18,258          | 14,946        | Mullins, J. P.....                 | Lib.....           | Bromptonville, P.Q.               |
| Rimouski.....                       | 40,208            | 19,827          | 14,581        | Fiset, Sir Eugène.....             | Lib.....           | Rimouski, P.Q.                    |
| St. Hyacinthe-Bégo.....             | 42,830            | 24,967          | 16,089        | Fontaine, T. A.....                | Lib.....           | St. Hyacinthe, P.Q.               |
| St. John's-Berthier.....            | 32,259            | 18,302          | 10,910        | Rhénanne, M.....                   | Lib.....           | St. Jean, P.Q.                    |
| Napierville.....                    | 21,943            | 12,943          | 10,910        | Crête, J. A.....                   | Lib.....           | Grand mére, P.Q.                  |
| St. Maurice-Lafleche.....           | 28,262            | 16,490          | 13,595        | Leclerc, J. H.....                 | Lib.....           | Granby, P.Q.                      |
| Sherbrooke.....                     | 37,386            | 21,980          | 18,085        | Howard, C. B.....                  | Lib.....           | Sherbrooke, P.Q.                  |
| Stamstead.....                      | 25,118            | 14,493          | 11,765        | Davidson, R. G.....                | Lib.....           | North Hatley, P.Q.                |
| Témiscouata.....                    | 42,679            | 20,720          | 15,347        | Pouliot, J. F.....                 | Lib.....           | Rivière du Loup, P.Q.             |
| Terrebonne.....                     | 38,940            | 20,748          | 15,389        | Parent, L. E.....                  | Lib.....           | Ste. Agathe, P.Q.                 |
| Three Rivers.....                   | 44,223            | 25,547          | 20,837        | Gariépy, W.....                    | Ind.-Lib.....      | Trois Rivières, P.Q.              |
| Vaudreuil-Soulanges.....            | 21,114            | 11,843          | 8,845         | Thurvetta, J.....                  | Lib.....           | Vaudreuil, P.Q.                   |
| Wright.....                         | 27,107            | 14,284          | 10,785        | Perras, F. W. <sup>5</sup> .....   | Lib.....           | Grâcefield, P.Q.                  |

<sup>1</sup> Rt. Hon. Sir George Perley died Jan. 4, 1938, and Mr. Georges Heon (Con.) was elected Feb. 28, 1938.

<sup>2</sup> Hon. Charles Marcell died Jan. 29, 1937, and Mr. P. E. Côté (Lib.) was elected Mar. 28, 1937.

<sup>3</sup> Mr. Verville died Nov. 20, 1937, and Mr. Joseph N. Francoeur (Lib.) was elected Dec. 27, 1937.

<sup>4</sup> Hon. Mr. C. Cannon having accepted an office of enrolment under the Crown, Dr. P. Gauthier (Lib.) was elected by acclamation, Jan. 29, 1936.

<sup>5</sup> Mr. Perras died June 28, 1936, and Mr. R. Ledue (Lib.) was elected by acclamation, Aug. 5, 1936.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

| Province and Electoral District. | Population, 1931. | Voters on List. | Votes Polled. | Name of Member.         | Party Affiliation. | P.O. Address.          |
|----------------------------------|-------------------|-----------------|---------------|-------------------------|--------------------|------------------------|
| <b>Quebec—concluded.</b>         |                   |                 |               |                         |                    |                        |
| <i>Montreal Island—</i>          |                   |                 |               |                         |                    |                        |
| Cartier.....                     | 61,280            | 41,373          | 21,389        | Jacobs, S. W.....       | Lib.....           | Westmount, P.Q.        |
| Hochelega.....                   | 78,353            | 44,009          | 30,685        | St.-Père, E. C.....     | Lib.....           | Montreal, P.Q.         |
| Jacques-Cartier.....             | 42,671            | 20,957          | 16,120        | Mallette, V.....        | Lib.....           | Pte. Claire, P.Q.      |
| Laurier.....                     | 68,784            | 41,238          | 28,134        | Bertrand, E.....        | Lib.....           | Westmount, P.Q.        |
| <i>Maisons-neuve</i>             |                   |                 |               |                         |                    |                        |
| Rosemount.....                   | 64,845            | 35,419          | 26,148        | Fournier, S.....        | Lib.....           | Montreal, P.Q.         |
| Mercier.....                     | 66,051            | 34,906          | 24,706        | Jean, J.....            | Lib.....           | Montreal, P.Q.         |
| Mont Royal.....                  | 65,012            | 46,133          | 33,224        | Walsh, W. A.....        | Cons.....          | Outremont, P.Q.        |
| Outremont.....                   | 46,136            | 28,805          | 20,616        | Vien, T.....            | Lib.....           | Montreal, P.Q.         |
| St. Ann.....                     | 38,673            | 20,565          | 15,808        | Hushion, W. J.....      | Lib.....           | Westmount, P.Q.        |
| <i>St. Antoine</i>               |                   |                 |               |                         |                    |                        |
| Westmount.....                   | 50,059            | 35,330          | 22,322        | White, R. S.....        | Cons.....          | Westmount, P.Q.        |
| St. Denis.....                   | 76,830            | 44,945          | 31,049        | Denis, A.....           | Lib.....           | Montreal, P.Q.         |
| St. Henry.....                   | 78,127            | 42,550          | 30,096        | Mercier, P. J.....      | Lib.....           | Montreal, P.Q.         |
| St. James.....                   | 89,374            | 54,768          | 37,672        | Rinfret, Hon. F.....    | Lib.....           | Ottawa, Ont.           |
| <i>St. Lawrence</i>              |                   |                 |               |                         |                    |                        |
| St. George.....                  | 40,213            | 22,549          | 14,329        | Cahan, Hon. C. H.....   | Cons.....          | Montreal, P.Q.         |
| St. Mary.....                    | 77,472            | 46,473          | 32,051        | Deslauriers, H.....     | Lib.....           | Montreal, P.Q.         |
| Verdun.....                      | 63,144            | 36,298          | 25,347        | Wermeling, E. J.....    | Cons.....          | Verdun, P.Q.           |
| <b>Ontario—</b>                  |                   |                 |               |                         |                    |                        |
| <i>(82 members).</i>             |                   |                 |               |                         |                    |                        |
| Algoma East.....                 | 27,925            | 14,472          | 10,627        | Farquhar, T.....        | Lib.....           | Mindemoya, Ont.        |
| Algoma West.....                 | 35,618            | 20,098          | 14,949        | Hamilton, H. S.....     | Lib.....           | Sault Ste. Marie, Ont. |
| <i>Brant</i>                     |                   |                 |               |                         |                    |                        |
| Brant.....                       | 21,202            | 12,257          | 9,725         | Wood, G. E.....         | Lib.....           | Cainsville, Ont.       |
| Brantford City.....              | 32,274            | 20,969          | 16,897        | Macdonald, W. R.....    | Lib.....           | Brantford, Ont.        |
| Brace.....                       | 29,842            | 18,899          | 14,922        | Tomlinson, W. R.....    | Lib.....           | Port Elgin, Ont.       |
| Carleton.....                    | 31,305            | 19,603          | 16,311        | Hyndman, A. B.....      | Cons.....          | Carp, Ont.             |
| Cochrane.....                    | 53,284            | 34,235          | 19,976        | Bradette, J. A. B.....  | Lib-Lab            | Cochrane, Ont.         |
| Dufferin-Simcoe.....             | 27,894            | 20,612          | 15,654        | Rowe, Hon. W. E. P..... | Cons.....          | Newton Robinson, Ont.  |
| <i>Durham</i>                    |                   |                 |               |                         |                    |                        |
| Durham.....                      | 25,782            | 17,064          | 13,964        | Riekard, W. F.....      | Lib.....           | Newcastle, Ont.        |
| <i>Elgin</i>                     |                   |                 |               |                         |                    |                        |
| Elgin.....                       | 43,436            | 29,376          | 22,694        | Mills, W. H.....        | Lib.....           | Sparta, Ont.           |
| <i>Essex East</i>                |                   |                 |               |                         |                    |                        |
| Essex East.....                  | 51,718            | 26,223          | 19,467        | Martin, P.....          | Lib.....           | Walkerville, Ont.      |
| <i>Essex South</i>               |                   |                 |               |                         |                    |                        |
| Essex South.....                 | 51,970            | 18,088          | 13,144        | Clark, S. M.....        | Lib.....           | Harrow, Ont.           |
| <i>Essex West</i>                |                   |                 |               |                         |                    |                        |
| Essex West.....                  | 75,350            | 41,726          | 26,630        | McLarty, N. A.....      | Lib.....           | Windsor, Ont.          |
| <i>Port William</i>              |                   |                 |               |                         |                    |                        |
| Port William.....                | 34,656            | 17,352          | 13,895        | McIvor, D.....          | Lib.....           | Fort William, Ont.     |
| <i>Frontenac-Addington</i>       |                   |                 |               |                         |                    |                        |
| Frontenac-Addington.....         | 26,455            | 17,398          | 14,512        | Campbell, C. A. S.....  | Lib.....           | Northbrook, Ont.       |
| <i>Glengarry</i>                 |                   |                 |               |                         |                    |                        |
| Glengarry.....                   | 18,666            | 11,073          | 8,858         | MacRae, J. D.....       | Lib.....           | Apple Hill, Ont.       |
| <i>Grenville-Dundas</i>          |                   |                 |               |                         |                    |                        |
| Grenville-Dundas.....            | 32,425            | 22,044          | 17,199        | Casselman, A. C.....    | Cons.....          | Prescott, Ont.         |
| <i>Grey-Bruce</i>                |                   |                 |               |                         |                    |                        |
| Grey-Bruce.....                  | 55,736            | 29,384          | 18,110        | Macphail, A. C.....     | Lib.....           | Mississauga, Ont.      |
| <i>Grey North</i>                |                   |                 |               |                         |                    |                        |
| Grey North.....                  | 35,407            | 23,096          | 17,908        | Telford, W. P.....      | Lib.....           | Ceylon, Ont.           |
| <i>Haldimand</i>                 |                   |                 |               |                         |                    |                        |
| Haldimand.....                   | 21,428            | 13,927          | 11,388        | Seay, M. C.....         | Lib.....           | Owen Sound, Ont.       |
| <i>Haltimand</i>                 |                   |                 |               |                         |                    |                        |
| Haltimand.....                   | 29,558            | 17,539          | 13,362        | Cleaver, H.....         | Cons.....          | Caledonia, Ont.        |
| <i>Hamilton East</i>             |                   |                 |               |                         |                    |                        |
| Hamilton East.....               | 66,771            | 40,725          | 28,421        | Brown, A. A.....        | Cons.....          | Burlington, Ont.       |
| <i>Hamilton West</i>             |                   |                 |               |                         |                    |                        |
| Hamilton West.....               | 56,305            | 33,926          | 23,961        | Wilton, H. E. S.....    | Cons.....          | Hamilton, Ont.         |
| <i>Hastings-Peterborough</i>     |                   |                 |               |                         |                    |                        |
| Hastings-Peterborough.....       | 27,100            | 16,956          | 12,910        | Ferguson, R. S.....     | Lib.....           | Norwood, Ont.          |
| <i>Hastings South</i>            |                   |                 |               |                         |                    |                        |
| Hastings South.....              | 39,327            | 25,122          | 20,603        | Cameron, C. A.....      | Lib.....           | Belleville, Ont.       |
| <i>Huron North</i>               |                   |                 |               |                         |                    |                        |
| Huron North.....                 | 26,095            | 17,397          | 14,067        | Deachman, R. J.....     | Lib.....           | Wingham, Ont.          |
| <i>Huron-Perth</i>               |                   |                 |               |                         |                    |                        |
| Huron-Perth.....                 | 22,861            | 14,672          | 10,847        | Golding, W. H.....      | Lib.....           | Seaford, Ont.          |
| <i>Kenora-Rainy River</i>        |                   |                 |               |                         |                    |                        |
| Kenora-Rainy River.....          | 39,334            | 21,892          | 14,656        | McKinnon, H. B.....     | Lib.....           | Kenora, Ont.           |
| <i>Kent</i>                      |                   |                 |               |                         |                    |                        |
| Kent.....                        | 50,994            | 29,576          | 18,964        | Rutherford, J. W.....   | Lib.....           | Chatham, Ont.          |
| <i>Kingston City</i>             |                   |                 |               |                         |                    |                        |
| Kingston City.....               | 26,130            | 17,023          | 13,367        | Rogers, Hon. N. M.....  | Lib.....           | Ottawa, Ont.           |
| <i>Lambton-Kent</i>              |                   |                 |               |                         |                    |                        |
| Lambton-Kent.....                | 34,689            | 20,953          | 15,246        | McKenzie, H. A.....     | Lib.....           | Windsor, Ont.          |
| <i>Lambton West</i>              |                   |                 |               |                         |                    |                        |
| Lambton West.....                | 32,401            | 20,912          | 15,157        | Gray, R. W. C.....      | Lib.....           | Narsis, Ont.           |
| <i>Larnark</i>                   |                   |                 |               |                         |                    |                        |
| Larnark.....                     | 32,856            | 21,478          | 17,763        | Thompson, T. A.....     | Cons.....          | Almonte, Ont.          |
| <i>Leeds</i>                     |                   |                 |               |                         |                    |                        |
| Leeds.....                       | 35,157            | 22,975          | 19,229        | Stewart, Hon. H. A..... | Cons.....          | Brookville, Ont.       |
| <i>Lincoln</i>                   |                   |                 |               |                         |                    |                        |
| Lincoln.....                     | 54,199            | 34,429          | 26,425        | Loekhart, N. J. M.....  | Cons.....          | St. Catharines, Ont.   |
| <i>London</i>                    |                   |                 |               |                         |                    |                        |
| London.....                      | 59,821            | 41,777          | 30,522        | Betts, F. C.....        | Cons.....          | London, Ont.           |
| <i>Middlesex East</i>            |                   |                 |               |                         |                    |                        |
| Middlesex East.....              | 34,788            | 23,073          | 16,012        | Ross, D. G.....         | Lib.....           | Lucan, Ont.            |

<sup>1</sup> Mr. Mercier having accepted an office of emolument under the Crown, Mr. Joseph A. Bonnier (Lib.) was elected Jan. 17, 1938.

<sup>2</sup> Hon. Mr. Rowe resigned Sept. 28, 1937, and was re-elected by acclamation Nov. 8, 1937.

<sup>3</sup> Mr. Campbell resigned Aug. 11, 1937, and Mr. Angus N. McCallum (Lib.) was elected by acclamation Nov. 1, 1937.

<sup>4</sup> Mr. Wilton died Jan. 31, 1937, and Mr. J. A. Marsh (Lib.) was elected Mar. 22, 1937.

**8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.**

| Province and Electoral District. | Population, 1931. | Voters on List. | Votes Polled. | Name of Member.         | Party Affiliation. | P.O. Address.            |
|----------------------------------|-------------------|-----------------|---------------|-------------------------|--------------------|--------------------------|
| <b>Ontario—concluded.</b>        |                   |                 |               |                         |                    |                          |
| Middlesex West.....              | 23,632            | 15,269          | 11,719        | Elliott, Hon. J. C..... | Lib.....           | Ottawa, Ont.             |
| Muskoka-Ontario.....             | 35,613            | 23,038          | 17,428        | Furniss, S. J.....      | Lib.....           | Brechin, Ont.            |
| Nipissing.....                   | 68,697            | 47,661          | 33,649        | Hurtubise, J. R.....    | Lib.....           | Sudbury, Ont.            |
| Norfolk.....                     | 31,350            | 19,842          | 14,521        | Taylor, W. H.....       | Lib.....           | Scotland, Ont.           |
| Northumberland.....              | 30,727            | 20,291          | 16,583        | Fraser, W. A.....       | Lib.....           | Trenton, Ont.            |
| Ontario.....                     | 45,136            | 27,291          | 20,947        | Moore, W. H.....        | Lib.....           | Dunbarton, Ont.          |
| Ottawa East.....                 | 51,667            | 33,259          | 26,406        | Chevrier, E. R. E.....  | Lib.....           | Ottawa, Ont.             |
| Ottawa West.....                 | 78,656            | 55,759          | 44,671        | Aheara, T. F.....       | Lib.....           | Ottawa, Ont.             |
| Oxford.....                      | 47,825            | 30,825          | 24,119        | Rennie, A. S.....       | Lib.....           | Tillsonburg, Ont.        |
| Parry Sound.....                 | 26,198            | 15,526          | 11,543        | Slaght, A. G.....       | Lib.....           | Toronto, Ont.            |
| Peel.....                        | 28,156            | 19,203          | 16,045        | Graydon, G.....         | Cons.....          | Brumpton, Ont.           |
| Perth.....                       | 47,816            | 30,670          | 23,705        | Sanderson, F. G.....    | Lib.....           | St. Mary's, Ont.         |
| Peterborough West.....           | 37,042            | 23,568          | 19,022        | Duffus, J. J.....       | Lib.....           | Peterborough, Ont.       |
| Port Arthur.....                 | 35,313            | 17,607          | 12,023        | Howe, Hon. C. D.....    | Lib.....           | Ottawa, Ont.             |
| Prescott.....                    | 24,696            | 13,665          | 11,343        | Bertrand, E. O.....     | Lib.....           | L'Orignal, Ont.          |
| Prince Edward-Lennox.....        | 23,697            | 18,958          | 15,056        | Tustin, G. J.....       | Cons.....          | Napanee, Ont.            |
| Renfrew North.....               | 27,330            | 16,033          | 12,212        | McKay, M. J.....        | Lib.....           | Pembroke, Ont.           |
| Renfrew South.....               | 26,986            | 15,800          | 11,960        | McCann, J. J.....       | Lib.....           | Renfrew, Ont.            |
| Russell.....                     | 26,899            | 14,761          | 11,717        | Goulet, A.....          | Lib.....           | Bourget, Ont.            |
| Simcoe East.....                 | 36,572            | 21,154          | 16,358        | McLean, G. A.....       | Lib.....           | Orillia, Ont.            |
| Simcoe North.....                | 29,224            | 18,849          | 14,608        | McCuaig, D. F.....      | Lib.....           | Barrie, Ont.             |
| Stormont.....                    | 32,634            | 20,627          | 17,036        | Chevrier, L.....        | Lib.....           | Cornwall, Ont.           |
| Timiskaming.....                 | 37,594            | 23,306          | 15,890        | Little, W.....          | Lib.....           | Kirkland Lake, Ont.      |
| Victoria.....                    | 31,841            | 21,538          | 17,060        | McNevin, B.....         | Lib.....           | Omeane, Ont.             |
| Waterloo North.....              | 53,777            | 32,847          | 20,308        | Euler, Hon. W. D.....   | Lib.....           | Ottawa, Ont.             |
| Waterloo South.....              | 36,075            | 22,823          | 19,312        | Edwards, A. M.....      | Cons.....          | Ottawa, Ont.             |
| Welland.....                     | 52,731            | 47,060          | 34,614        | Damude, A. B.....       | Lib.....           | Pontheill, Ont.          |
| Wellington North.....            | 27,677            | 16,310          | 12,876        | Blair, J. K.....        | Lib.....           | Arthur, Ont.             |
| Wellington South.....            | 35,856            | 22,614          | 16,987        | Gladstone, R. W.....    | Lib.....           | Guelph, Ont.             |
| Westworth.....                   | 66,943            | 40,840          | 30,483        | Lennard, F. E., Jr..... | Cons.....          | Dundas, Ont.             |
| York East.....                   | 66,194            | 46,215          | 33,703        | McGregor, R. H.....     | Cons.....          | Toronto, Ont.            |
| York North.....                  | 43,323            | 26,146          | 20,000        | Mulock, W. P.....       | Lib.....           | Toronto, Ont.            |
| York South.....                  | 60,350            | 42,998          | 31,237        | Lawson, Hon. J. E.....  | Cons.....          | Toronto, Ont.            |
| York West.....                   | 55,831            | 34,401          | 25,930        | Streight, J. E. L.....  | Lib.....           | Toronto, Ont.            |
| <b>City of Toronto—</b>          |                   |                 |               |                         |                    |                          |
| Broadview.....                   | 57,523            | 39,804          | 28,053        | Church, T. L.....       | Cons.....          | Toronto, Ont.            |
| Danforth.....                    | 41,824            | 26,034          | 21,135        | Harris, J. H.....       | Cons.....          | Toronto, Ont.            |
| Davenport.....                   | 57,039            | 40,434          | 27,772        | MacNicol, J. R.....     | Cons.....          | Toronto, Ont.            |
| Eglinton.....                    | 54,859            | 43,147          | 31,894        | Baker, R. I.....        | Cons.....          | Toronto, Ont.            |
| Greenwood.....                   | 57,206            | 39,087          | 27,878        | Massey, D.....          | Cons.....          | Toronto, Ont.            |
| High Park.....                   | 52,971            | 37,590          | 27,550        | Anderson, A. J.....     | Cons.....          | Toronto, Ont.            |
| Parkdale.....                    | 51,398            | 34,956          | 24,408        | Spence, D.....          | Cons.....          | Toronto, Ont.            |
| Rosedale.....                    | 53,081            | 36,755          | 23,798        | Clarke, H. G.....       | Cons.....          | Toronto, Ont.            |
| St. Paul's.....                  | 62,283            | 45,113          | 26,821        | Ross, D. G.....         | Cons.....          | Toronto, Ont.            |
| Spadina.....                     | 62,127            | 52,154          | 34,313        | Factor, S.....          | Lib.....           | Toronto, Ont.            |
| Trinity.....                     | 60,806            | 39,642          | 26,973        | Plaxton, H. J.....      | Lib.....           | Toronto, Ont.            |
| <b>Manitoba—</b>                 |                   |                 |               |                         |                    |                          |
| <b>(17 members).</b>             |                   |                 |               |                         |                    |                          |
| Brandon.....                     | 40,483            | 22,262          | 17,059        | Beaubier, D. W.....     | Cons.....          | Brandon, Man.            |
| Churchill.....                   | 32,133            | 13,863          | 9,084         | Crear, Hon. T. A.....   | Lib.....           | Ottawa, Ont.             |
| Dauphin.....                     | 37,703            | 20,501          | 15,405        | Ward, W. J.....         | Lib.....           | Dauphin, Man.            |
| Lisgar.....                      | 30,547            | 14,212          | 10,282        | Winkler, H. W.....      | Lib.....           | Morden, Man.             |
| Macdonald.....                   | 34,948            | 18,567          | 14,290        | Weir, W. G.....         | Lib-Prog.          | Carman, Man.             |
| Marquette.....                   | 37,468            | 20,842          | 15,849        | Glen, J. A.....         | Lib.....           | Russell, Man.            |
| Neepawa.....                     | 28,346            | 16,450          | 12,767        | MacKenzie, F. D.....    | Lib.....           | Neepawa, Man.            |
| Portage la Prairie.....          | 25,569            | 13,846          | 11,015        | Leader, H.....          | Lib.....           | Portage la Prairie, Man. |
| Provencher.....                  | 32,613            | 13,163          | 10,179        | Beaubien, A. L.....     | Lib.....           | St. Jean Baptiste, Man.  |
| St. Boniface.....                | 31,289            | 16,483          | 13,082        | Howden, J. P.....       | Lib.....           | Norwood Grove, Man.      |
| Selkirk.....                     | 52,222            | 26,411          | 19,650        | Thorson, J. T.....      | Lib-Prog.          | Winnipeg, Man.           |
| Souris.....                      | 25,094            | 13,051          | 10,675        | McDonald, G. W.....     | Lib.....           | Elisavain, Man.          |
| Springfield.....                 | 42,350            | 21,276          | 14,593        | Turner, J. M.....       | Lib.....           | Winnipeg, Man.           |
| Winnipeg North.....              | 74,762            | 37,761          | 29,321        | Heaps, A. A.....        | C.C.F.             | Winnipeg, Man.           |

<sup>1</sup> Mr. Chevrier having accepted an office of emolument under the Crown, Mr. J. A. Pinard (Lib.) was elected, Oct. 26, 1936. <sup>2</sup> Dr. McKay died Feb. 14, 1937, and Mr. R. M. Warren (Lib.) was elected April 5, 1937.

S.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

| Province and Electoral District. | Population, 1931. | Voters on List. | Votes Polled. | Name of Member.     | Party Affiliation. | P.O. Address.           |
|----------------------------------|-------------------|-----------------|---------------|---------------------|--------------------|-------------------------|
| <b>Manitoba—concluded.</b>       |                   |                 |               |                     |                    |                         |
| Winnipeg North Centre.           | 59,004            | 34,253          | 24,797        | Woodsworth, J. S.   | C.C.F.             | Winnipeg, Man.          |
| Winnipeg South.                  | 51,518            | 31,260          | 25,085        | Mutch, L. A.        | Lib.               | Winnipeg, Man.          |
| Winnipeg South Centre.           | 64,090            | 41,373          | 31,456        | Maybank, R.         | Lib.               | Fort Garry, Man.        |
| <b>Saskatchewan—</b>             |                   |                 |               |                     |                    |                         |
| <b>(21 members).</b>             |                   |                 |               |                     |                    |                         |
| Assiniboia.                      | 41,036            | 18,838          | 14,975        | McKenzie, R. I.     | Lib.               | Stoughton, Sask.        |
| Humboldt.                        | 41,172            | 20,049          | 15,120        | Fleming, H. R.      | Lib.               | Humboldt, Sask.         |
| Kindersley.                      | 30,632            | 17,797          | 13,891        | Elliott, O. B.      | Soc. Cr.           | Edmonton, Alta.         |
| Lake Centre.                     | 42,532            | 19,160          | 15,441        | Johnston, J. F.     | Lib.               | Bladworth, Sask.        |
| Mackenzie.                       | 46,171            | 23,534          | 15,417        | MacMillan, J. A.    | Lib.               | Wadena, Sask.           |
| Maple Creek.                     | 42,428            | 19,572          | 15,023        | Evans, C. R.        | Lib.               | Piapot, Sask.           |
| Melfort.                         | 40,887            | 24,507          | 19,004        | McLean, M.          | Lib.               | Eldersley, Sask.        |
| Melville.                        | 45,910            | 23,175          | 18,455        | Motherwell, Hon.    | Lib.               |                         |
|                                  |                   |                 |               | W. R.               | Lib.               | Abernethy, Sask.        |
| Moose Jaw.                       | 43,668            | 21,562          | 16,505        | Ross, J. G.         | Lib.               | Moose Jaw, Sask.        |
| North Battleford.                | 41,513            | 22,925          | 15,718        | McIntosh, C. R.     | Lib.               | North Battleford, Sask. |
| Prince Albert.                   | 39,869            | 21,032          | 16,724        | King, Rt. Hon.      | Lib.               |                         |
|                                  |                   |                 |               | W. L. M.            | Lib.               | Ottawa, Ont.            |
| Qu'Appelle.                      | 38,015            | 19,391          | 15,809        | Perley, E. E.       | Cons.              | Woleseley, Sask.        |
| Regina City.                     | 53,209            | 30,823          | 24,969        | McNiven, D. A.      | Lib.               | Regina, Sask.           |
| Rosetown-Biggar.                 | 40,512            | 18,735          | 15,277        | Coldwell, M. J. W.  | C.C.F.             | Regina, Sask.           |
| Rosthern.                        | 43,885            | 19,152          | 13,291        | Tucker, W. A.       | Lib.               | Rosthern, Sask.         |
| Saskatoon City.                  | 47,362            | 26,137          | 19,415        | Young, A. M.        | Lib.               | Saskatoon, Sask.        |
| Swift Current.                   | 46,447            | 19,206          | 14,787        | Bothwell, C. E.     | Lib.               | Swift Current, Sask.    |
| The Battlefords.                 | 45,064            | 23,576          | 18,415        | Needham, J.         | Soc. Cr.           | Unity, Sask.            |
| Weyburn.                         | 44,710            | 19,635          | 16,290        | Douglas, T. C.      | C.C.F.             | Weyburn, Sask.          |
| Wood Mountain.                   | 44,658            | 18,871          | 15,040        | Donnelly, T. F.     | Lib.               | Meyroune, Sask.         |
| Yorkton.                         | 50,406            | 29,333          | 17,931        | McPhee, G. W.       | Lib.               | Yorkton, Sask.          |
| <b>Alberta—</b>                  |                   |                 |               |                     |                    |                         |
| <b>(17 members).</b>             |                   |                 |               |                     |                    |                         |
| Acadia.                          | 37,423            | 16,054          | 10,594        | Quelch, V.          | Soc. Cr.           | Morris, Alta.           |
| Athabasca.                       | 39,102            | 19,433          | 10,576        | Rowe, P. J.         | Soc. Cr.           | Edmonton, Alta.         |
| Battle River.                    | 41,881            | 21,221          | 13,613        | Fair, R.            | Soc. Cr.           | Paradise Valley, Alta.  |
| Bow River.                       | 44,491            | 20,680          | 14,317        | Johnston, C. E.     | Soc. Cr.           | Three Hills, Alta.      |
| Calgary East.                    | 44,745            | 25,372          | 18,184        | Landryou, J. C.     | Soc. Cr.           | Calgary, Alta.          |
| Calgary West.                    | 41,418            | 24,915          | 18,361        | Bennett, Rt. Hon.   | Soc. Cr.           |                         |
|                                  |                   |                 |               | R. B.               | Cons.              | Ottawa, Ont.            |
| Camrose.                         | 42,717            | 20,247          | 13,392        | Marshall, J. A.     | Soc. Cr.           | Bashaw, Alta.           |
| Edmonton East.                   | 46,086            | 24,956          | 16,449        | Hall, W. S. J.      | Soc. Cr.           | Edmonton, Alta.         |
| Edmonton West.                   | 39,712            | 25,917          | 18,134        | MacKinnon, J. A.    | Lib.               | Edmonton, Alta.         |
| Jasper-Edson.                    | 47,394            | 25,516          | 14,835        | Kuhl, W. F.         | Soc. Cr.           | Spruce Grove, Alta.     |
| Lethbridge.                      | 44,708            | 18,013          | 12,898        | Blackmore, J. H.    | Soc. Cr.           | Raymond, Alta.          |
| Marlond.                         | 44,325            | 20,456          | 14,583        | Hansell, E. G.      | Soc. Cr.           | Vulcan, Alta.           |
| Medicine Hat.                    | 40,980            | 18,506          | 13,099        | Mitchell, A. H.     | Soc. Cr.           | Medicine Hat, Alta.     |
| Pence River.                     | 43,701            | 22,442          | 11,756        | Pelletier, R. A.    | Soc. Cr.           | Fulmer, Alta.           |
| Red Deer.                        | 39,758            | 21,078          | 13,378        | Poole, E. J.        | Soc. Cr.           | Calgary, Alta.          |
| Vegreville.                      | 47,168            | 20,675          | 13,620        | Hayhurst, W.        | Soc. Cr.           | Vegreville, Alta.       |
| Wetaskiwin.                      | 45,330            | 22,524          | 13,302        | Jacques, N.         | Soc. Cr.           | Mirror, Alta.           |
| <b>British Columbia—</b>         |                   |                 |               |                     |                    |                         |
| <b>(16 members).</b>             |                   |                 |               |                     |                    |                         |
| Cariboo.                         | 26,094            | 15,197          | 10,480        | Turgeon, J. G.      | Lib.               | Vancouver, B.C.         |
| Comox-Alberni.                   | 28,379            | 13,533          | 10,041        | Neill, A. W.        | Ind.               | Alberni, B.C.           |
| Fraser Valley.                   | 31,377            | 16,879          | 12,753        | Barber, H. J.       | Cons.              | Chilliwack, B.C.        |
| Kamloops.                        | 29,249            | 19,035          | 11,296        | O'Neill, T. J.      | Lib.               | Kamloops, B.C.          |
| Kootenay East.                   | 25,602            | 12,668          | 10,175        | Stevens, Hon. H. H. | Recon.             | Ottawa, Ont.            |

<sup>1</sup> Mr. McKenzie having accepted an office of emolument under the Crown, Mr. J. G. Gardiner (Lib.) was elected, Jan. 8, 1936.

<sup>2</sup> Mr. Hall died Jan. 20, 1938.



8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—concluded.

| Province and Electoral District.   | Population, 1931. | Voters on List. | Votes Polled. | Name of Member.                    | Party Affiliation. | P.O. Address.       |
|------------------------------------|-------------------|-----------------|---------------|------------------------------------|--------------------|---------------------|
| <b>British Columbia—concluded.</b> |                   |                 |               |                                    |                    |                     |
| Kootenay West.....                 | 32,556            | 15,508          | 11,824        | Esling, W. K.....                  | Cons.....          | Rossland, B.C.      |
| Nanaimo.....                       | 45,767            | 20,155          | 20,431        | Taylor, J. S.....                  | C.C.F.....         | Vancouver, B.C.     |
| New Westminster.....               | 59,170            | 33,749          | 27,280        | Reid, T.....                       | Lib.....           | Newton, B.C.        |
| Skeena.....                        | 30,391            | 11,741          | 8,382         | Hanson, O.....                     | Lib.....           | Prince Rupert, B.C. |
| Vancouver-Burrard.....             | 59,583            | 30,044          | 28,483        | McGeer, G. G.....                  | Lib.....           | Vancouver, B.C.     |
| Vancouver Centre.....              | 65,683            | 32,425          | 22,780        | Mackenzie, Hon. I. A.....          | Lib.....           | Ottawa, Ont.        |
| Vancouver East.....                | 58,021            | 34,310          | 27,105        | MacInnis, A.....                   | C.C.F.....         | Vancouver, B.C.     |
| Vancouver North.....               | 48,906            | 28,121          | 21,804        | MacNeil, C. G.....                 | C.C.F.....         | Vancouver, B.C.     |
| Vancouver South.....               | 63,122            | 39,274          | 31,251        | Green, H. C.....                   | Cons.....          | Vancouver, B.C.     |
| Victoria.....                      | 48,599            | 28,902          | 21,585        | Plunkett, D. B. <sup>1</sup> ..... | Cons.....          | Victoria, B.C.      |
| Yale.....                          | 40,804            | 21,777          | 16,640        | Stirling, Hon. G.....              | Cons.....          | Kelowna, B.C.       |
| <b>Yukon—(1 member).</b>           |                   |                 |               |                                    |                    |                     |
| Yukon.....                         | 4,230             | 1,806           | 1,265         | Black, M. L. (Mrs.)                | Ind-Cons.          | Ottawa, Ont.        |

<sup>1</sup> Mr. Plunkett died May 3, 1936, and Hon. S. F. Tormie (Cons.) was elected June 8, 1935. Hon. Mr. Tormie died Oct. 13, 1937, and Mr. Robert W. Mayhew (Lib.) was elected Nov. 29, 1937.

Subsection 5.—The Dominion Franchise.

An article by Col. J. T. C. Thompson, Dominion Franchise Commissioner, appeared at pp. 80-88 of the 1937 edition of the Year Book. Briefly, the qualifications for the Dominion franchise are that one must be a British subject, of the full age of 21 years, and have been ordinarily resident in Canada for at least one year, and resident for three months in the electoral district in which application is being made for registration.

**The Use of the Franchise.**—The numbers of voters on the lists and the numbers of votes polled at the general elections of 1925, 1926, 1930, and 1935 are given in Table 9.

9.—Numbers of Voters and Votes Polled at the General Elections of 1925, 1926, 1930, and 1935.

| Province.             | Numbers of Voters on the Lists. |                              |                              |                  | Numbers of Votes Polled. |                              |                              |                      |
|-----------------------|---------------------------------|------------------------------|------------------------------|------------------|--------------------------|------------------------------|------------------------------|----------------------|
|                       | 1925.                           | 1926.                        | 1930.                        | 1935.            | 1925.                    | 1926.                        | 1930.                        | 1935.                |
| P.E. Island.....      | 45,454                          | 46,208                       | 46,985                       | 53,284           | 49,559 <sup>1</sup>      | 55,569 <sup>1</sup>          | 59,519 <sup>1</sup>          | 61,641 <sup>1</sup>  |
| Nova Scotia.....      | 277,073                         | 273,712                      | 275,762                      | 304,313          | 222,883 <sup>2</sup>     | 229,846 <sup>2</sup>         | 268,727 <sup>2</sup>         | 275,523 <sup>2</sup> |
| New Brunswick.....    | 211,190                         | 210,028                      | 207,006                      | 229,260          | 152,652 <sup>2</sup>     | 162,777 <sup>2</sup>         | 186,277 <sup>2</sup>         | 177,455              |
| Quebec.....           | 1,124,998                       | 1,133,633                    | 1,351,585 <sup>3</sup>       | 1,576,458        | 805,492                  | 809,295                      | 1,029,480 <sup>4</sup>       | 1,162,862            |
| Ontario.....          | 1,821,906                       | 1,847,612                    | 1,894,624                    | 2,174,188        | 1,223,027 <sup>5</sup>   | 1,226,267 <sup>5</sup>       | 1,364,960 <sup>5</sup>       | 1,608,244            |
| Manitoba.....         | 250,505                         | 257,244 <sup>6</sup>         | 328,089                      | 377,733          | 171,124                  | 198,028 <sup>6</sup>         | 235,192                      | 284,589              |
| Saskatchewan.....     | 348,791                         | 353,471                      | 410,400                      | 451,386          | 197,246                  | 246,460                      | 331,652                      | 347,536              |
| Alberta.....          | 283,529                         | 270,403                      | 304,475 <sup>6</sup>         | 368,956          | 161,423                  | 157,993                      | 201,635 <sup>6</sup>         | 241,107              |
| British Columbia..... | 244,352                         | 262,262                      | 333,326                      | 382,117          | 183,748                  | 185,345                      | 243,631                      | 292,423              |
| Yukon.....            | 1,621                           | 1,849                        | 1,719                        | 1,805            | 1,259                    | 1,482                        | 1,408                        | 1,265                |
| <b>Totals.....</b>    | <b>4,607,419</b>                | <b>4,665,381<sup>4</sup></b> | <b>5,153,971<sup>4</sup></b> | <b>5,919,506</b> | <b>3,168,412</b>         | <b>3,273,062<sup>4</sup></b> | <b>3,922,481<sup>4</sup></b> | <b>4,452,675</b>     |

<sup>1</sup> Each voter in the double member constituency of Queens County, P.E.I., had two votes; in 1935, 23,467 voters on the list cast 37,576 votes.

<sup>2</sup> Each voter in the double member constituency of Halifax, N.S., had two votes; in 1935, 50,503 voters on the list cast 85,986 votes.

<sup>3</sup> Each voter in the double member constituency of St. John-Albert, N.B., had two votes; in 1930, 37,067 voters on the list cast 50,121 votes.

<sup>4</sup> Not including one electoral district in which the return was by acclamation.

<sup>5</sup> Each voter in the double member constituency of Ottawa, Ont., had two votes; in 1930, 61,535 voters on the list cast 97,369 votes.

<sup>6</sup> Not including two electoral districts in which the returns were by acclamation.

## Section 2.—Provincial Governments.

Table 10 gives the names and areas, as in 1938, of the several provinces, territories, and provisional districts of the Dominion, together with the dates of their creation or admission into the Confederation and the legislative process by which this was effected.

10.—Provinces and Territories of Canada, with Present Areas, Dates of Admission to Confederation, and Legislative Process by which Admission was Effected.

| Province, Territory, or District. | Date of Admission or Creation. | Legislative Process.                                | Present Area (square miles). |              |                      |
|-----------------------------------|--------------------------------|---|------------------------------|--------------|----------------------|
|                                   |                                |   | Land.                        | Fresh Water. | Total.               |
| Ontario.....                      | July 1, 1867                   | Act of Imperial Parliament — The                    | 363,282                      | 49,300       | 412,582 <sup>1</sup> |
| Quebec.....                       | " 1, 1867                      | British North America Act, 1867                     | 523,534                      | 71,000       | 594,534 <sup>2</sup> |
| Nova Scotia.....                  | " 1, 1867                      | (30-31 Vict., c. 3), and Imperial                   | 20,743                       | 325          | 21,068               |
| New Brunswick.....                | " 1, 1867                      | Order in Council of May 22, 1867.                   | 27,473                       | 512          | 27,985               |
| Manitoba.....                     | " 15, 1870                     | Manitoba Act, 1870 (33 Vict., c. 3) and             | 219,723                      | 26,789       | 246,512 <sup>3</sup> |
| British Columbia.....             | " 20, 1871                     | Imperial Order in Council, June 23, 1870            | 359,279                      | 0,970        | 360,255              |
| P.E. Island.....                  | " 1, 1873                      | Imperial Order in Council, June 26, 1873            | 2,184                        | "            | 2,184                |
| Saskatchewan.....                 | Sept. 1, 1905                  | Saskatchewan Act, 1905 (4-5 Edw. VII,               | 237,975                      | 13,725       | 251,700 <sup>4</sup> |
| Alberta.....                      | " 1, 1905                      | c. 42)..... Alberta Act, 1905 (4-5 Edw. VII, c. 3). | 248,800                      | 6,485        | 255,285 <sup>4</sup> |
| Yukon.....                        | June 13, 1898                  | Yukon Territory Act, 1898 (61 Vict.,                | 205,346                      | 1,730        | 207,076              |
| Mackenzie.....                    | Jan. 1, 1920                   | c. 6)..... Order in Council, Mar. 16, 1918.....     | 493,225                      | 34,265       | 527,490 <sup>5</sup> |
| Keewatin.....                     | " 1, 1920                      |   | 218,450                      | 9,700        | 228,150 <sup>6</sup> |
| Franklin.....                     | " 1, 1920                      |   | 540,532                      | 7,500        | 548,032              |
| Totals.....                       |                                |   | 3,466,556                    | 228,397      | 3,694,953            |

<sup>1</sup> The area of Ontario was extended by the Ontario Boundaries Extension Act, 1912 (2 Geo. V, c. 40).

<sup>2</sup> Extended by Quebec Boundaries Extension Act, 1912 (2 Geo. V, c. 45), and diminished in consequence of the award of the Judicial Committee of the British Privy Council (Mar. 1, 1927), whereby some 112,400 square miles of territory, formerly considered as part of Quebec, were assigned to Newfoundland.

<sup>3</sup> Extended by Extension of Boundaries of Manitoba Act, 1881, and Manitoba Boundaries Extension Act, 1912 (2 Geo. V, c. 32).

<sup>4</sup> Alberta and Saskatchewan now cover approximately the area formerly comprised in the districts of Assiniboia, Athabasca, Alberta, and Saskatchewan, established May 17, 1882, by minute of Canadian P.C., concurred in by Dominion Parliament and Order in Council of Oct. 2, 1888.

<sup>5</sup> By Order in Council, June 23, 1870, Rupert's Land, acquired under the Rupert's Land Acts of 1867 and 1868, and the undefined Northern Territories were admitted into the Confederation. The original Northwest Territories, mentioned in the Manitoba Act, 1870, were established by the Northwest Territories Act 1880 (43 Vict., c. 25), the district of Keewatin having been previously defined by an Act of the Dominion Parliament (39 Vict., c. 21). The provisional districts of Yukon, Mackenzie, Franklin, and Ungava were defined in an Order in Council of Oct. 2, 1895, their boundaries being changed by Order in Council of Dec. 18, 1897. By Order in Council of July 24, 1905, the area of Keewatin, not included in the Northwest Territories, was annexed to the latter from Sept. 1, 1905. By the Extension of Boundaries Act, 1912, Ungava was made a part of the province of Quebec, and the remaining area of the Northwest Territories south of 60° N. latitude was divided between Manitoba and Ontario.

<sup>6</sup> Too small to be enumerated.

In each of the provinces the King is represented by a Lieutenant-Governor appointed by the Governor General in Council and governs with the advice and assistance of his Ministry or Executive Council, which is responsible to the Legislature and resigns office when it ceases to enjoy the confidence of that body. The Legislatures of all the provinces with the exception of Quebec are now unicameral, consisting of a Legislative Assembly elected by the people. In Quebec there is a Legislative Council as well as a Legislative Assembly. For detailed description of the Provincial Governments, the reader is referred to pp. 101-115 of the 1922-23 edition of the Year Book.

The Lieutenant-Governors of the provinces, together with the names of the Ministers of the present administrations, are given in Table 11. Details regarding Provincial Legislatures and Ministries from Confederation to 1924 were given on pp. 75-84 of the 1924 Year Book.

# 11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present.

NOTE.—The Lieutenant-Governor of a province is styled "His Honour" and is also styled "Honourable" throughout his life. Legislatures from Confederation to 1923 will be found on p. 75 of the 1924 Year Book.

## PRINCE EDWARD ISLAND.

### LIEUTENANT-GOVERNORS.

| Name.                           | Date of Appointment. | Name.                  | Date of Appointment. |
|---------------------------------|----------------------|------------------------|----------------------|
| W. C. F. Robinson.....          | June 10, 1873        | D. A. Mackinnon.....   | Oct. 3, 1904         |
| Sir Robert Hodgson.....         | July 4, 1874         | Benjamin Rogers.....   | June 1, 1910         |
| Thomas H. Haviland.....         | July 14, 1879        | A. C. Macdonald.....   | June 2, 1915         |
| Andrew Archibald Macdonald..... | Aug. 1, 1884         | Murdoch McKinnon.....  | Sept. 3, 1919        |
| Jedediah S. Carvell.....        | Sept. 21, 1889       | Frank R. Hearts.....   | Sept. 3, 1924        |
| George W. Howland.....          | Feb. 21, 1894        | Charles Dalton.....    | Nov. 29, 1930        |
| P. A. McIntyre.....             | May 13, 1899         | George D. DeBlois..... | Dec. 28, 1933        |

### LEGISLATURES, 1924 TO THE PRESENT.

| Date of Election. | Legislature.               | No. of Sessions. | Date of First Opening. | Date of Dissolution. |
|-------------------|----------------------------|------------------|------------------------|----------------------|
| July 26, 1923     | 15th General Assembly..... | 4                | Mar. 12, 1924.....     | May 26, 1927         |
| June 25, 1927     | 16th General Assembly..... | 4                | Mar. 20, 1928.....     | July 2, 1931         |
| Aug. 6, 1931      | 17th General Assembly..... | 4                | Mar. 2, 1932.....      | June 15, 1935        |
| July 23, 1935     | 18th General Assembly..... | 1                | Sept. 25, 1935.....    |                      |

### MINISTRIES.

| Ministry. | Premier.             | Date of Formation. | Ministry. | Premier.              | Date of Formation. |
|-----------|----------------------|--------------------|-----------|-----------------------|--------------------|
| 15        | Hon. J. D. Stewart,  | Sept. 5, 1923      | 19        | Hon. W. J. P. Mac-    | Oct. 14, 1933      |
| 16        | K.C.....             |                    | 20        | Millan, M.D., C.M.... |                    |
|           | Hon. A. C. Saunders, | Aug. 12, 1927      | 21        | Hon. W. M. Lea.....   | Aug. 15, 1935      |
| 17        | K.C.....             | May 20, 1930       |           | Hon. T. A. Campbell,  | Jan. 14, 1936      |
| 18        | Hon. J. D. Stewart,  | Aug. 29, 1931      |           | K.C.....              |                    |
|           | K.C.....             |                    |           |                       |                    |

### TWENTY-FIRST MINISTRY.

| Office.   | Name.                            | Date of Appointment.            |
|---|----------------------------------|---------------------------------|
| Premier, Provincial Secretary-Treasurer, Attorney and Advocate General..... | Hon. Thane A. Campbell, K.C..... | {Aug. 15, 1935<br>Jan. 14, 1936 |
| Minister of Public Works and Highways.....                                  | Hon. James P. Molatys.....       | Aug. 15, 1935                   |
| President of the Executive Council.....                                     | Hon. Bradford W. LePage.....     | Jan. 14, 1936                   |
| Minister of Agriculture.....  | Hon. William H. Dennis.....      | Jan. 14, 1936                   |
| Minister of Education and Public Health.....                                | Hon. Mark R. McGuigan, K.C.....  | Aug. 15, 1935                   |
| Minister without Portfolio.....   | Hon. Lucas R. Allen.....         | Aug. 15, 1935                   |
| Minister without Portfolio.....   | Hon. John A. Campbell.....       | Aug. 15, 1935                   |
| Minister without Portfolio.....   | Hon. Marin Gallant.....          | Aug. 15, 1935                   |
| Minister without Portfolio.....   | Hon. T. William L. Prowse.....   | Aug. 15, 1935                   |

<sup>1</sup> Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

NOVA SCOTIA.

LIUTENANT-GOVERNORS.

| Name.                                | Date of Appointment.       | Name.                  | Date of Appointment.       |
|--------------------------------------|----------------------------|------------------------|----------------------------|
| Lt.-Gen. Sir F. William Williams.... | July 1, 1867               | Duncan C. Fraser.....  | Mar. 27, 1906              |
| Major-Gen. Sir C. Hastings Doyle...  | Oct. 18, 1867              | James D. McGregor..... | Oct. 18, 1910              |
| Lt.-Gen. Sir C. Hastings Doyle.....  | Jan. 31, 1868 <sup>1</sup> | David MacKee.....      | Oct. 19, 1915              |
| Joseph Howe.....                     | May 1, 1873                | MacCallum Grant.....   | Nov. 29, 1916              |
| Sir Adams G. Archibald.....          | July 4, 1873               | MacCallum Grant.....   | Mar. 21, 1922 <sup>1</sup> |
| Matthew Henry Richey.....            | July 4, 1883               | J. Robson Douglas..... | Jan. 23, 1925              |
| A. W. McLellan.....                  | July 9, 1888               | James C. Tory.....     | Sept. 24, 1925             |
| Sir Malachy Bowes Daly.....          | July 11, 1890              | Frank Stanfield.....   | Dec. 2, 1930               |
| Sir Malachy Bowes Daly.....          | July 29, 1895 <sup>1</sup> | Walter H. Covert.....  | Oct. 5, 1931               |
| Alfred G. Jones.....                 | Aug. 7, 1900               | Robert Irwin.....      | May 1, 1937                |

<sup>1</sup> Second term.

LEGISLATURES, 1924 TO THE PRESENT.

| Date of Election. | Legislature. | No. of Sessions. | Date of First Opening. | Date of Dissolution. |
|-------------------|--------------|------------------|------------------------|----------------------|
| July 27, 1920     | 14th.....    | 5                | Mar. 9, 1921.....      | June 2, 1925         |
| June 25, 1925     | 15th.....    | 3                | Feb. 9, 1926.....      | Sept. 5, 1928        |
| Oct. 1, 1925      | 16th.....    | 5                | Feb. 27, 1929.....     | July 13, 1933        |
| Aug. 22, 1933     | 17th.....    | 4                | Mar. 1, 1934.....      | May 20, 1937         |
| June 29, 1937     | 18th.....    | 1                | Mar. 1, 1938.....      |                      |

MINISTRIES.

| Ministry. | Premier.                            | Date of Formation. | Ministry. | Premier.               | Date of Formation. |
|-----------|-------------------------------------|--------------------|-----------|------------------------|--------------------|
| 10        | Hon. E. N. Rhodes.....              | July 16, 1925      | 12        | Hon. A. L. Macdonald.. | Sept. 5, 1933      |
| 11        | Col. The Hon. G. S. Harrington..... | Aug. 11, 1930      |           |                        |                    |

TWELFTH MINISTRY.

| Office.  | Name.                               | Date of Appointment. |
|--|-------------------------------------|----------------------|
| Premier and President of Council, Provincial Secretary and Treasurer.....              | Hon. Angus Lewis Macdonald, K.C.... | Sept. 5, 1933        |
| Attorney General, Minister of Lands and Forests and Minister of Municipal Affairs..... | Hon. Josiah H. MacQuarrie, K.C..... | Sept. 5, 1933        |
| Minister of Highways.....  | Hon. A. Stirling MacMillan.....     | Sept. 5, 1933        |
| Minister of Public Works and Mines and Minister of Labour.....                         | Hon. Michael Dwyer.....             | Sept. 5, 1933        |
| Minister of Agriculture and Marketing.....   | Hon. John A. McDonald.....          | Sept. 5, 1933        |
| Minister of Public Health.....   | Hon. Frank R. Davis, M.D., C.M..... | Sept. 5, 1933        |
| Minister without Portfolio.....  | Hon. J. Willie Comeau.....          | Sept. 5, 1933        |

<sup>1</sup> Life of Legislature not yet expired.

# 11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

## NEW BRUNSWICK.

### LIEUTENANT-GOVERNORS.

| Name.                              | Date of Appointment. | Name.                          | Date of Appointment. |
|------------------------------------|----------------------|--------------------------------|----------------------|
| Major-Gen. Sir C. Hastings Doyle.. | July 1, 1867         | A. R. McClelan.....            | Dec. 9, 1898         |
| Col. F. P. Harding.....            | Oct. 18, 1867        | Jabez B. Snowball.....         | Feb. 5, 1902         |
| L. A. Wilkes.....                  | July 14, 1868        | L. J. Tweedie.....             | Mar. 2, 1907         |
| Samuel Leonard Tilley.....         | Nov. 5, 1873         | Josiah Wood.....               | Mar. 6, 1912         |
| E. Baron Chandler.....             | July 16, 1878        | G. W. Ganong.....              | June 29, 1916        |
| Robert Duncan Wilmot.....          | Feb. 11, 1880        | William Pugsley.....           | Nov. 6, 1917         |
| Sir Samuel Leonard Tilley.....     | Oct. 31, 1885        | William F. Todd.....           | Feb. 24, 1923        |
| John Boyd.....                     | Sept. 21, 1893       | Major-Gen. Hugh H. McLean..... | Dec. 28, 1928        |
| John A. Fraser.....                | Dec. 20, 1893        | Murray McLaren.....            | Feb. 5, 1935         |

### LEGISLATURES, 1924 TO THE PRESENT.

| Date of Election. | Legislature. | No. of Sessions. | Date of First Opening. | Date of Dissolution. |
|-------------------|--------------|------------------|------------------------|----------------------|
| Oct. 9, 1920      | 8th.....     | 5                | Mar. 17, 1921.....     | July 17, 1925        |
| Aug. 10, 1925     | 9th.....     | 5                | Mar. 11, 1926.....     | May 26, 1930         |
| June 19, 1930     | 10th.....    | 5                | Feb. 12, 1931.....     | May 22, 1935         |
| June 27, 1935     | 11th.....    | 1                | Mar. 5, 1936.....      |                      |

### MINISTRIES.

| Ministry. | Premier.                | Date of Formation. | Ministry. | Premier.                | Date of Formation. |
|-----------|-------------------------|--------------------|-----------|-------------------------|--------------------|
| 17        | Hon. J. B. M. Baxter... | Sept. 14, 1925     | 19        | Hon. L. P. D. Tilley... | June 1, 1933       |
| 18        | Hon. C. D. Richards...  | May 19, 1931       | 20        | Hon. A. A. Dysart....   | July 16, 1935      |

### TWENTIETH MINISTRY.

| Office.   | Name.                        | Date of Appointment. |
|---|------------------------------|----------------------|
| Premier.....  | Hon. A. A. Dysart, K.C.....  | July 16, 1935        |
| Minister of Public Works.....   | Hon. A. A. Dysart, K.C.....  | July 16, 1935        |
| Minister of Lands and Mines.....  | Hon. F. W. Pirie.....        | July 16, 1935        |
| Minister of Agriculture.....  | Hon. Austin C. Taylor.....   | July 16, 1935        |
| Attorney General.....   | Hon. J. B. McNair, K.C.....  | July 16, 1935        |
| Minister of Health and Labour.....  | Hon. W. F. Roberts, M.D..... | July 16, 1935        |
| Provincial Secretary-Treasurer.....   | Hon. C. T. Richard.....      | July 16, 1935        |
| President, Executive Council, Minister of Education, Federal and Municipal Relations..... | Hon. A. P. Paterson.....     | July 16, 1935        |
| Minister without Portfolio.....   | Hon. W. S. Anderson.....     | July 16, 1935        |

<sup>1</sup> Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

QUEBEC.

LIUTENANT-GOVERNORS.

| Name.                         | Date of Appointment.      | Name.                              | Date of Appointment. |
|-------------------------------|---------------------------|------------------------------------|----------------------|
| Sir Narcisse F. Belleau.....  | July 1, 1867              | Sir Charles A. P. Pelletier.....   | Sept. 4, 1898        |
| Sir Narcisse F. Belleau.....  | Jan. 31, 1868             | Sir François Langlois.....         | May 5, 1911          |
| René Edouard Caron.....       | Feb. 11, 1873             | Sir Pierre-Evariste Leblanc.....   | Feb. 9, 1915         |
| Luc Letellier de St-Just..... | Dec. 15, 1876             | Right Hon. Sir Charles Fitzpatrick | Oct. 21, 1918        |
| Théodore Robitaille.....      | July 26, 1879             | L. P. Brodeur.....                 | Oct. 31, 1923        |
| L. F. R. Masson.....          | Nov. 7, 1884              | N. Pérodeau.....                   | Jan. 8, 1924         |
| A. R. Angers.....             | Oct. 24, 1887             | Sir Lomer Gouin.....               | Jan. 10, 1926        |
| Sir Joseph A. Chapleau.....   | Dec. 5, 1892              | H. G. Carroll.....                 | April 2, 1929        |
| T. A. Jetté.....              | Feb. 2, 1898              | E. L. Patenaude.....               | May 3, 1934          |
| Sir Louis A. Jetté.....       | Feb. 2, 1903 <sup>1</sup> |                                    |                      |

<sup>1</sup> Second term.

LEGISLATURES, 1924 TO THE PRESENT.

| Date of Election. | Legislature. | No. of Sessions. | Date of First Opening. | Date of Dissolution. |
|-------------------|--------------|------------------|------------------------|----------------------|
| Feb. 15, 1923     | 16th.....    | 4                | Dec. 17, 1923.....     | April 19, 1927       |
| May 16, 1927      | 17th.....    | 4                | Jan. 10, 1928.....     | July 30, 1931        |
| Aug. 24, 1931     | 18th.....    | 4                | Nov. 3, 1931.....      | Oct. 30, 1933        |
| Nov. 25, 1933     | 19th.....    | 1                | Mar. 24, 1933.....     | June 11, 1936        |
| Aug. 17, 1933     | 20th.....    | 1                | Oct. 7, 1933.....      |                      |

MINISTRIES.

| Ministry. | Premier.                   | Date of Formation. | Ministry. | Premier.               | Date of Formation. |
|-----------|----------------------------|--------------------|-----------|------------------------|--------------------|
| 16        | Hon. L. A. Taschereau..... | July 8, 1920       | 18        | Hon. M. Duplessis..... | Aug. 24, 1936      |
| 17        | Hon. A. Godbout.....       | June 11, 1936      |           |                        |                    |

EIGHTEENTH MINISTRY.

| Office.   | Name.                        | Date of Appointment. |
|---|------------------------------|----------------------|
| Premier, President of the Council and Attorney General..... | Hon. Maurice Duplessis.....  | Aug. 24, 1936        |
| Minister of Lands and Forests.....                          | Hon. Maurice Duplessis.....  | Feb. 23, 1937        |
| Minister of Health and Provincial Secretary.....            | Hon. J. H. A. Faquette.....  | Aug. 24, 1936        |
| Minister of Public Works.....                               | Hon. J. S. Bourque.....      | Aug. 24, 1936        |
| Minister of Mines, Game and Fisheries.....                  | Hon. Onésime Gagnon.....     | Oct. 6, 1936         |
| Minister of Agriculture.....                                | Hon. Bona Dussault.....      | Aug. 24, 1936        |
| Provincial Treasurer.....                                   | Hon. M. B. Fisher.....       | Aug. 24, 1936        |
| Minister of Municipal Affairs, Trade and Commerce.....      | Hon. J. Bilodeau.....        | Aug. 24, 1936        |
| Minister of Colonization.....                               | Hon. H. L. Auger.....        | Aug. 24, 1936        |
| Minister of Roads.....                                      | Hon. F. J. Leduc.....        | Aug. 24, 1936        |
| Minister of Labour.....                                     | Hon. W. Tremblay.....        | Aug. 24, 1936        |
| Minister without Portfolio.....                             | Hon. Antonio Elie.....       | Aug. 24, 1936        |
| Minister without Portfolio.....                             | Hon. Sir Thomas Chapais..... | Oct. 6, 1936         |
| Minister without Portfolio.....                             | Hon. Gilbert Layton.....     | Aug. 24, 1936        |
| Minister without Portfolio.....                             | Hon. T. J. Coonan.....       | Aug. 24, 1936        |

<sup>1</sup> Life of Legislature not yet expired.

# 11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

## ONTARIO.

### LIEUTENANT-GOVERNORS.

| Name.                            | Date of Appointment. | Name.                             | Date of Appointment. |
|----------------------------------|----------------------|-----------------------------------|----------------------|
| Major-General H. W. Stisted..... | July 1, 1867         | Sir William Mortimer Clark.....   | April 20, 1903       |
| W. P. Howland.....               | July 14, 1868        | Sir John M. Gibson.....           | Sept. 22, 1908       |
| John W. Crawford.....            | Nov. 5, 1873         | Lt.-Col. Sir John S. Hendrie..... | Sept. 26, 1914       |
| D. A. Macdonald.....             | May 18, 1875         | Lionel H. Clarke.....             | Nov. 27, 1910        |
| John Beverly Robinson.....       | June 30, 1880        | Col. Henry Coekshutt.....         | Sept. 10, 1921       |
| Sir Alexander Campbell.....      | Feb. 8, 1887         | William Donald Ross.....          | Dec. 30, 1929        |
| Sir George A. Kirkpatrick.....   | May 30, 1892         | Col. Herbert Alexander Bruce..... | Oct. 25, 1932        |
| Sir Oliver Mowat.....            | Nov. 18, 1897        | Albert Matthews.....              | Nov. 30, 1937        |

### LEGISLATURES, 1924 TO THE PRESENT.

| Date of Election. | Legislature. | No. of Sessions. | Date of First Opening. | Date of Dissolution. |
|-------------------|--------------|------------------|------------------------|----------------------|
| June 25, 1923     | 16th.....    | 3                | Feb. 6, 1924.....      | Oct. 18, 1926        |
| Dec. 1, 1926      | 17th.....    | 2                | Feb. 2, 1927.....      | Sept. 16, 1929       |
| Oct. 30, 1929     | 18th.....    | 5                | Feb. 6, 1930.....      | May 16, 1934         |
| June 19, 1934     | 19th.....    | 3                | Feb. 20, 1935.....     | April 9, 1936        |
| Oct. 6, 1937      | 20th.....    | 1                | Dec. 1, 1937.....      |                      |

### MINISTRIES.

| Ministry. | Premier.               | Date of Formation. | Ministry. | Premier.              | Date of Formation. |
|-----------|------------------------|--------------------|-----------|-----------------------|--------------------|
| 9         | Hon. G. H. Ferguson... | July 16, 1923      | 11        | Hon. M. F. Hepburn... | July 10, 1934      |
| 10        | Hon. G. S. Henry.....  | Dec. 15, 1930      | 12        |                       |                    |

### ELEVENTH MINISTRY.

| Office.   | Name.                              | Date of Appointment. |
|---|------------------------------------|----------------------|
| President of the Council and Treasurer.....           | Hon. Mitchell Hepburn.....         | July 10, 1934        |
| Secretary and Registrar.....                          | Hon. Harry C. Nixon.....           | July 10, 1934        |
| Minister of Lands and Forests.....                    | Hon. Peter Heenan.....             | July 10, 1934        |
| Minister of Education.....                            | Hon. Leonard J. Simpson, M.D.....  | July 10, 1934        |
| Minister of Highways.....                             | Hon. Thomas B. McQuesten, K.C..... | July 10, 1934        |
| Minister of Mines.....                                | Hon. Paul Leduc, K.C.....          | July 10, 1934        |
| Minister of Health.....                               | Hon. Harold J. Kirby, K.C.....     | Oct. 12, 1937        |
| Minister of Labour.....                               | Hon. M. M. MacBride.....           | Oct. 12, 1937        |
| Minister of Agriculture.....                          | Hon. P. M. Dwan.....               | Oct. 12, 1937        |
| Minister of Public Works.....                         | Hon. Colin A. Campbell.....        | Oct. 12, 1937        |
| Attorney General.....                                 | Hon. Gordon D. Conant, K.C.....    | Oct. 12, 1937        |
| Minister of Municipal Affairs and Public Welfare..... | Hon. Eric W. B. Cross, K.C.....    | Oct. 12, 1937        |
| Minister without Portfolio.....                       | Hon. William L. Houck.....         | Oct. 12, 1937        |
| Minister without Portfolio.....                       | Hon. A. St. Clair Gordon.....      | Oct. 12, 1937        |

\* Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

MANITOBA.

LIUTENANT-GOVERNORS.

| Name.                           | Date of Appointment. | Name.                        | Date of Appointment.      |
|---------------------------------|----------------------|------------------------------|---------------------------|
| A. G. Archibald.....            | May 20, 1870         | Sir Daniel H. McMillan.....  | May 11, 1906 <sup>1</sup> |
| Francis Goodschall Johnson..... | April 9, 1872        | Sir Douglas C. Cameron.....  | Aug. 1, 1911              |
| Alexander Morris.....           | Dec. 2, 1872         | Sir James A. M. Aikins.....  | Aug. 3, 1916              |
| Joseph E. Cuthbert.....         | Dec. 2, 1877         | Sir James A. M. Aikins.....  | Aug. 7, 1921 <sup>1</sup> |
| James C. Aikins.....            | Sept. 22, 1882       | Theodore A. Burrows.....     | Oct. 9, 1926              |
| J. C. Schultz.....              | July 1, 1888         | J. D. McGregor.....          | Jan. 25, 1929             |
| J. C. Patterson.....            | Sept. 2, 1895        | William Johnston Tupper..... | Nov. 17, 1934             |
| Sir Daniel H. McMillan.....     | Oct. 16, 1900        |                              |                           |

<sup>1</sup> Second term.

LEGISLATURES, 1924 TO THE PRESENT.

| Date of Election. | Legislature. | No. of Sessions. | Date of First Opening. | Date of Dissolution. |
|-------------------|--------------|------------------|------------------------|----------------------|
| July 18, 1922     | 17th.....    | 6                | Jan. 18, 1923.....     | June 4, 1927         |
| June 28, 1927     | 18th.....    | 5                | Dec. 1, 1927.....      | May 7, 1932          |
| June 16, 1932     | 19th.....    | 4                | Feb. 14, 1933.....     | June 12, 1935        |
| July 27, 1936     | 20th.....    | 1                | Feb. 18, 1937.....     | 1                    |

MINISTRIES.

| Ministry. | Premier.             | Date of Formation. |
|-----------|----------------------|--------------------|
| 12        | Hon. J. Bracken..... | Aug. 8, 1922       |

TWELFTH MINISTRY.

| Office.   | Name.                       | Date of Appointment.              |
|---|-----------------------------|-----------------------------------|
| Premier, President of the Council, Provincial Secretary and Railway Commissioner.....   | Hon. John Bracken.....      | {Aug. 8, 1922<br>Jan. 12, 1925    |
| Attorney General, Minister of Telephones and Telegraphs and Municipal Commissioner..... | Hon. W. J. Major, K.C.....  | {April 29, 1927<br>Sept. 21, 1936 |
| Minister of Public Works and Labour.....  | Hon. W. B. Clabb.....       | Aug. 8, 1922                      |
| Minister of Agriculture and Immigration.....  | Hon. D. L. Campbell.....    | Sept. 21, 1936                    |
| Minister of Education.....  | Hon. Ivan Schultz, K.C..... | Sept. 21, 1936                    |
| Minister of Health and Public Welfare.....  | Hon. I. B. Griffiths.....   | May 28, 1935                      |
| Minister of Mines and Natural Resources.....  | Hon. J. S. McDiarmid.....   | May 27, 1932                      |
| Provincial Treasurer.....   | Hon. S. S. Garsen, K.C..... | Sept. 21, 1936                    |
| Minister without Portfolio.....   | Hon. S. Marcoux.....        | Sept. 21, 1936                    |

<sup>1</sup> Life of Legislature not yet expired.



# 11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

## SASKATCHEWAN.

### LIEUTENANT-GOVERNORS.

| Name.                        | Date of Appointment. | Name.                             | Date of Appointment.       |
|------------------------------|----------------------|-----------------------------------|----------------------------|
| A. E. Forget.....            | Sept. 1, 1905        | H. W. Newlands.....               | Feb. 22, 1926 <sup>1</sup> |
| George W. Brown.....         | Oct. 5, 1910         | Lt.-Col. H. E. Munroe, O.B.E..... | Mar. 31, 1931              |
| Sir Richard Stuart Lake..... | Oct. 6, 1915         | A. P. McNab.....                  | Oct. 1, 1936               |
| H. W. Newlands.....          | Feb. 17, 1921        |                                   |                            |

<sup>1</sup> Second term.

### LEGISLATURES, 1924 TO THE PRESENT.

| Date of Election. | Legislature. | No. of Sessions. | Date of First Opening. | Date of Dissolution. |
|-------------------|--------------|------------------|------------------------|----------------------|
| June 2, 1925      | 6th.....     | 4                | Dec. 3, 1925.....      | May 11, 1929         |
| June 6, 1929      | 7th.....     | 6                | Sept. 4, 1929.....     | May 25, 1934         |
| June 19, 1934     | 8th.....     | 1                | Nov. 15, 1934.....     | 1                    |

### MINISTRIES.

| Ministry. | Premier.                | Date of Formation. | Ministry. | Premier.                | Date of Formation. |
|-----------|-------------------------|--------------------|-----------|-------------------------|--------------------|
| 3         | Hon. C. A. Dunning....  | Oct. 20, 1916      | 6         | Hon. J. G. Gardiner...  | July 19, 1934      |
| 4         | Hon. J. G. Gardiner.... | Feb. 26, 1926      | 7         | Hon. W. J. Patterson... | Nov. 1, 1935       |
| 5         | Hon. J. T. M. Anderson. | Sept. 9, 1929      |           |                         |                    |

### SEVENTH MINISTRY.

| Office.  | Name.                       | Date of Appointment. |
|--|-----------------------------|----------------------|
| Premier, President of the Council, Provincial Treasurer and Minister of Telephones and Telegraphs.   | Hon. W. J. Patterson.....   | Nov. 1, 1935         |
| Attorney General and Minister in Charge of the Loan Companies Act and Trust Companies Act.....   | Hon. T. C. Davis, K.C.....  | July 19, 1934        |
| Minister of Public Health and Provincial Secretary, and Minister in Charge of the Theatres and Cinematographs Act and the Travelling Shows Act..                                 | Hon. J. M. Uhrich, M.D..... | July 19, 1934        |
| Minister of Education.....   | Hon. J. W. Estey, K.C.....  | July 19, 1934        |
| Minister of Agriculture.....   | Hon. J. G. Taggart.....     | July 19, 1934        |
| Minister of Municipal Affairs, Minister in Charge of the Employment Agencies Act, the Mines Act, the Minimum Wage Act, and Bureau of Labour and Public Welfare.....              | Hon. R. J. M. Parker.....   | July 19, 1934        |
| Minister of Natural Resources and Minister in Charge of the Saskatchewan Insurance Act, the Fire Prevention Act and the Prairie and Forest Fires Act.                            | Hon. W. F. Kerr.....        | Nov. 5, 1935         |
| Minister of Public Works and Minister in Charge of the Steam Boilers Act, and the Saskatchewan Power Commission Act.....   | Hon. George Spence.....     | July 19, 1934        |
| Minister of Highways and Transportation, Minister in Charge of the Public Printing Act, the Bureau of Publications Act, the Child Welfare Act, and the Old Age Pensions Act..... | Hon. C. M. Dunn.....        | July 19, 1934        |

<sup>1</sup> Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

ALBERTA.

LEUTENANT-GOVERNORS.

| Name.                    | Date of Appointment.       | Name.                      | Date of Appointment. |
|--------------------------|----------------------------|----------------------------|----------------------|
| George H. V. Bulyea..... | Sept. 1, 1905              | William Egbert.....        | Oct. 20, 1925        |
| George H. V. Bulyea..... | Oct. 5, 1910 <sup>1</sup>  | William L. Walsh.....      | April 24, 1931       |
| Robert George Brett..... | Oct. 6, 1915               | Philip C. H. Primrose..... | Oct. 1, 1936         |
| Robert George Brett..... | Oct. 20, 1920 <sup>1</sup> | J. C. Bowen.....           | Mar. 20, 1937        |

<sup>1</sup> Second term.

LEGISLATURES, 1924 TO THE PRESENT.

| Date of Election. | Legislature. | No. of Sessions. | Date of First Opening. | Date of Dissolution. |
|-------------------|--------------|------------------|------------------------|----------------------|
| July 18, 1921     | 5th.....     | 6                | Feb. 2, 1922.....      | May 25, 1926         |
| June 28, 1926     | 6th.....     | 4                | Feb. 10, 1927.....     | May 10, 1930         |
| June 19, 1930     | 7th.....     | 5                | Jan. 29, 1931.....     | July 22, 1935        |
| Aug. 22, 1935     | 8th.....     | <sup>1</sup>     | Feb. 6, 1936.....      | <sup>1</sup>         |

MINISTRIES.

| Ministry. | Premier.                | Date of Formation. | Ministry. | Premier.             | Date of Formation. |
|-----------|-------------------------|--------------------|-----------|----------------------|--------------------|
| 4         | Hon. Herbert Greenfield | Aug. 13, 1921      | 6         | Hon. R. G. Reid..... | July 10, 1934      |
| 5         | Hon. J. E. Brownlee...  | Nov. 23, 1925      | 7         | Hon. Wm. Aberhart... | Sept. 3, 1935      |

SEVENTH MINISTRY.

| Office.   | Name.                       | Date of Appointment. |
|---|-----------------------------|----------------------|
| Premier and Minister of Education.....                                | Hon. William Aberhart.....  | Sept. 3, 1935        |
| Attorney General.....   | Hon. William Aberhart.....  | Sept. 15, 1937       |
| Provincial Treasurer.....   | Hon. Solon Low.....         | Feb. 2, 1937         |
| Minister of Lands and Mines.....                                      | Hon. Nathan E. Tanner.....  | Jan. 5, 1937         |
| Minister of Agriculture.....  | Hon. D. B. Mullen.....      | May 1, 1937          |
| Minister of Public Works and Minister of Railways and Telephones..... | Hon. William A. Fallow..... | Sept. 3, 1935        |
| Minister of Health.....   | Hon. W. W. Cross, M.D.....  | Sept. 3, 1935        |
| Provincial Secretary and Minister of Trade and Industry.....          | Hon. E. C. Manning.....     | Sept. 3, 1935        |
| Minister of Municipal Affairs.....                                    | Hon. Lucien Maynard.....    | Jan. 20, 1937        |

<sup>1</sup> Life of Legislature not yet expired.

# 11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1921 to the Present—continued.

## BRITISH COLUMBIA.

### LIEUTENANT-GOVERNORS.

| Name.                                | Date of Appointment. | Name.                      | Date of Appointment. |
|--------------------------------------|----------------------|----------------------------|----------------------|
| J. W. Trutch.....                    | July 20, 1871        | T. W. Patterson.....       | Dec. 3, 1909         |
| Albert Norton Richards.....          | July 20, 1876        | Sir Frank S. Barnard.....  | Dec. 5, 1914         |
| Clement F. Cornwall.....             | July 20, 1881        | Col. Edward G. Prior.....  | Dec. 9, 1919         |
| Hugh Nelson.....                     | Feb. 8, 1887         | Walter C. Nichol.....      | Dec. 24, 1920        |
| Edgar Dewdney.....                   | Nov. 1, 1892         | R. Randolph Bruce.....     | Jan. 21, 1926        |
| Thomas R. McInnes.....               | Nov. 18, 1897        | J. W. Fordham Johnson..... | Aug. 1, 1931         |
| Sir Henri G. Joly de Lotbinière..... | June 21, 1900        | Erie W. Hamber.....        | May 1, 1936          |
| James Dunsmuir.....                  | May 11, 1906         |                            |                      |

### LEGISLATURES, 1924 TO THE PRESENT.

| Date of Election. <sup>1</sup> | Legislature. | No. of Sessions. | Date of First Opening. | Date of Dissolution. |
|--------------------------------|--------------|------------------|------------------------|----------------------|
| June 20, 1924                  | 16th.....    | 4                | Nov. 3, 1924.....      | June 7, 1928         |
| July 18, 1928                  | 17th.....    | 5                | Jan. 22, 1929.....     | Aug. 1, 1933         |
| Nov. 2, 1933                   | 18th.....    | 4                | Feb. 20, 1934.....     | April 15, 1937       |
| June 1, 1937                   | 19th.....    | 1                | Oct. 20, 1937.....     | <sup>1</sup>         |

### MINISTRIES.

| Ministry. | Premier.               | Date of Formation. | Ministry. | Premier.                | Date of Formation. |
|-----------|------------------------|--------------------|-----------|-------------------------|--------------------|
| 19        | Hon. John Oliver.....  | Mar. 6, 1918       | 21        | Hon. S. F. Tolmie.....  | Aug. 21, 1928      |
| 20        | Hon. J. D. MacLean.... | Aug. 20, 1927      | 22        | Hon. T. D. Pattullo.... | Nov. 15, 1933      |

### TWENTY-SECOND MINISTRY.

| Office.  | Name.                       | Date of Appointment. |
|--|-----------------------------|----------------------|
| Premier and President of Executive Council.....                    | Hon. T. D. Pattullo.....    | Nov. 15, 1933        |
| Minister of Finance.....   | Hon. John Hart.....         | Nov. 15, 1933        |
| Provincial Secretary and Minister of Education....                 | Hon. G. M. Weir.....        | Nov. 15, 1933        |
| Attorney General.....  | Hon. G. S. Wismer.....      | July 5, 1937         |
| Minister of Lands and Municipalities.....                          | Hon. A. Wellesley Gray..... | Nov. 15, 1933        |
| Minister of Agriculture.....                                       | Hon. K. C. MacDonald.....   | Nov. 15, 1933        |
| Minister of Railways and Labour and Commissioner of Fisheries..... | Hon. G. S. Pearson.....     | Nov. 15, 1933        |
| Minister of Public Works.....                                      | Hon. F. M. MacPherson.....  | Nov. 15, 1933        |
| Minister of Mines and Trade and Industry.....                      | Hon. W. J. Asseltine.....   | Dec. 23, 1937        |

<sup>1</sup> Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—concluded.

THE TERRITORIES.

NOTE.—In 1888 the districts of Alberta, Assiniboia, Athabaska, and Saskatchewan, then called the Northwest Territories, with their capital at Regina, were given local responsible government, and the old Northwest Council was replaced by the Northwest Legislature, which existed until Aug. 31, 1905. When the area included in these districts was formed into the provinces of Alberta and Saskatchewan, on Sept. 1, 1905, those provinces were given systems of government similar to the other provinces of the Dominion. The remaining areas (Yukon and the provisional districts of Franklin, Keewatin, and Mackenzie) are now administered by the Lands, Parks and Forests Branch, Department of Mines and Resources. The Deputy Minister of the Department is, *ex officio*, the Commissioner of the Northwest Territories, which comprises the three provisional districts.

LIEUTENANT-GOVERNORS.

| Name.                           | Date of Appointment. | Name.                 | Date of Appointment.       |
|---------------------------------|----------------------|-----------------------|----------------------------|
| A. G. Archibald.....            | May 10, 1870         | Joseph Royal.....     | July 1, 1888               |
| Francis Goodschall Johnson..... | April 9, 1872        | C. H. Mackintosh..... | Oct. 31, 1893              |
| Alexander Morris.....           | Dec. 2, 1872         | M. C. Cameron.....    | May 30, 1898               |
| David Laird.....                | Oct. 7, 1876         | A. E. Forget.....     | Oct. 11, 1898              |
| Edgar Dewdney.....              | Dec. 3, 1881         | A. E. Forget.....     | Mar. 30, 1904 <sup>1</sup> |

<sup>1</sup> Second term.

PART IV.—REPRESENTATIVES IN OTHER COUNTRIES.\*

Section 1.—Representatives Within the Empire.

The policy of the early North American colonies, of maintaining in London accredited representatives for business and diplomatic purposes, was recognized in the eighteenth century as being a more satisfactory means of communication with the British Government than that provided by occasional official visits or by correspondence. Of the Canadian colonies, Nova Scotia was the first to adopt this plan, its Legislature having appointed an Agent in London in 1761. New Brunswick was similarly represented in 1786, Upper Canada as early as 1794, Lower Canada in 1812 and British Columbia in 1857. Following Confederation, several of the provinces continued to adhere to, and in certain cases enlarge upon, the practice to the extent of themselves appointing Crown Agents or Agents General. Such developments as have taken place are dealt with on p. 92 of the 1934-35 Year Book.

**The High Commissioner for Canada.**—With the federation of the provinces of British North America in 1867, a new political entity which could not avail itself of the services of the provincial Agents was brought into existence. To supplement the ordinary method of communication between the Canadian and British Governments, which at that time was by correspondence between the Governor General and the Secretary of State for the Colonies, the position of High Commissioner for Canada was created in 1880 (see R.S.C. 1927, c. 92). The duties of the office are defined in the Act as follows:—

“The High Commissioner shall—

“(a) act as representative and resident agent of Canada in Great Britain and in that capacity execute such powers and perform such duties as are, from time to time, conferred upon and assigned to him by the Governor in Council;

\* Revised by the Department of External Affairs, Ottawa. An annual report on the organization and activities of Canadian Government representation abroad is contained in the Report of the Department of External Affairs, which may be obtained from the King's Printer, price 25 cents.

- "(b) take the charge, supervision and control of the immigration offices and agencies in Great Britain, under the Minister of Immigration and Colonization;
- "(c) carry out such instructions as he, from time to time, receives from the Governor in Council respecting the commercial, financial and general interests of Canada in Great Britain and elsewhere."

Sir Alexander Galt was the first Canadian High Commissioner, holding office from May 11, 1880, until May, 1883; in 1884 he was succeeded by Sir Charles Tupper. Lord Strathcona and Mount Royal was appointed in 1896. Sir George H. Perley took charge of the High Commissioner's Office in 1914 but was appointed High Commissioner only on Oct. 12, 1917. The Hon. P. C. Larkin was appointed in February, 1922, and after his decease (Feb. 3, 1930) the Hon. G. Howard Ferguson was appointed on Nov. 28, 1930. On Nov. 8, 1935, the Hon. Vincent Massey succeeded Mr. Ferguson in this post. The office of the High Commissioner for Canada is in Canada House, Trafalgar Square, London, S.W. 1.

**High Commissioner of the United Kingdom in Canada.**—His Majesty's Government in the United Kingdom in April, 1928, appointed a High Commissioner in Canada, Sir William H. Clark, who was succeeded in January, 1935, by Sir Francis Floud, K.C.B. The High Commissioner resides in Ottawa, and his position corresponds to that of the High Commissioner for Canada in the United Kingdom. This appointment was made in consequence of discussions at the Imperial Conference of 1926. The relevant passage in the report of the Inter-Imperial Relations Committee runs as follows:—

"A special aspect of the question of consultation which we considered was that concerning the representation of Great Britain in the Dominions. By reason of his constitutional position, as explained in Section IV (b) of this report, the Governor General is no longer the representative of His Majesty's Government in Great Britain. There is no one therefore in the Dominion capitals in a position to represent with authority the views of His Majesty's Government in Great Britain.

"We summed up our conclusions in the following resolution which is submitted for the consideration of the Conference:—

"The Governments represented at the Imperial Conference are impressed with the desirability of developing a system of personal contact, both in London and in the Dominion capitals, to supplement the present system of intercommunication and the reciprocal supply of information on affairs requiring joint consideration. The manner in which any new system is to be worked out is a matter for consideration and settlement between His Majesty's Governments in Great Britain and the Dominions, with due regard to the circumstances of each particular part of the Empire, it being understood that any new arrangements should be supplementary to, and not in replacement of, the system of direct communication from Government to Government and the special arrangements which have been in force since 1918 for communications between Prime Ministers'."

## Section 2.—Diplomatic Representation Abroad.

**The Canadian Minister to the United States.**—For many years the diplomatic business between Canada and the United States has been steadily increasing as the natural result of the proximity of the two countries and the closeness of the business relationships between their citizens. Before the Great War, a former British Ambassador at Washington, Lord Bryce, said that between two-

thirds and three-quarters of the work of the British Embassy in the United States was occasioned by Canadian affairs.

In January, 1918, a temporary Canadian War Mission was established at Washington, under the chairmanship of Mr. Lloyd Harris, and was maintained for some years after the close of the War. Though not a formal diplomatic mission, its duties extended to questions usually dealt with through diplomatic channels. After the retirement of this mission, Canada was represented in Washington by Mr. M. M. Mahoney, who acted as agent of the Department of External Affairs, and, through the courtesy of the British Government, occupied an office at the British Embassy.

In 1920, following discussions between the British and Canadian Governments, it was announced that agreement had been reached upon the appointment of a Canadian Minister at Washington, who would act for the British Ambassador in the latter's absence. No appointment was made until Nov. 26, 1926, when, after decision to omit the arrangement that the Canadian Minister should substitute for the British Ambassador, Hon. Vincent Massey was appointed as His Majesty's Envoy Extraordinary and Minister Plenipotentiary in the United States of America to represent the interests of the Dominion of Canada. Mr. Massey took up his duties in February, 1927, and held office until July 23, 1930. Hon. W. D. Herridge, who was appointed Minister to the United States on Mar. 7, 1931, resigned his appointment Oct. 23, 1935. The Hon. Sir Herbert Marler, K.C.M.G., presented his credentials as Canadian Minister on Oct. 20, 1936. The Canadian Legation in Washington is situated at 1746 Massachusetts Avenue.

**The Canadian Minister to France.**—For many years the Canadian Government maintained an agency at Paris. The post was first occupied in 1882 by Hon. Hector Fabre, who also represented for a time the Government of Quebec. After his death Hon. Philippe Roy was appointed in May, 1911, with the title of Commissioner General of Canada in France. In 1928 an exchange of Ministers was agreed upon between Canada and France, and in September of that year Hon. Philippe Roy was appointed as His Majesty's Envoy Extraordinary and Minister Plenipotentiary in France to represent the interests of the Dominion of Canada. The Canadian Legation in Paris is situated at No. 1, rue François premier.

**The Canadian Minister to Japan.**—In 1928 an exchange of Ministers was agreed upon between the Governments of Canada and Japan, and Hon. H. M. Marler was appointed in 1929 as His Majesty's Envoy Extraordinary and Minister Plenipotentiary in Japan to represent the interests of the Dominion of Canada. On his appointment as Canadian Minister at Washington he was succeeded by the Hon. R. Randolph Bruce, who presented his credentials to the Emperor of Japan on Nov. 7, 1936. The Canadian Legation is at 16 Omote-Cho, Sancho-me, Akasaka-Ku, Tokyo.

**The Permanent Delegate of Canada to the League of Nations.**—The practice of appointing permanent representatives at Geneva accredited to the League of Nations has been largely followed by those nations which are situated at a distance from Geneva. It was found that, while countries adjacent to the seat of the League were able, without difficulty, to include in the personnel of their delegations to the Assembly and Council various advisers and assistants at a minimum of expense, distant countries were at a disadvantage in this respect. Canada's duties as a member of the Assembly and of the International Labour Conference, and as one of the countries represented on the Governing Body of the International

Labour Office, made this disadvantage especially felt. Accordingly, the position of Dominion of Canada Advisory Officer, League of Nations, was created and Dr. W. A. Riddell was appointed to the post on Jan. 1, 1925. He was succeeded by Mr. H. H. Wrong on Oct. 25, 1937.

The duties of the Permanent Delegate are "to establish and maintain as close relations as possible with the Secretariats of the League of Nations and the International Labour Office", to "communicate with the Government of Canada as to all matters arising and requiring its attention", and to "act in all such matters in an advisory capacity to the Government of Canada and to delegates from the Government of Canada to conferences arising out of the organizations before-named". The office of the Canadian Permanent Delegate is situated at 41, Quai Wilson, Geneva.

### Section 3.—Diplomatic Representation in Canada.

Reference has been made in Section 2 to the beginnings of a Canadian diplomatic service with the appointment of the Hon. Vincent Massey as Canadian Minister at Washington, in 1926, and its extension to France and Japan. These countries have all reciprocated by establishing legations in Ottawa through which their governments transact diplomatic business direct with the Canadian government. In addition, Belgium is also represented by an Envoy Extraordinary and Minister Plenipotentiary in Ottawa.

The following list gives the addresses of the legations with the dates of establishment and the present Ministers:—

#### Legation of the United States of America: (Established 1927.)

*Address:* Wellington Street, Ottawa. *Envoy Extraordinary and Minister Plenipotentiary:* (Vacant as at Mar. 26, 1938, *Chargé d'Affaires, ad interim*, Mr. J. F. Simmons.)

#### Legation of France: (Established 1928.)

*Address:* 42 Sussex Street, Ottawa. *Envoy Extraordinary and Minister Plenipotentiary:* Count Robert Daupierre.

#### Legation of Japan: (Established 1928.)

*Address:* 140 Wellington Street, Ottawa. *Envoy Extraordinary and Minister Plenipotentiary:* Minister Designate as at Mar. 26, 1938, Baron Tomii.

#### Legation of Belgium: (Established 1937.)

*Address:* Stadacona Hall, 395 Laurier Avenue East, Ottawa. 680 Sherbrooke Street West, Montreal. *Envoy Extraordinary and Minister Plenipotentiary:* Baron Silvercruyts.

## PART V.—CANADA AND THE LEAGUE OF NATIONS.\*

The League of Nations is an association of fully self-governing States whose relations are governed by the Covenant. The League of Nations acts through an Assembly and Council composed of representatives of Governments. Fifty-eight States are at present Members of the League, as compared with forty-two at the

\* The League of Nations Society in Canada, 124 Wellington St., Ottawa, is the authorized agent for the publications of the League of Nations.

time of the first Assembly in 1920. Canada, as a signatory of the Treaties of Peace, is an original Member of the League.

The League of Nations has two aims: (1) to preserve peace and to seek a settlement of international disputes; and (2) to organize in the most varied spheres co-operation of peoples, with a view to the material and moral welfare of humanity.

The Covenant, which constitutes the fundamental charter of the League of Nations was drafted in 1919 by a Commission of the Peace Conference and inserted at the head of the several Treaties of Peace. It came into force on Jan. 10, 1920.

**The Organs of the League.**—The organs of the League are:—

- (a) The Assembly;
- (b) The Council;
- (c) The Secretariat;
- (d) The International Labour Organization, (see Chapter XIX);
- (e) The Permanent Court of International Justice.

*The Assembly.*—The Assembly consists of representatives of the members of the League, and meets annually in ordinary session each September in Geneva. At the 18th Assembly in September, 1937, the Canadian Delegates were the Hon. Raoul Dandurand, the Hon. J. L. Ilsley and the Hon. Vincent Massey.\*

*The Council.*—The Council, which originally consisted of five permanent members and four non-permanent members, now consists of four permanent members (the British Empire, France, Italy, and the U.S.S.R.) together with eleven non-permanent members elected for three years from among the States Members of the League. The non-permanent members of the Council are at present as follows: Ecuador, Poland, and Roumania, terms expiring in 1938; Bolivia, China, Latvia, New Zealand, and Sweden, terms expiring in 1939; Belgium, Iran, and Peru, terms expiring in 1940. Canada was a member of the Council of the League from 1927 to 1930.

The Council, which normally meets four times a year and more frequently if circumstances should require it to do so, may deal at its meetings with any matter within the sphere of action of the League or affecting the peace of the world.

*The Secretariat.*—The Permanent Secretariat is the Civil Service of the League. The staff is appointed by the Secretary General with the approval of the Council. The officials of the Secretariat of the League are exclusively international officials, having international and not national duties. The first Secretary General, Sir Eric Drummond, who was named in the Annex to the Covenant, resigned in 1933 and was succeeded by M. Joseph Avenol, who is assisted by three Deputy Secretaries General and by one Under-Secretary General.

*Permanent Court of International Justice.*—The Permanent Court of International Justice was established by the Protocol of Dec. 16, 1920, in accordance with Article 14 of the Covenant of the League of Nations. It is composed of a body of fifteen judges elected by the Assembly and Council of the League of Nations for a term of nine years, and sits at The Hague. The Court is competent to hear and determine any dispute of an international character which the parties thereto submit to it; it may also give an advisory opinion upon any dispute or question referred to it by the Council or the Assembly. Article 36 of the Statute of the

\* The Report of the Canadian Delegates to the Eighteenth Assembly of the League of Nations is obtainable from the King's Printer, Ottawa, price 10 cents.



Court provides that any State may recognize as compulsory, the jurisdiction of the Court in all or any classes of legal dispute concerning:—

- (a) The interpretation of a Treaty.
- (b) Any question of international law.
- (c) The existence of any fact which, if established, would constitute a breach of an international obligation, and the nature and extent of the reparations to be made for the breach of the international obligation.

Canada has been a member of the Court from its establishment, and in 1929 accepted, subject to certain reservations, the compulsory jurisdiction of the Court in the cases contemplated in Article 36.

**The Budget of the League.**—The expenditure of the League is covered by the contributions of States Members which are fixed in accordance with a scale which takes into account the population, area, and public revenue of each State concerned. The budget for the year 1938 was 22,682,148 gold francs reduced after taking account of the returnable surplus to 20,806,753 gold francs. This net sum included 10,202,404 gold francs for the work of the Assembly, Council, and Secretariat; 5,408,135 gold francs for the International Labour Organization, and 1,878,035 gold francs for the Permanent Court of International Justice; the balance of 8,318,178 gold francs is allocated to buildings and pensions. Canada's share of this net assessment is 35/932 of the total, or 780,114·20 gold francs.

**Membership of the League of Nations.**—The States which are Members of the League (January, 1938) are as follows:—

|                       |                          |  |
|-----------------------|--------------------------|--|
| Afghanistan           | Finland                  | Panama   |
| Union of South Africa | France                   | Paraguay <sup>1</sup>                                |
| Albania               | Greece                   | Peru   |
| Argentina Republic    | Guatemala                | Poland   |
| Australia             | Haiti                    | Portugal   |
| Austria               | Honduras <sup>1</sup>    | Roumania   |
| Belgium               | Hungary                  | Salvador <sup>1</sup>                                |
| Bolivia               | India                    | Siam   |
| Bulgaria              | Iran                     | Soviet Socialist Republics, Union of                 |
| Canada                | Iraq                     | Spain  |
| Chile                 | Irish Free State         | Sweden   |
| China                 | Italy <sup>1</sup>       | Switzerland  |
| Colombia              | Latvia                   | Turkey   |
| Cuba                  | Liberia                  | United Kingdom of Great Britain and Northern Ireland |
| Czechoslovakia        | Lithuania                | Uruguay  |
| Denmark               | Luxemburg                | Venezuela  |
| Dominican Republic    | Mexico, United States of | Yugoslavia   |
| Ecuador               | Netherlands              |  |
| Egypt                 | New Zealand              |  |
| Ethiopia              | Nicaragua <sup>1</sup>   |  |
| Estonia               | Norway                   |  |

<sup>1</sup> By a communication dated June 22, 1936, Honduras gave notice of her intention to withdraw from the League of Nations, in accordance with Article 1, paragraph 3, of the Covenant. Paraguay and Nicaragua manifested the same intention by telegram dated Feb. 23, 1935, and June 26, 1936, respectively. Salvador gave notice on July 23, 1937, and Italy on Dec. 1, 1937, of their intention of withdrawing from the League.

## CHAPTER IV.—POPULATION.\*

The Population chapter of the Year Book is a *précis* of the results of investigations into the number and the constitution of the population made in the seven censuses of Canada since Confederation, summarizing the growth and distribution of population between 1871 and 1931, as shown by the successive decennial censuses, in regard to the chief matters investigated at the censuses. Owing to the extent of the field covered, it is quite impossible to include in each edition of the Year Book a full digest of population statistics. The policy adopted, therefore, is to maintain the skeleton of the chapter and the historical tables as a permanent feature and build up each section as statistics are available following each census. After complete and accurate summary statistics have been given publicity, the chapter is cut down to skeleton limits, with adequate references, until the next census. The 1934-35 Year Book gave at pp. 93-169 as complete a picture of the 1931 census statistics as will appear in one Year Book. In the present edition, the chapter has been cut down except in regard to Section 15—Occupations of the People—which subject has not previously received treatment for the Census of 1931.

Under the Canadian constitution, the legal *raison d'être* of the census is to determine representation in the House of Commons; after each decennial census a redistribution of seats in the House, following the course of the movement of population, is made in the manner described on pp. 101-102 of this volume. But the census, especially since the introduction of methods of mechanical tabulation, has become far more than a mere counting of heads. It is a great periodical stock-taking of the people and their affairs, designed to show as fully as possible the stage which has been reached in the progress of the nation. Thus the numbers, local distribution, age, sex, racial origin, nationality, language, religion, education, housing, and occupations of the people, severally, constitute investigations of enormous importance, to which all the continuous and routine statistics collected in the ordinary course of administration must be related if their full value is to be realized. The census, in fine, rounds out and completes the scheme of information upon which the Government relies in conducting the business of the country.

On account of the requirements as to parliamentary representation and the payment of provincial subsidies, which are based on population, the Canadian census is taken on the *de jure* principle; i.e., each person is counted as belonging to the locality in which he is regularly domiciled, irrespective of where he may be at the date of the enumeration. Under the *de facto* method, adopted in the United Kingdom, each individual is counted as belonging to the locality where he is found on the census date. The *de facto* method is undoubtedly simpler, but the *de jure* plan better portrays the permanent condition of the population. The chief difficulty in the application of the latter method is found in connection with holiday resorts, in the segregation of "visitors" and the tracing of "absentees". A date prior to the opening of the holiday season is accordingly chosen for the date of the census. In the Canadian census, students and inmates of hospitals are assigned to their home localities, while inmates of prisons, gaols, lunatic asylums, etc., are counted where found.

\* This chapter has been revised by A. J. Pelletier, F.S.S., Chief, Demography Branch, Dominion Bureau of Statistics. A list of the publications of this Branch will be found in Chapter XXIX, Section 1, under "Population".



### 3.—Population of Canada, by Provinces and Territories, in 1871 and 1931, Numerical Increase in each Decade from 1871 to 1931 and Total Increase.

| Province or Territory.    | Population in 1871. | Increase in each Decade from 1871 to 1931. |                |                |                  |                      |                  | Population in 1931. | Increase 1871 to 1931. |
|---------------------------|---------------------|--|----------------|----------------|------------------|----------------------|------------------|---------------------|------------------------|
|                           |                     | 1871 to 1881.                              | 1881 to 1891.  | 1891 to 1901.  | 1901 to 1911.    | 1911 to 1921.        | 1921 to 1931.    |                     |                        |
|                           |                     | No.  | No.            | No.            | No.              | No.                  | No.              |                     |                        |
| P.E. Island.....          | 94,021              | 14,870                                     | 187            | -5,819         | -9,531           | -5,113               | -577             | 88,038              | -5,983                 |
| N.S.....                  | 387,800             | 52,772                                     | 9,824          | 9,178          | 32,764           | 31,499               | -10,991          | 512,846             | 125,046                |
| N.B.....                  | 285,594             | 35,639                                     | 30             | 9,857          | 20,709           | 35,987               | 20,343           | 408,219             | 122,625                |
| Que.....                  | 1,191,516           | 167,511                                    | 129,508        | 100,363        | 356,878          | 354,889 <sup>1</sup> | 513,599          | 2,874,255           | 1,682,739              |
| Ont.....                  | 1,620,851           | 306,071                                    | 187,399        | 68,626         | 344,345          | 406,370              | 498,021          | 3,431,083           | 1,810,232              |
| Man.....                  | 25,228              | 37,032                                     | 90,240         | 102,705        | 206,183          | 145,724              | 90,021           | 700,130             | 674,911                |
| Sask.....                 | -                   | -  | -              | 91,279         | 401,153          | 265,075              | 164,275          | 921,785             | 921,785                |
| Alta.....                 | -                   | -  | -              | 73,022         | 301,273          | 214,159              | 143,151          | 731,005             | 731,005                |
| B.C.....                  | 36,247              | 13,212                                     | 48,714         | 80,484         | 213,823          | 132,102              | 169,681          | 604,263             | 668,016                |
| Yukon.....                | -                   | -  | -              | 27,219         | -18,707          | -4,355               | 73               | 4,230               | 4,230                  |
| N.W.T. <sup>2</sup> ..... | 48,000              | 8,446                                      | 42,521         | -78,838        | -13,622          | 1,481                | 1,735            | 9,723               | -38,277                |
| Royal Cdn. Navy.....      | -                   | -  | -              | -              | -                | 485                  | -                | -                   | -                      |
| <b>Canada.....</b>        | <b>3,689,257</b>    | <b>635,553</b>                             | <b>508,429</b> | <b>538,076</b> | <b>1,835,328</b> | <b>1,581,306</b>     | <b>1,588,837</b> | <b>10,376,786</b>   | <b>6,687,529</b>       |

<sup>1</sup> Revised in accordance with the Labrador Award of the Privy Council, Mar. 1, 1927.

<sup>2</sup> The decreases shown in the population of the Northwest Territories since 1891 are due to the separation therefrom of vast areas to form Alberta, Saskatchewan, and Yukon and to extend the boundaries of Quebec, Ontario, and Manitoba. <sup>3</sup> Members of the Royal Canadian Navy were counted in their homes in the Census of 1931.

### 4.—Population of Canada, by Provinces and Territories, in 1871, and Increase Per Cent, by Decades, from 1871 to 1931.

| Province or Territory.                   | Population in 1871. | Increase Per Cent in each Decade from 1871 to 1931. |               |               |               |                    |               | Increase Per Cent in 60 Years. |
|--|---------------------|---|---------------|---------------|---------------|--------------------|---------------|--------------------------------|
|  |                     | 1871 to 1881.                                       | 1881 to 1891. | 1891 to 1901. | 1901 to 1911. | 1911 to 1921.      | 1921 to 1931. |                                |
|  |                     | No.   | p.c.          | p.c.          | p.c.          | p.c.               | p.c.          |                                |
| Prince Edward Island.....                | 94,021              | 15.82   | 0.17          | -5.33         | -9.23         | -5.46              | -0.65         | -6.36                          |
| Nova Scotia.....                         | 387,800             | 13.61   | 2.23          | 2.04          | 7.13          | 8.40               | -2.10         | 32.24                          |
| New Brunswick.....                       | 285,594             | 12.48   | 0.61          | 3.07          | 6.27          | 10.23              | 5.24          | 42.04                          |
| Quebec.....                              | 1,191,516           | 14.06   | 9.33          | 10.77         | 21.64         | 17.60 <sup>1</sup> | 21.76         | 141.23                         |
| Ontario.....                             | 1,620,851           | 18.88   | 9.73          | 3.25          | 15.77         | 16.08              | 16.98         | 111.72                         |
| Manitoba.....                            | 25,228              | 146.79  | 144.95        | 67.34         | 80.79         | 32.23              | 14.75         | 2,676.25                       |
| Saskatchewan.....                        | -                   | -   | -             | -             | 439.48        | 53.83              | 21.69         | -                              |
| Alberta.....                             | -                   | -   | -             | -             | 412.58        | 57.22              | 24.33         | -                              |
| British Columbia.....                    | 36,247              | 36.45   | 98.49         | 81.98         | 119.08        | 33.66              | 32.85         | 1,815.37                       |
| Yukon.....                               | -                   | -   | -             | -             | -68.73        | -51.16             | 1.76          | -                              |
| Northwest Territories <sup>2</sup> ..... | 48,000              | 17.60   | 75.33         | -79.66        | -67.67        | 22.76              | 21.72         | -70.74                         |
| <b>Canada.....</b>                       | <b>3,689,257</b>    | <b>17.23</b>  | <b>11.76</b>  | <b>11.13</b>  | <b>34.17</b>  | <b>21.94</b>       | <b>18.08</b>  | <b>181.27</b>                  |

For footnotes, see end of Table 3.

**Early Censuses.**—The credit of taking the first census of modern times belongs to Canada; the year was 1666, the census that of the colony of New France. Still earlier records of settlement at Port Royal (1605) and Quebec (1608) are extant; but the Census of 1666 was a systematic "nominal" enumeration of the people, taken on the *de jure* principle on a fixed date, showing age, sex, occupation, and conjugal and family condition. A second census in 1667 included the areas under cultivation and the numbers of sheep and cattle. When it is recalled that in Europe the first census dates only from the eighteenth century (those of France and

England from the first year of the nineteenth) and that, in the United States, the census begins only with 1790, the achievement of the primitive St. Lawrence colony in instituting what is to-day one of the principal instruments of government throughout the civilized world, may call for more than passing appreciation.

The Census of 1666 (the results occupy 154 pages in manuscript, and are still to be seen in the Archives of Paris, or in a transcript at Ottawa) showed some 3,215 souls. It was repeated at intervals more or less regularly for a hundred years. By 1685 the total had risen to 10,904, including 1,538 Indians settled in villages and living a civilized life under the supervision of the missionaries. By the end of the century it had passed 15,000, and this was doubled in the next twenty-five years. Not to present too much detail, some of which is in the Chronology on pp. 69-77, it may be said that at the time of the cession (1763) the population of New France was nearly 70,000 (69,810 in 1765), while another 10,000 French (thinned to these proportions by the expulsion of the Acadians) were scattered through what are now Nova Scotia, New Brunswick, and Prince Edward Island. The British population of Nova Scotia was 8,104 in 1762, thirteen years after the foundation of Halifax in 1749.

Our chief sources of statistics for half a century and more after the cession are the reports—more or less sporadic—of colonial governors, though censuses of the different sections under British rule were taken at irregular intervals. British settlement on a substantial scale in the Gulf provinces and in Ontario dates only from the Loyalist movement which followed the American Revolution, at the end of which, *i.e.*, about the year of the Constitutional Act (1791), the population of Lower Canada was approximately 163,000, while the newly constituted province of Upper Canada, under Lieutenant-Governor Simcoe, numbered perhaps 15,000, and the addition of the maritime colonies brought the total to well over 200,000. A decade later Canada began the nineteenth century with a population of probably not less than 250,000 or 260,000. Subsequent censuses gave the populations of the different colonies as follows: Upper Canada (1824) 150,066, (1840) 432,159; Lower Canada (1822) 427,465, (1844) 697,084; New Brunswick (1824) 74,176, (1840) 156,162; Nova Scotia (1817) 81,351, (1838) 202,575; Prince Edward Island (1822) 24,600, (1841) 47,042.\*

The policy of irregular census-taking was supposed to have been ended after the union of Upper and Lower Canada by an Act, passed on Sept. 18, 1841, which provided for a census in the year 1842 and every fifth year thereafter, but under this Act only the census of Upper Canada was taken and the following year on Dec. 9, the Act was amended, the reason being stated as follows: "Whereas the Census of the inhabitants of Lower Canada, for the year one thousand eight hundred and forty-two as required by an Act of this Legislature, . . . hath not been duly taken . . . and whereas it is of the greatest importance that such Census should be taken. . . . Be it therefore enacted . . .". The Census of 1844 of Lower Canada was taken under this Act.

Another Act was passed and given Royal Assent on July 28, 1847, creating a 'Board of Registration and Statistics' with instructions "to collect statistics and adopt measures for disseminating or publishing the same" and providing for a census to be taken in the year 1848, to be repeated in 1850 and every fifth year thereafter. Under this Act a census of Upper Canada was taken in 1848.

\* A résumé of the results of all the censuses taken in Canada between 1666 and 1931 has been published in bulletin form and is included in Vol. I, Census of 1931.

Finally an Act was passed on Aug. 30, 1851, providing for a census to be taken in January, 1852, then in the year 1861 and thereafter every tenth year, and that better provision should be made for taking the census. The first census thereunder was taken in January, 1852, and, as similar censuses were taken by New Brunswick and Nova Scotia, we have a regular measure of population growth in Canada over the past 80 years. The 'fifties saw a very rapid development, especially in Ontario, and the 'sixties showed only less substantial gains. In the years following Confederation there was a spurt, the increase between 1871 and 1881 (which included several lean years towards the end) being 635,553, or 17·23 p.c. In neither of the last two decades of the nineteenth century, however, was this record equalled either absolutely or relatively, the gains in each being under 550,000, or 12 p.c. With the end of the century the population of Canada had reached approximately five and a third millions, or twenty times that of 1800. It has increased by five millions in the past thirty years.

**Expansion in the Twentieth Century.**—It is within the present century that the most spectacular expansion of the population of Canada has taken place. The outstanding feature was, of course, the opening to settlement of the West. The unorganized territories of British North America had been ceded to the Dominion soon after Confederation, and the West had been tapped and traversed by the Canadian Pacific railway in the 'eighties and 'nineties. But though western population was doubled in each of these decades, it was only with the launching of a large-scale immigration movement after 1900 that western settlement and production became a first-rate economic factor. Simultaneously an almost equally striking development occurred in the industrial centres of Eastern Canada, forming the immediate basis for the move upon the West. At the back, of course, was the heavy inflow of British and other capital—a total of \$1,500,000,000 between 1900 and 1912—to finance large constructive undertakings (chiefly railway, municipal, and industrial) which characterized the movement. The years 1901 to 1911, in brief, form the *decas mirabilis* of Canadian expansion. The immigration movement just mentioned, which had previously run well under 50,000 per annum, rose rapidly to over five times that volume, eventually passing 400,000 in a single year. In the ten years between 1901 and 1911 it exceeded 1,800,000 and, though at least a third of these were lost (partly in the return to Europe of labour temporarily attracted by the railway and other developments in progress, and partly in the never-ceasing and natural "drag" of the United States upon a virile and less wealthy people), it formed the chief factor in the gain of 34 p.c. which the total population of Canada registered in that decade, and which was larger than the relative growth of any other country during the same period. The movement was continued and even intensified in the first three years of the second decade of the century, after which a recession set in, to which the outbreak of war gave a new and wholly unexpected turn. Nevertheless, the decade which closed with the Census of 1921 showed over 1,700,000 immigrant arrivals in Canada, and, though the proportionate loss of these was very heavy (probably as much as two-thirds), Canada's relative gain for the decade was again among the largest in the world.

**Results of the Census of 1931.**—The total population of the Dominion on June 1, 1931, was 10,376,786, as compared with 8,787,949 on June 1, 1921, an increase of 1,588,837 or 18·08 p.c. in the decade, as compared with 21·94 p.c. and 34·17 p.c. during the decades 1911 to 1921 and 1901 to 1911, respectively.

During the decade 1911-21 the countries which comprise the British Empire, and more especially the United States which was in the Great War for only nineteen months as against Canada's fifty-two, had suffered less in actual loss of life from the War and its consequences than the continental countries of Europe. None of them declined in population during the period, as many continental European countries did. Their percentage increases, however, were in almost all cases lower than in the previous decade. Thus the population of England and Wales increased between 1911 and 1921 only from 36,070,492 to 37,886,699, or 5.0 p.c., as compared with an increase of 10.9 p.c. in the previous decade; Scotland, again, increased only from 4,760,904 to 4,882,497, or 2.6 p.c., as compared with 6.5 p.c. between 1901 and 1911. Nor has this situation been much improved in the post-war decade 1921-31, for the increase in England and Wales during these years was but 5.4 p.c. and Scotland actually showed a decrease of 0.8 p.c. Of the overseas Dominions, New Zealand, according to the official estimate\* increased her population from 1,218,913 to 1,452,747, or by about 19 p.c. for the decade ended 1931, as compared with 20.9 p.c. and 30.5 p.c., respectively, for the decades ended 1921 and 1911. In the case of the white population of South Africa, much the same condition obtained. The Commonwealth of Australia, the only Dominion to grow more rapidly in the second decade of the twentieth century than in the first, increased from 4,455,005 in 1911 to 5,435,734 in 1921, or by 22.01 p.c., as compared with 18.05 p.c. for 1901-11, and to 6,552,606 in 1931 according to the official estimate,\* or by 20.5 p.c. in the decade 1921-31. The population of the continental United States increased between 1920 and 1930 from 105,710,620 to 122,775,046, an increase of 16.1 p.c., as compared with 14.9 p.c. in the decade 1910-20 and 21 p.c. in the decade 1900-10.

Considering now the movement of population within the Dominion of Canada itself, it is evident from Table 1 that in this country, as formerly in the United States, there is a distinct movement of population from east to west. In the decade from 1911 to 1921 this was clearly apparent, for the four western provinces then increased their population by no less than 44 p.c. and for the decade 1921-31 the increase was from 2,480,664 to 3,047,792, or 22.86 p.c. From 1921 to 1931 the five eastern provinces increased from 6,294,655 to 7,315,041, an increase of 1,020,386 persons, which, though absolutely larger than the figure for the West, constitutes an increase of only 16.2 p.c. over the 1921 population. The same conclusion may be deduced from Table 2, which shows that while in 1871 only 2.97 p.c. and in 1881 only 3.80 p.c. of the population of the country dwelt west of the Lake of the Woods, the percentage in 1891 was 7.23; in 1901, 12.02; in 1911, 24.08; in 1921, 28.37; and in 1931, 29.51.

On the other hand, the Maritime Provinces, which in 1871 contained 20.80 p.c. of the total population of the Dominion, had, in 1881, 20.13 p.c.; in 1891, 18.22 p.c.; in 1901, 16.64 p.c.; in 1911, 13.02 p.c.; in 1921, 11.38 p.c.; and in 1931, only 9.72 p.c. of the population. Ontario and Quebec—the old pre-Confederation Province of Canada—still remain the chief centre of population. Their proportion of the total was 60.77 p.c. in 1931, as compared with 76.23 p.c. in 1871, 75.98 p.c. in 1881, 74.54 p.c. in 1891, 71.34 p.c. in 1901, 62.90 p.c. in 1911, and 60.25 p.c. in 1921. In other words, the net result of the sixty years has been that in 1931 three-fifths of the population of the Dominion lived in these provinces as compared with more than three-fourths in 1871.

\* In both New Zealand and Australia the 1931 censuses were postponed and were taken in March, 1936, and June, 1933, respectively.

**Centres of Population.**—The "centre of population"\* for the Dominion of Canada was carefully worked out for each census from 1851 to 1931, inclusive, and showed a definite north-westward movement up to 1911, westward for the next decade and northward for 1931. For the censuses of 1851 to 1881 the location was near Valleyfield, Que.; in 1891, it was 25 miles west of Ottawa; in 1901, near Pembroke; in 1911, 45 miles west of Sudbury; in 1921, 50 miles northeast of Sault Ste. Marie; and in 1931, 35 miles north of Sault Ste. Marie.

**Density of Population.**—The density of population in 1931 (*i.e.*, the number of persons per square mile of the land area as in that year), as compared with 1921, 1911, and 1901, is shown by provinces and for the country as a whole in Table 5.

\* The centres of population are the centres of gravity (not the intersections of median lines). The units of area in which the moments (*i.e.*, population multiplied by distance from a fixed point) were calculated, were the permanent counties or census divisions, of which there are about 220, the same units being used so far as possible for all censuses from 1851 to 1931. The geographical centre of the unit area was assumed to be the centre of population of that unit except in the cases of the thinly settled northern areas of counties with very large cities, where special adjustments were made.

5.—Area and Density of Population of Canada, by Provinces, 1901-31.

| Province or Territory.                     | Land Area in Sq. Miles | Population, 1901. <sup>1</sup> |               | Population, 1911. <sup>2</sup> |               | Population, 1921.      |               | Population, 1931. |               |
|--|------------------------|--------------------------------|---------------|--------------------------------|---------------|------------------------|---------------|-------------------|---------------|
|  |                        | Total.                         | Per Sq. Mile. | Total.                         | Per Sq. Mile. | Total.                 | Per Sq. Mile. | Total.            | Per Sq. Mile. |
| P. E. Island.....                          | 2,184                  | 103,259                        | 47.28         | 93,728                         | 42.92         | 88,615                 | 40.57         | 88,038            | 40.31         |
| Nova Scotia.....                           | 20,743                 | 459,574                        | 22.16         | 492,338                        | 23.74         | 523,837                | 25.25         | 512,846           | 24.72         |
| New Brunswick...                           | 27,473                 | 331,120                        | 12.06         | 351,889                        | 12.81         | 357,870                | 14.12         | 408,219           | 14.89         |
| Quebec.....                                | 523,534                | 1,648,898                      | 3.15          | 2,005,776                      | 3.83          | 2,360,665 <sup>2</sup> | 4.51          | 2,874,255         | 5.49          |
| Ontario.....                               | 363,282                | 2,182,947                      | 6.01          | 2,527,292                      | 6.96          | 2,933,662              | 8.08          | 3,431,653         | 9.45          |
| Manitoba.....                              | 219,723                | 255,211                        | 1.16          | 461,394                        | 2.10          | 610,118                | 2.78          | 700,139           | 3.19          |
| Saskatchewan.....                          | 237,975                | 91,279                         | 0.38          | 492,432                        | 2.07          | 757,510                | 3.18          | 921,785           | 3.87          |
| Alberta.....                               | 248,890                | 73,022                         | 0.29          | 374,295                        | 1.50          | 588,454                | 2.37          | 731,605           | 2.94          |
| British Columbia.                          | 359,279                | 178,657                        | 0.50          | 392,480                        | 1.09          | 524,582                | 1.46          | 604,293           | 1.93          |
| Canada (Exclusive of the Territories)..... | 2,002,993              | 5,323,967                      | 2.66          | 7,191,624                      | 3.59          | 8,775,319 <sup>2</sup> | 4.38          | 10,362,833        | 5.18          |
| Yukon.....                                 | 205,346                | 27,219                         | 0.13          | 8,512                          | 0.04          | 4,157                  | 0.02          | 4,230             | 0.02          |
| N.W.T.....                                 | 1,258,217              | 20,129                         | 0.02          | 6,507                          | 0.01          | 7,988                  | 0.01          | 9,723             | 0.01          |
| R. Cdn. Navy.....                          | —                      | —                              | —             | —                              | —             | 485                    | —             | —                 | —             |
| Canada.....                                | 3,466,556              | 5,371,315                      | 1.55          | 7,206,643                      | 2.08          | 8,787,949 <sup>2</sup> | 2.53          | 10,376,786        | 2.99          |

<sup>1</sup> The populations of Ontario, Quebec, Manitoba, and Northwest Territories were adjusted for 1911 according to the provisions of the Boundary Extensions Acts, 1912, but such adjustment was not carried back to 1901. <sup>2</sup> Populations of Northwest River Arm and Kigolet, on Hamilton Inlet, as in 1921, have been deducted from Quebec, as these parts were awarded to Newfoundland by decision of the Judicial Committee of the Privy Council, Mar. 1, 1927.



Figures showing the density of population in 1931, by counties and census divisions, were given at pp. 109-110 of the 1934-35 Year Book. Generally speaking, the density of population decreases as one travels westward, but the enormous area of the province of Quebec unduly reduces the density of its population, which was 5.49 in 1931. As among the nine provinces, the density of population is greatest in Prince Edward Island and least in British Columbia.

The densities of population in various countries in recent years are given in Table 6. It should not be assumed, however, that a low density is necessarily evidence of under-population. If density could be expressed in terms of estimated habitable area, the figures would be more comparable, but even then natural physical factors, such as climate, topography, physical condition of the soil, mineral wealth, etc., would not be adequately weighted. These considerations should be borne in mind when comparing the figures of this table.

#### 6.—Densities of Population in Various Countries in Recent Years.

NOTE.—The following figures, for countries other than Canada and China, are based on data taken from the Statistical Year Book of the League of Nations 1936-37. The population figures of the latest census are used and total population is taken except where indicated otherwise by footnotes.

| Country.  | Year. | Persons<br>per<br>Sq. Mile. | Country.  | Year.       | Persons<br>per<br>Sq. Mile. |
|---|-------|-----------------------------|---|-------------|-----------------------------|
| Belgium.....  | 1930  | 697.59                      | United States of America (not<br>including Alaska)..... | 1930        | 40.57                       |
| Netherlands.....  | 1930  | 605.80                      | Sweden.....   | 1931        | 35.50                       |
| United Kingdom (including<br>Channel Islands and Isle of Man) | 1931  | 490.74                      | Norway.....   | 1930        | 22.57                       |
| Japan.....  | 1935  | 469.50                      | Russia <sup>1</sup> .....                               | 1935        | 20.85                       |
| Germany (not including Saar<br>Territory).....                | 1933  | 360.77                      | Russia in Europe <sup>2</sup> .....                     | 1935        | 58.06                       |
| Italy.....  | 1935  | 354.61                      | Union of South Africa.....                              | 1936        | 20.32                       |
| China proper <sup>1</sup> .....                               | 1931  | 234.87                      | New Zealand.....  | 1936        | 15.20                       |
| Poland.....   | 1931  | 214.51                      | Argentina <sup>2</sup> .....                            | 1935        | 11.32                       |
| India.....  | 1931  | 195.07                      | Southern Rhodesia.....                                  | 1931        | 7.38                        |
| British India.....  | 1931  | 247.67                      | <b>Canada.....</b>                                      | <b>1931</b> | <b>2.99</b>                 |
| France.....   | 1936  | 196.97                      | Canada, exclusive of the Terri-<br>tories.....          | 1931        | 5.18                        |
| Spain (including Canary Islands).....                         | 1930  | 121.34                      | Commonwealth of Australia.....                          | 1933        | 2.23                        |
| Irish Free State.....   | 1936  | 111.33                      |   |             |                             |

<sup>1</sup> Estimate as of Dec. 31, 1931, taken from Canada Year Book, 1934-35, p. 168.

<sup>2</sup> Estimate as at

**Elements of Growth.**—The former lack of comprehensive and comparable vital statistics for the whole of Canada, together with the lack of statistics of emigration, make it difficult to determine how far the growth of population since the commencement of the twentieth century is due to natural increase and how far to immigration. In Table 7 figures of movement are given as closely as they can be estimated. During the decade 1911-21, in addition to 60,000 Canadians who died overseas and nearly 20,000 who took their discharge in the United Kingdom, there were also great numbers of residents of Canada—most of them recent immigrants—who left Canada to join the forces of the Mother Country and her allies in the Great War and did not return.

**7.—Movement of Population, Including Estimated Natural Increase, Recorded Immigration and Estimated Emigration for the Intercensal Periods 1901-11, 1911-21, and 1921-31.**

| Decade and Item.  | No.                    |
|---|------------------------|
| <b>Decade, 1901-11—</b>   |                        |
| Population, Census of April 1, 1901.....  | 5,371,315              |
| Natural increase (1901-11), estimated.....  | 853,566                |
| Immigration (April 1, 1901, to May 31, 1911).....   | 1,847,651              |
| Total.....  | 8,072,532              |
| Population, Census of June 1, 1911.....   | 7,206,643              |
| Emigration (April 1, 1901, to May 31, 1911), estimated.....                                 | 865,889                |
| <b>Decade, 1911-21—</b>   |                        |
| Population, Census of June 1, 1911.....   | 7,206,643              |
| Natural increase (1911-21), estimated.....  | 1,180,125              |
| Immigration (June 1, 1911, to May 31, 1921).....  | 1,728,921              |
| Total.....  | 10,085,689             |
| Population, Census of June 1, 1921.....   | 8,787,949 <sup>1</sup> |
| Emigration (June 1, 1911, to May 31, 1921), estimated.....                                  | 1,287,740 <sup>2</sup> |
| <b>Decade, 1921-31—</b>   |                        |
| Population, Census of June 1, 1921.....   | 8,787,949 <sup>1</sup> |
| Natural Increase (1921-31), partly estimated for the years 1921-25 in the case of Quebec... | 1,325,256              |
| Immigration (June 1, 1921, to May 31, 1931), including 288,874 returned Canadians.....      | 1,509,136              |
| Total.....  | 11,622,341             |
| Population, Census of June 1, 1931.....   | 10,376,786             |
| Emigration (June 1, 1921, to May 31, 1931), estimated.....                                  | 1,245,555              |
| <b>Net Gain in Population, 1901-11.....</b>   | <b>1,835,328</b>       |
| <b>Net Gain in Population, 1911-21.....</b>   | <b>1,581,306</b>       |
| <b>Net Gain in Population, 1921-31.....</b>   | <b>1,588,837</b>       |

<sup>1</sup> Revised in accordance with the Labrador Award of the Privy Council, Mar. 1, 1937. <sup>2</sup> This figure includes also the 50,000 Canadian lives lost at the Front and the soldiers (about 20,000) enlisting in the Canadian forces and receiving their discharge in the United Kingdom.

## Section 2.—Sex Distribution.

Throughout the older countries of the world there is usually found an excess of female over male population, more especially as in most of these countries the census is taken on a *de facto* instead of, as in Canada, on a *de jure* basis. The causes of this excess of female population are: (1) the normally higher rate of mortality among males; (2) the greater number of males who travel; (3) the effects of war; (4) the employment of males in the army, navy and merchant marine; and (5) the preponderance of males among emigrants. In the newer countries of the world, however, the preponderance of males among immigrants results in a general excess of male over female population. These phenomena are exemplified for both the older and the newer countries in Table 9.

In Canada there has been an excess of male population from the commencement of its history, the first census, 1666, showing 2,034 males to only 1,181 females. As the colony increased in numbers, the disproportion between the sexes became smaller, more especially since the French-Canadian population, after about 1680,

was not reinforced by immigration from the Old World. In 1784, when the English-speaking immigration to Canada for purposes of settlement was commencing, there were 54,064 males and 50,759 females in the colony. At the middle of the nineteenth century, there were 449,967 males to 440,294 females in Lower Canada, and 499,067 males to 452,937 females in the more newly-settled Upper Canada, and since Confederation the same phenomenon of considerable excess of males has occurred throughout the growing northwest. The great immigration of the first decade of the present century resulted in raising what is called the "masculinity" of the Canadian population (*i.e.*, the excess of males over females per 100 of population) to the highest point in recent history, *viz.*, 6.07 p.c. in 1911. The Great War, however, both checked immigration and took about 60,000 young Canadian male lives as its toll, with the result that at the Census of 1921 the masculinity of our population was only 3 p.c.—515 males to 485 females per 1,000 of population.

In 1931 there were 518 males to 482 females for Canada as a whole. It is interesting to note that the masculinity of the population has increased in the eastern provinces and decreased in the western ones, where it was formerly greatest. In Table 8 statistics are presented, showing the number of males and females in each of the provinces and territories at each census since 1871. A table showing the proportions of the sexes and excess of males per 1,000 of population, 1871-1931, appears at p. 113 of the 1934-35 Year Book. The statistics of Table 9 show the position of Canada among other countries of the world in regard to masculinity.

8.—Sex Distribution of the People of Canada, by Provinces, 1871-1931.

| Province<br>or<br>Territory. | 1871.            |                  | 1881.            |                  | 1891.            |                  |
|------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                              | Male.            | Female.          | Male.            | Female.          | Male.            | Female.          |
| Prince Edward Island.....    | 47,121           | 46,900           | 54,729           | 54,162           | 54,881           | 54,197           |
| Nova Scotia.....             | 193,792          | 194,008          | 220,538          | 220,034          | 227,093          | 223,303          |
| New Brunswick.....           | 145,888          | 139,706          | 164,119          | 157,114          | 163,739          | 157,524          |
| Quebec.....                  | 506,041          | 595,475          | 678,175          | 680,852          | 744,141          | 744,394          |
| Ontario.....                 | 828,500          | 792,261          | 978,554          | 948,368          | 1,069,487        | 1,044,834        |
| Manitoba.....                | 12,864           | 12,304           | 35,123           | 27,137           | 84,342           | 68,104           |
| Saskatchewan.....            | —                | —                | —                | —                | —                | —                |
| Alberta.....                 | —                | —                | —                | —                | —                | —                |
| British Columbia.....        | 20,694           | 15,553           | 29,503           | 19,956           | 63,003           | 35,170           |
| Yukon.....                   | —                | —                | —                | —                | —                | —                |
| Northwest Territories.....   | 24,274           | 23,726           | 28,113           | 28,333           | 53,785           | 45,182           |
| <b>Canada.....</b>           | <b>1,869,264</b> | <b>1,819,993</b> | <b>2,188,854</b> | <b>2,135,956</b> | <b>2,460,471</b> | <b>2,372,768</b> |

| Province<br>or<br>Territory. | 1901.            |                  | 1911.            |                  | 1921.            |                  | 1931.            |                  |
|------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                              | Male.            | Female.          | Male.            | Female.          | Male.            | Female.          | Male.            | Female.          |
| P. E. Island.....            | 51,939           | 51,300           | 47,069           | 46,659           | 44,887           | 43,728           | 45,392           | 42,046           |
| Nova Scotia.....             | 233,642          | 225,932          | 251,019          | 241,319          | 266,472          | 257,365          | 263,104          | 249,742          |
| New Brunswick.....           | 168,430          | 162,481          | 179,867          | 172,022          | 197,351          | 190,525          | 208,020          | 199,599          |
| Quebec.....                  | 824,454          | 824,444          | 1,012,815        | 992,961          | 1,179,726        | 1,180,939        | 1,447,124        | 1,427,131        |
| Ontario.....                 | 1,096,640        | 1,086,307        | 1,301,272        | 1,226,020        | 1,481,890        | 1,451,772        | 1,748,844        | 1,682,839        |
| Manitoba.....                | 138,504          | 116,707          | 252,954          | 208,440          | 320,567          | 289,551          | 368,065          | 332,074          |
| Saskatchewan.....            | 49,431           | 41,848           | 201,730          | 200,702          | 413,700          | 343,810          | 499,935          | 421,850          |
| Alberta.....                 | 41,019           | 32,003           | 223,792          | 150,593          | 324,308          | 264,246          | 400,199          | 331,406          |
| British Columbia.....        | 114,160          | 64,497           | 251,619          | 140,801          | 293,409          | 231,173          | 385,219          | 309,044          |
| Yukon.....                   | 23,094           | 4,135            | 6,508            | 2,004            | 2,819            | 1,338            | 2,825            | 1,405            |
| N.W.Territories.....         | 10,176           | 9,953            | 3,350            | 3,157            | 4,129            | 3,850            | 5,214            | 4,509            |
| <b>Canada.....</b>           | <b>2,751,708</b> | <b>2,619,607</b> | <b>3,821,995</b> | <b>3,384,648</b> | <b>4,529,643</b> | <b>4,258,306</b> | <b>5,374,541</b> | <b>5,002,245</b> |

<sup>1</sup> Includes 485, Royal Canadian Navy.

## 9.—Masculinity of the Populations of Various Countries in Recent Years.

NOTE.—A minus sign denotes a deficiency of males. The figures are calculated from population figures of the latest census in each case, as given by the League of Nations Year Book, 1936-37, except as indicated by footnotes.

| Country.                       | Year. | Excess of<br>Males over<br>Females in<br>each 100 of<br>Population. | Country.               | Year. | Excess of<br>Males over<br>Females in<br>each 100 of<br>Population. |
|--------------------------------|-------|---|------------------------|-------|---|
| Argentina <sup>1</sup> .....   | 1928  | 6.58  | Denmark.....           | 1935  | -1.57   |
| Canada.....                    | 1931  | 3.58  | Finland.....           | 1930  | -2.06   |
| India.....                     | 1931  | 3.06  | Italy.....             | 1931  | -2.22   |
| Irish Free State.....          | 1936  | 2.43  | Spain.....             | 1930  | -2.42   |
| Union of South Africa.....     | 1931  | 1.76  | Norway.....            | 1930  | -2.48   |
| Australia.....                 | 1933  | 1.56  | Germany.....           | 1933  | -2.92   |
| New Zealand <sup>2</sup> ..... | 1936  | 1.41  | Czechoslovakia.....    | 1930  | -3.00   |
| United States.....             | 1930  | 1.22  | Northern Ireland.....  | 1926  | -3.26   |
| Bulgaria.....                  | 1934  | 0.42  | France.....            | 1931  | -3.40   |
| Japan.....                     | 1935  | 0.31  | Switzerland.....       | 1930  | -3.66   |
| Netherlands.....               | 1930  | -0.64   | Austria.....           | 1934  | -3.90   |
| Greece.....                    | 1928  | -0.84   | Scotland.....          | 1931  | -3.94   |
| Belgium.....                   | 1930  | -0.96   | England and Wales..... | 1931  | -4.18   |
| Chile.....                     | 1930  | -0.98   | Portugal.....          | 1930  | -4.60   |
| Sweden.....                    | 1931  | -1.54   | U.S.S.R. (Europe)..... | 1926  | -4.90   |

<sup>1</sup> 1928 estimate.  
population only.

<sup>2</sup> Excluding Maoris. From New Zealand Year Book, 1937.

<sup>3</sup> White

## Section 3.—Conjugal Condition.

In Table 10 are given, in summary form, the statistics of the conjugal condition of the population, as single, married, widowed, divorced, and legally separated, for 1871 and subsequent censuses. Especially notable is the larger proportion of married in the more recent years. This is mainly attributable to the larger proportion of adults to total population in our own time. Noteworthy also is the larger proportion of divorced and legally separated in later years. A table showing the conjugal condition of the people, as percentages of the total population, was given at p. 110 of the 1936 Year Book. Another table, showing conjugal condition by sex and provinces, will be found at the same place. At pp. 115-116 of the 1934-35 Year Book a table appears showing the conjugal condition of the 1931 population, 15 years of age or over by age groups. The reader is referred to p. 172 of this volume for details of divorces granted in the years 1918-37.

## 10.—Conjugal Condition of the Population, as Shown by the Censuses of 1871, 1891, 1901, 1911, 1921, and 1931.

| Census Year<br>and Sex. | Single.   | Married.  | Widowed. | Divorced. | Legally<br>Separated. | Not<br>Given. | Total.    |
|-------------------------|-----------|-----------|----------|-----------|-----------------------|---------------|-----------|
| 1871—Male.....          | 1,183,787 | 543,037   | 37,487   | -         | -                     | -             | 1,764,311 |
| Female.....             | 1,059,210 | 543,559   | 79,895   | -         | -                     | -             | 1,721,450 |
| 1891—Male.....          | 1,447,415 | 690,544   | 60,895   | -         | -                     | -             | 2,198,854 |
| Female.....             | 1,336,381 | 680,540   | 100,435  | -         | -                     | -             | 2,135,956 |
| 1901—Male.....          | 1,601,541 | 796,153   | 62,777   | -         | -                     | -             | 2,460,471 |
| Female.....             | 1,451,851 | 791,902   | 129,015  | -         | -                     | -             | 2,372,768 |
| 1901—Male.....          | 1,748,582 | 928,952   | 73,837   | 337       | -                     | -             | 2,751,708 |
| Female.....             | 1,564,011 | 904,091   | 151,181  | 324       | -                     | -             | 2,619,607 |
| 1911—Male.....          | 2,369,766 | 1,331,853 | 89,154   | 839       | 1,286                 | 29,097        | 3,821,905 |
| Female.....             | 1,941,886 | 1,251,468 | 179,650  | 601       | 1,584                 | 9,363         | 3,284,043 |
| 1921—Male.....          | 2,698,504 | 1,698,207 | 119,695  | 3,670     | 2                     | 9,417         | 4,529,643 |
| Female.....             | 2,378,728 | 1,631,663 | 236,504  | 3,731     | 2                     | 7,680         | 4,258,306 |
| 1931—Male.....          | 3,179,444 | 2,033,240 | 148,954  | 4,049     | 2                     | 8,854         | 5,374,541 |
| Female.....             | 2,771,965 | 1,937,950 | 288,641  | 3,392     | 2                     | 294           | 5,002,245 |

<sup>1</sup> The figures for 1871 cover the four original provinces of Canada only.  
included with divorced.

<sup>2</sup> Legally separated included with married.

<sup>3</sup> Legally separated in-

### Section 4.—Age Distribution.

The same causes which have in the past rendered the sex distribution of population in Canada somewhat unusual have also affected its age distribution. In the first stages of the settlement of a new colony, men in the prime of life constitute the bulk of the population, and women and children are conspicuous by their absence, so that there will be a disproportionately large male population between the ages of 20 and 50, together with a low birth rate. Later on in the settlement of a new country, where there is land and food for all and where the early disproportion of the sexes has been overcome, there is a very high rate of natural increase, and an extraordinarily large proportion of children among the population. Thus in 1871 (see Table 11), 286·91 out of every 1,000 of the population of Canada were children under 10 years of age, and over half the total population (526·76 out of every 1,000) were under 20 years of age. But, with the growing urbanization of population, the average age at marriage increased and children came to be regarded as a liability rather than an asset. Thus in 1911, out of every 1,000 of the population, only 231·83 were under 10 years of age and 423·42 under 20 years of age. In 1921, however, 239·67 per 1,000 of the population were under 10 years of age and 434·81 per 1,000 under 20 years. In 1931, the number of children under 10 years of age had dropped to 212·70 per 1,000 of the population, and of persons under 20 to 416·39 per 1,000.

Table 12 shows the varying age distribution of the population of the respective provinces. At p. 118 of the 1934-35 Year Book details of the age distribution of the population of the Dominion, by sex, for the census years 1881 to 1931 were given.

11.—Proportion per 1,000 of the Population by Age Periods, 1871, 1881, 1891, 1901, 1911, 1921, and 1931.

| Age Period.       | 1871.   | 1881.   | 1901.   | 1901.   | 1911.   | 1921.   | 1931.   |
|-------------------|---------|---------|---------|---------|---------|---------|---------|
| Under 1 year..... | 30·507  | 28·019  | 24·923  | 24·497  | 25·734  | 23·858  | 19·531  |
| 1—4 years.....    | 115·649 | 108·507 | 99·964  | 95·210  | 97·413  | 96·482  | 84·009  |
| 5—9 ".....        | 140·691 | 138·251 | 121·242 | 114·664 | 108·635 | 119·333 | 106·102 |
| 10—19 ".....      | 239·854 | 227·404 | 219·710 | 210·906 | 191·353 | 195·138 | 203·639 |
| 20—29 ".....      | 171·436 | 175·957 | 178·080 | 173·549 | 189·335 | 159·041 | 163·583 |
| 30—39 ".....      | 111·404 | 113·099 | 122·080 | 129·259 | 141·938 | 146·247 | 134·656 |
| 40—49 ".....      | 79·095  | 83·817  | 88·441  | 98·494  | 100·071 | 100·481 | 118·660 |
| 50—59 ".....      | 54·783  | 58·087  | 62·300  | 67·836  | 69·121  | 73·082  | 82·463  |
| 60 or over.....   | 55·128  | 63·270  | 70·142  | 76·397  | 71·027  | 74·917  | 83·882  |
| Not given.....    | 0·488   | 13·539  | 13·059  | 9·137   | 5·090   | 2·419   | 0·363   |

12.—Proportion per 1,000 of the Population by Age Periods, by Provinces, 1931, with Totals for 1921.

| Province.                       | 0-9 Years. | 10-19 Years. | 20-44 Years. | 45-69 Years. | 70 Years or Over. | Age Not Given. |
|---------------------------------|------------|--------------|--------------|--------------|-------------------|----------------|
| Prince Edward Island.....       | 212·47     | 207·97       | 308·15       | 206·52       | 64·81             | 0·08           |
| Nova Scotia.....                | 215·36     | 214·17       | 320·93       | 198·39       | 50·93             | 0·22           |
| New Brunswick.....              | 239·83     | 219·63       | 317·25       | 181·18       | 41·95             | 0·17           |
| Quebec.....                     | 245·89     | 214·20       | 353·95       | 157·69       | 29·05             | 0·23           |
| Ontario.....                    | 186·68     | 185·67       | 373·92       | 212·28       | 41·20             | 0·25           |
| Manitoba.....                   | 205·29     | 219·27       | 365·99       | 185·52       | 35·72             | 0·20           |
| Saskatchewan.....               | 234·80     | 228·98       | 353·08       | 163·81       | 19·12             | 0·21           |
| Alberta.....                    | 217·98     | 210·00       | 374·07       | 178·47       | 19·32             | 0·16           |
| British Columbia.....           | 160·07     | 175·97       | 377·16       | 254·66       | 29·97             | 2·17           |
| Canada, 1931 <sup>1</sup> ..... | 212·70     | 293·69       | 369·30       | 189·32       | 33·22             | 0·36           |
| Canada, 1921 <sup>1</sup> ..... | 239·67     | 195·14       | 365·27       | 169·35       | 28·12             | 2·42           |

<sup>1</sup>The statistics for Yukon and the Northwest Territories are included in the totals.

**Age Distribution by Sex.**—An interesting table of quartile and decile age distribution, by sex, with textual interpretation, was given at pp. 119-120 of the 1934-35 Year Book. It is not repeated in order to conserve space.

### Section 5.—Racial Origins.

In six out of seven censuses of Canada since Confederation the racial origin of each person has been secured, the exception being 1891. The object of this information is to ascertain from what basic ethnic stocks the Canadian population, more particularly the recently immigrated population, is derived. The answer "Canadian" is not accepted under this heading, as the purpose of the question is to obtain, in so far as possible, a definition of "Canadian" in terms of racial derivation. Of this procedure of the census, criticism has been received on two main grounds: (a) that there are Canadians whose family is of several generations residence in the country who may not know their ultimate racial origin, or who may be of very mixed racial origin; (b) that the practice tends to perpetuate racial distinctions which it is desirable to obliterate. As against these criticisms the following three points must be considered: (a) that the Canadian whose family is of three or more generations residence is enumerated and differentiated through the census question on the birthplace of parents for which statistics from the 1931 Census appeared at pp. 134-139 of the 1934-35 Year Book; (b) that notwithstanding the desirability of racial assimilation, there are special features in connection with the process that require appraisal and study—for example, 271 children of Chinese fathers and 842 of Japanese fathers were born in Canada in 1931. Again, the fact that the constitution of Canada is based on the presence of two dominant races points to the desirability of a measurement of these factors: only recently it has been widely pointed out that the original French colony, numbering 75,000 at the date of the Conquest, has expanded to over three millions to-day. Measurements of this kind would be impossible if the answer "Canadian" instead of "French" were accepted under the heading of racial origin, yet undoubtedly if the descendants of the original French colonists are not "Canadians", no one is; (c) finally, racial origin is an important subject for study in a "new" country like Canada from a scientific standpoint, *i.e.*, from the standpoint of the student of ethnology, criminology, and the social and "biometric" sciences in general.

To accept the answer "Canadian" to the question on racial origin would confuse the data and defeat the purpose for which the question is asked.

**Racial Distribution.**—The total increase in population over the decade 1921-31 was 1,588,837. The population of English origin increased by only 196,061 compared with 722,208 in the previous decade; that of Scottish origin by 172,725 compared with 175,745; and that of Irish origin by 123,005 compared with 57,419. The population of British origin, taken together, increased from 4,868,738 to 5,381,071, or by 512,333, between 1921 and 1931. This represented 32 p.c. of the total increase as compared with 61 p.c. of the total increase for the previous decade. On the other hand, the population of French origin increased from 2,452,743 in 1921 to 2,927,990 in 1931, or by 475,247 (slightly under 30 p.c. of the total increase for the decade) and showed the greatest absolute increase for any decade since 1871. Figures for the minor racial groups that help to compose the nation (see Table 13) indicate that the people of Scandinavian, German, and Ukrainian origins increased between 1921 and 1931 by 36 p.c., 61 p.c., and 111 p.c., respectively. Owing to the new national and racial alignments in Central and Southeastern Europe following the Great War, comparison of the post-war numerical strength of certain ethnic stocks in Canada with pre-war returns cannot be made with any certainty. For example, a number of people reported as of Ukrainian stock in the Seventh Census were described in the Censuses of 1921 and 1911 as Galician, Bukovinian, Ruthenian, or Russian.

A perspective of the percentage relationship of the origin groups to the population as a whole was given in tabular form for the censuses 1871 to 1931 at p. 123 of the 1934-35 Year Book. Table 13, below, gives the actual figures for the same years.

Together, the British and French groups constituted, in 1931, 80 p.c. of the total population, compared with 83 p.c. in 1921 and 1911, 88 p.c. in 1901, 89 p.c. in 1881 and no less than 92 p.c. in 1871. The immigration of continental Europeans to Canada during the past thirty years has, of course, been the cause of this decline.

### 13.—Origins of the People According to the Censuses of 1871, 1881, 1901, 1911, 1921, and 1931.

NOTE.—Origins were not taken in the Census of 1891.

| Origin.                            | 1871. <sup>1</sup> | 1881.            | 1901.            | 1911.            | 1921.            | 1931.             |
|------------------------------------|--------------------|------------------|------------------|------------------|------------------|-------------------|
| British—                           |                    |                  |                  |                  |                  |                   |
| English.....                       | 706,369            | 881,301          | 1,260,899        | 1,823,150        | 2,545,358        | 2,741,419         |
| Irish.....                         | 846,414            | 957,493          | 988,721          | 1,050,384        | 1,107,803        | 1,230,808         |
| Scottish.....                      | 549,946            | 690,863          | 800,154          | 997,880          | 1,173,026        | 1,340,360         |
| Other.....                         | 7,773              | 9,947            | 13,421           | 25,671           | 41,962           | 62,494            |
| <b>Totals, British.....</b>        | <b>2,110,502</b>   | <b>2,549,611</b> | <b>3,063,195</b> | <b>3,896,985</b> | <b>4,868,738</b> | <b>5,381,071</b>  |
| French.....                        | 1,082,940          | 1,208,929        | 1,649,371        | 2,054,800        | 2,452,743        | 2,927,090         |
| Austrian, n.o.p.....               | —                  | —                | 10,947           | 42,535           | 107,671          | 48,639            |
| Belgian.....                       | —                  | —                | 2,094            | 9,593            | 20,334           | 27,585            |
| Bulgarian and Rumanian.....        | —                  | —                | 354              | 5,875            | 15,235           | 32,216            |
| Chinese.....                       | —                  | 4,383            | 17,312           | 27,774           | 39,587           | 46,519            |
| Czech (Bohemian and Moravian)..... | —                  | —                | —                | —                | 8,840            | 30,401            |
| Dutch.....                         | 29,062             | 30,412           | 33,345           | 54,986           | 117,805          | 148,962           |
| Finnish.....                       | —                  | —                | 2,502            | 15,497           | 21,494           | 43,885            |
| German.....                        | 202,991            | 254,319          | 310,501          | 393,320          | 294,635          | 473,544           |
| Greek.....                         | —                  | —                | 231              | 3,594            | 5,740            | 9,444             |
| Hebrew.....                        | 125                | 967              | 16,131           | 75,681           | 120,190          | 156,726           |
| Hungarian.....                     | —                  | —                | 1,549            | 11,005           | 13,181           | 40,582            |
| Indian and Eskimo.....             | 23,037             | 108,547          | 127,941          | 108,492          | 113,724          | 128,890           |
| Italian.....                       | 1,035              | 1,849            | 10,834           | 45,411           | 66,709           | 98,173            |
| Japanese.....                      | —                  | —                | 4,738            | 9,021            | 15,898           | 23,342            |
| Negro.....                         | 21,496             | 21,394           | 17,437           | 16,877           | 19,456           | 19,456            |
| Polish.....                        | —                  | —                | 6,285            | 33,365           | 53,403           | 145,503           |
| Russian.....                       | 607                | 1,227            | 19,825           | 43,142           | 100,064          | 88,148            |
| Scandinavian.....                  | 1,623              | 5,223            | 31,042           | 107,535          | 167,350          | 228,049           |
| Ukrainian.....                     | —                  | —                | 5,682            | 74,963           | 100,721          | 225,113           |
| Yugoslavian.....                   | —                  | —                | —                | —                | 3,906            | 16,174            |
| Various.....                       | 4,182              | 8,540            | 7,000            | 31,157           | 28,796           | 27,476            |
| Unspecified.....                   | 7,561              | 40,806           | 31,539           | 147,345          | 21,249           | 8,898             |
| <b>Grand Totals.....</b>           | <b>3,185,761</b>   | <b>4,221,810</b> | <b>5,371,315</b> | <b>7,206,643</b> | <b>8,787,949</b> | <b>10,376,786</b> |

<sup>1</sup> The figures for 1871 cover the four original provinces of Canada only.

<sup>2</sup> Incomplete in 1871; included "half-breeds" in 1901. <sup>3</sup> Includes Danish, Icelandic, Norwegian, and Swedish; in 1921 they numbered, respectively, 21,124, 15,876, 68,856 and 61,503; in 1931, 34,118, 19,332, 93,243 and 81,306.

## Section 6.—Religions.

At each of the censuses from 1871 to 1931 every inhabitant of Canada has been asked to state the religious body of which he is a member or an adherent. During the sixty-year period there have been various fluctuations in the proportions of the population belonging to the leading religious bodies, and these fluctuations are, in a new country like this, largely occasioned by the religious affiliations of immigrants.

Throughout the sixty-year period something like two-fifths of the population of Canada has been of the Roman Catholic faith, the 1931 percentage, inclusive of Greek Catholics, being 41.30. Methodists were 16.27 p.c. of the population in 1871 but fell to 13.19 p.c. in 1921, while Presbyterians increased from 15.63 p.c. in 1871 to 16.04 p.c. in 1921, being reinforced by a considerable immigration from Scotland after the beginning of the century. The fusion of the Methodists

and Congregationalists in 1925 with a large section of the Presbyterians, as the United Church of Canada, left that body the second largest religious body in the Dominion in 1931 with 19.44 p.c. of the population. The Presbyterians who did not adhere to the United Church of Canada amounted to 8.39 p.c. of the population in 1931. The proportion of Anglicans in the population of Canada fell from 14.17 p.c. in 1871 to 12.69 p.c. in 1901 but thereafter the large immigration from the British Isles raised it to 16.02 p.c. in 1921, followed by a slight falling-off to 15.76 p.c. in 1931. The Baptists have shown a fairly steady decline from 6.87 p.c. in 1871 to 4.27 p.c. in 1931.

The immigration from non-English-speaking countries during the first three decades of the twentieth century led to a great growth of the religious bodies which have as their home the continent of Europe. Thus the Lutherans, who were only 1.09 p.c. of the population in 1871 and 1.72 p.c. in 1901, rose to 3.80 p.c. in 1931. The Jews, again, who were only 0.03 p.c. in 1871 and 0.31 p.c. in 1901, were 1.50 p.c. in 1931. The adherents of the Greek Orthodox Church, who in earlier years were not distinguished from Greek Catholics (the two together being only 0.29 p.c. in 1901) were 0.99 p.c. in 1931.

Of the total population in 1931 (10,376,786), 16,042 or 0.15 p.c. did not state their religion while 54,164 persons, or 0.52 p.c., belonging to small sects, were classed as "various" and 21,071 or 0.20 p.c. as of "no religion". Of the non-Christian sects, 155,614 or 1.50 p.c. were Jews, 24,087 or 0.23 p.c. were Confucians, 15,784 or 0.15 p.c. were Buddhists, and 5,008 or 0.05 p.c. were pagans. In Table 14 the totals for each religion are brought together for all censuses since Confederation. Further analyses showing the percentages of specified religions at each census, 1871-1931, and the numbers accredited to each specified religion, by provinces, were given at pp. 127-129 of the 1934-35 Year Book.

14.—Religions of the People at each Decennial Census, 1871-1931.

| Religion.  | 1871. <sup>1</sup>   | 1881.                | 1891.                | 1901.   | 1911.     | 1921.     | 1931.                |
|--|----------------------|----------------------|----------------------|---------|-----------|-----------|----------------------|
| Adventist.....                                   | 6,179                | 7,211                | 6,354                | 8,058   | 10,406    | 14,179    | 16,026               |
| Anglican.....                                    | 494,049              | 574,818              | 640,059              | 681,494 | 1,043,017 | 1,407,750 | 1,635,615            |
| Baptist <sup>2</sup> .....                       | 230,343 <sup>3</sup> | 296,525 <sup>3</sup> | 303,839 <sup>3</sup> | 318,005 | 382,720   | 421,730   | 443,341              |
| Brethren.....                                    | 2,305                | 8,831                | 11,637               | 8,014   | 9,278     | 11,580    | 13,472               |
| Buddhist.....                                    | -                    | -                    | -                    | 10,407  | 10,012    | 11,251    | 15,784               |
| Christian.....                                   | -                    | -                    | -                    | 7,484   | 17,421    | 17,142    | 11,527               |
| Christian Science.....                           | -                    | -                    | -                    | 2,619   | 5,073     | 13,826    | 18,436               |
| Church of Christ, Disciples...<br>Confucian..... | -                    | 20,193               | 12,763               | 17,164  | 14,554    | 13,107    | 15,811               |
| .....  | -                    | -                    | -                    | 5,115   | 14,562    | 27,114    | 24,087               |
| Congregationalist.....                           | 21,829               | 26,900               | 28,157               | 28,293  | 34,054    | 30,730    | 604 <sup>4</sup>     |
| Doukhorobor.....                                 | -                    | -                    | -                    | 8,775   | 10,493    | 12,048    | 14,913               |
| Evangelical Association.....                     | -                    | -                    | -                    | 10,193  | 10,505    | 13,905    | 22,213               |
| Friends (Quaker).....                            | 7,345                | 6,553                | 4,650                | 4,100   | 4,027     | 3,149     | 2,424                |
| Greek Church.....                                | -                    | -                    | -                    | 15,630  | 88,507    | 169,832   | <sup>5</sup>         |
| Greek Orthodox.....                              | -                    | -                    | -                    | -       | -         | -         | 102,389 <sup>5</sup> |
| Holiness Movement.....                           | -                    | -                    | -                    | 2,775   | 3,856     | 3,245     | 4,436                |
| International Bible Students..                   | -                    | -                    | -                    | 90      | 925       | 6,078     | 13,552               |
| Jewish.....                                      | 1,115                | 2,393                | 6,414                | 16,401  | 74,564    | 125,197   | 155,614              |
| Lutheran.....                                    | 37,935               | 46,350               | 63,982               | 92,524  | 229,804   | 286,458   | 394,194              |

For footnotes, see end of table, p. 140.



## 14.—Religions of the People at each Decennial Census, 1871-1931—concluded.

| Religion.                      | 1871. <sup>1</sup> | 1881.     | 1891.     | 1901.     | 1911.     | 1921.              | 1931.                  |
|--------------------------------|--------------------|-----------|-----------|-----------|-----------|--------------------|------------------------|
| Mennonite (incl. Hutterite)... | 3                  | 3         | 3         | 31,797    | 44,625    | 58,797             | 88,739                 |
| Methodist.....                 | 567,091            | 742,981   | 847,765   | 916,889   | 1,079,993 | 1,159,240          | 4                      |
| Mormon.....                    | —                  | —         | —         | 6,891     | 15,971    | 19,622             | 22,005                 |
| No religion.....               | 5,140              | 2,634     | 6         | 4,810     | 26,027    | 21,739             | 21,071                 |
| Pagan.....                     | 1,886              | 4,478     | 6         | 15,107    | 11,840    | 6,778              | 5,008                  |
| Pentecostal.....               | —                  | —         | —         | —         | 513       | 7,003              | 26,301                 |
| Plymouth Brethren.....         | —                  | —         | —         | 3,040     | 3,438     | 6,482              | 6,983                  |
| Presbyterian.....              | 544,998            | 676,165   | 755,326   | 842,531   | 1,116,071 | 1,409,406          | 870,728 <sup>4</sup>   |
| Protestant.....                | 10,146             | 6,519     | 12,253    | 11,612    | 30,205    | 30,753             | 23,296                 |
| Roman Catholic.....            | 1,492,029          | 1,791,982 | 1,992,017 | 2,229,600 | 2,833,041 | 3,389,626          | 4,285,388 <sup>5</sup> |
| Salvation Army.....            | —                  | —         | 13,949    | 10,308    | 18,834    | 24,733             | 30,716                 |
| Unitarian.....                 | 2,275              | 2,126     | 1,777     | 1,934     | 3,224     | 4,926              | 4,445                  |
| United Church.....             | —                  | —         | —         | —         | —         | 8,728 <sup>6</sup> | 2,017,375 <sup>4</sup> |
| All other (various).....       | 35,035             | 21,382    | 46,030    | 16,427    | 26,383    | 31,270             | 54,164                 |
| Not given.....                 | 17,065             | 86,769    | 80,267    | 43,222    | 32,490    | 10,259             | 16,042                 |
| Totals.....                    | 3,485,761          | 4,324,810 | 4,833,239 | 5,371,315 | 7,206,643 | 8,787,949          | 10,376,786             |

<sup>1</sup> The figures for 1871 cover the four original provinces of Canada only.<sup>2</sup> Including Tunkers.<sup>3</sup> Mennonites were included with Baptists prior to 1901.<sup>4</sup> Practically all Methodists and Congregationalists and a large number of Presbyterians united to form the United Church of Canada in 1926, although a relatively small number reported themselves as "United Church" in 1921, chiefly in Western Canada where the movement towards union began.<sup>5</sup> In earlier censuses only small numbers were included, and Greek Catholics and Greek Orthodox were included under the general term "Greek Church". A rapid increase of both Greek Catholics and Greek Orthodox has been shown for recent censuses and, since the former owe obedience to the Pope in matters of faith, they have been included with the Roman Catholics for 1931.<sup>6</sup> Included with "All other" religions for 1891.<sup>7</sup> Including 186,654 Greek Catholics (see footnote 5).

In 1931, for the first time in the history of the Dominion Census, the religions of the people were cross-classified according to racial origin. The results, for Canada as a whole, were shown at pp. 116-117 of the 1936 Year Book.

## Section 7.—Birthplaces.

The birthplaces of the population of Canada, as at each of the seven censuses, are shown by Canadian born, other British born, and foreign born (United States born and other foreign born), in Table 15. The table shows that, in 1871, 97·28 p.c. of the population was born under the British flag, while sixty years later the percentage had declined to 89·18. The proportion of Canadian born increased steadily until the opening of the century, but has declined as a result of the increase of immigration after 1900. The Census of 1931 showed declines in the proportions of other British born and United States born as compared with 1921 but an increase in the percentage of other foreign born; the proportion of Canadian born has remained practically unchanged.

Worthy of note is the fairly steady increase of population born in the United States from 1·85 p.c. in 1871 to 4·25 p.c. in 1921, and the subsequent decline to 3·32 p.c. in 1931. Other foreign born increased from 0·87 p.c. in 1871 to 6·23 p.c. in 1911, declined to 5·87 p.c. of the total population by 1921 but, as already noted, increased substantially to 7·50 p.c. by 1931.

**15.—Birthplaces of the Population of Canada, by Numbers and Percentages,  
According to the Censuses of 1871-1931.**

| Year.    | Canadian<br>Born. | Other<br>British<br>Born. <sup>1</sup> | Foreign Born.                   |  | Total<br>Popula-<br>tion. | Percentages of Total Population. |                           |                                 |                           |
|----------|-------------------|--|---------------------------------|--|---------------------------|----------------------------------|---------------------------|---------------------------------|---------------------------|
|          |                   |  | Born<br>in<br>United<br>States. | Born<br>in<br>other<br>Foreign<br>Countries. |                           | Canadian<br>Born.                | Other<br>British<br>Born. | Foreign Born.                   |                           |
|          |                   |  |                                 |  |                           |                                  |                           | Born<br>in<br>United<br>States. | Other<br>Foreign<br>Born. |
|          | No.               | No.                                    | No.                             | No.  | No.                       | p.c.                             | p.c.                      | p.c.                            | p.c.                      |
| 1871.... | 2,894,591         | 496,502                                | 64,447                          | 30,221                                       | 3,485,761                 | 83.04                            | 14.24                     | 1.85                            | 0.87                      |
| 1881.... | 3,721,826         | 478,615                                | 77,753                          | 46,616                                       | 4,324,810                 | 86.06                            | 11.07                     | 1.80                            | 1.08                      |
| 1891.... | 4,189,368         | 490,573                                | 80,915                          | 72,383                                       | 4,833,239                 | 86.68                            | 10.15                     | 1.67                            | 1.50                      |
| 1901.... | 4,671,815         | 421,051                                | 127,899                         | 150,550                                      | 5,371,315                 | 86.98                            | 7.84                      | 2.38                            | 2.80                      |
| 1911.... | 5,619,682         | 834,229                                | 303,680                         | 449,052                                      | 7,206,643                 | 77.98                            | 11.58                     | 4.21                            | 6.23                      |
| 1921.... | 6,832,224         | 1,065,448                              | 374,022                         | 516,255                                      | 8,797,949                 | 77.75                            | 12.13                     | 4.25                            | 5.87                      |
| 1931.... | 8,069,261         | 1,184,830                              | 344,574                         | 778,121                                      | 10,376,786                | 77.76                            | 11.42                     | 3.32                            | 7.50                      |

<sup>1</sup> Includes some hundreds of persons born at sea.

The birthplaces of the 1931 population were tabulated for the various provinces and territories, by sex, at p. 118 of the 1936 Year Book. In the Maritime Provinces, the population is shown by the Census of 1931 to be about 93 p.c. native born, and in Quebec about 91 p.c. In Ontario, however, the proportion sinks to about 77 p.c., in Manitoba to about 66 p.c., in Saskatchewan to about 65 p.c., in Alberta to about 58 p.c., and in British Columbia to about 54 p.c.

At pp. 133-140, inclusive, of the 1934-35 Year Book, a very complete analysis was given of the birthplaces of the Canadian people. Tables there published show: population classified by province of residence and province of birth; population, for each province, classified by nativity of parents; Canadian born classified according to nativity of parents, by racial origin; and rural and urban population, other than Canadian born, classified according to year of arrival in Canada.

### Section 8.—Citizenship and Naturalization.

At the latest four decennial censuses, those of 1901, 1911, 1921, and 1931, inquiry has been made into the citizenship of the foreign-born population. The relevant instructions given to enumerators at the Census of 1931 were published at p. 141 of the 1934-35 Year Book.

Table 16 deals with the citizenship of the Canadian born, the British born, and the foreign born of the population residing in Canada at the date of the Census of 1931. As regards the total (8,069,261) native-born population, 8,052,459 were "Canadian Nationals" and were made up of 8,051,142 persons with uninterrupted citizenship and 1,317 naturalized repatriates. Of the total native born resident in Canada at the date of the census, 16,802 were aliens owing their allegiance to some foreign country—in the case of females usually as a result of marriage. The table on p. 142 of the 1934-35 Year Book showed the country to which allegiance was owed by these 16,802 Canadian-born aliens.

In the case of British born, 11.4 p.c. had not yet acquired Canadian domicile and of the foreign born 45.2 p.c. were still aliens. A more detailed analysis than that given below will be found at p. 143 of the 1934-35 Year Book.

**16.—Citizenship of Native-Born, Other British-Born, and Foreign-Born Residents in Canada in 1931, by Sex, According to Allegiance.**

| Nationality.  | NATIVE BORN.     |                  |                  | Nationality.   | OTHER BRITISH BORN. |                |                |
|---|------------------|------------------|------------------|--|---------------------|----------------|----------------|
|   | Total.           | Male.            | Female.          |  | Total.              | Male.          | Female.        |
| Canadian-born nationals—Totals.....                     | 8,052,459        | 4,074,715        | 3,977,744        | British-born Canadian nationals....                    | 1,044,791           | 556,043        | 488,748        |
| With uninterrupted citizenship.....                     | 8,051,142        | 4,074,053        | 3,977,089        | By domicile.....                                       | 1,042,781           | 555,062        | 487,719        |
| Repatriated and naturalized.....                        | 1,317            | 602              | 655              | By repatriation and naturalization....                 | 2,010               | 981            | 1,029          |
| Canadian-born aliens (by renunciation or marriage)..... | 16,802           | 1,286            | 15,516           | British born without acquired domicile.                | 135,420             | 74,687         | 60,739         |
| Owing allegiance to:—                                   |                  |                  |                  | British-born aliens (by renunciation or marriage)..... | 4,613               | 681            | 3,932          |
| European countries....                                  | 5,991            | 92               | 5,899            | Owing allegiance to:—                                  | 1,625               | 154            | 1,471          |
| Asiatic countries....                                   | 286              | 20               | 266              | European countries <sup>1</sup>                        | 32                  | 6              | 26             |
| United States.....                                      | 10,477           | 1,170            | 9,307            | Asiatic countries....                                  | 2,914               | 506            | 2,408          |
| Other countries.....                                    | 48               | 4                | 44               | United States.....                                     | 42                  | 15             | 27             |
| <b>Totals, Canadian Born.....</b>                       | <b>8,069,261</b> | <b>4,076,001</b> | <b>3,993,260</b> | <b>Totals, Other British Born.....</b>                 | <b>1,184,830</b>    | <b>631,411</b> | <b>553,419</b> |

**FOREIGN BORN.**

| Nationality.                | FOREIGN BORN.       |                            |         |         |               |        |         |                     |         |         |
|-----------------------------|---------------------|----------------------------|---------|---------|---------------|--------|---------|---------------------|---------|---------|
|                             | Total. <sup>2</sup> | Continental European Born. |         |         | Born in Asia. |        |         | United States Born. |         |         |
|                             |                     | Total.                     | Male.   | Female. | Total.        | Male.  | Female. | Total.              | Male.   | Female. |
| Canadian nationals.         | 614,971             | 351,013                    | 197,043 | 153,970 | 12,119        | 7,826  | 4,293   | 249,595             | 118,104 | 131,491 |
| Aliens.....                 | 507,724             | 303,449                    | 241,140 | 122,309 | 48,489        | 44,349 | 4,140   | 94,979              | 57,036  | 37,943  |
| European <sup>2</sup> ..... | 303,784             | 358,198                    | 238,366 | 119,832 | 330           | 179    | 151     | 4,822               | 1,991   | 2,831   |
| Asiatic.....                | 48,072              | 63                         | 18      | 45      | 47,935        | 44,047 | 3,888   | 64                  | 27      | 37      |
| United States....           | 94,984              | 4,726                      | 2,447   | 2,279   | 102           | 53     | 49      | 90,069              | 55,009  | 35,060  |
| Other.....                  | 914                 | 462                        | 309     | 153     | 122           | 70     | 52      | 24                  | 9       | 15      |
| Totals,<br>Foreign Born ..  | 1,122,695           | 714,462                    | 438,183 | 276,279 | 60,608        | 52,175 | 8,433   | 344,574             | 175,140 | 169,434 |

<sup>1</sup> The European country of allegiance was given on p. 142 of the 1934-35 Year Book.

<sup>2</sup> This column

includes foreign-born persons born in places other than continental Europe, Asia, or the United States.

<sup>2</sup> The European country of allegiance was given at p. 143 of the 1934-35 Year Book.

**The Progress of Naturalization.**—The foreign-born residents of Canada numbered 1,122,695 in 1931 as compared with 890,277 in 1921, 752,732 in 1911, and 278,449 in 1901; among these the naturalized numbered 614,971 in 1931, 514,179 in 1921, 344,557 in 1911, and 153,908 in 1901, or 54.78 p.c., 57.75 p.c., 45.77 p.c., and 55.27 p.c., respectively. Alien residents in Canada showed an absolute decline

between 1911 and 1921 of from 408,175 to 376,098, *i.e.*, from 5.66 p.c. of the population to 4.28 p.c. Between 1921 and 1931, they increased to 507,724, or 4.89 p.c. of the 1931 population. Among the foreign-born residents of Canada, the United States born exceeded those born in any other country, although by continental groups the Europeans were more numerous. Between 1921 and 1931 the U.S. born declined from 374,022 to 344,574, but there was a substantial net increase in the total foreign born due to the large increase of Europeans. On the other hand, the percentage of the U.S. born who were naturalized to total U.S. born increased from 63.63 in 1921 to 72.44 in 1931, whereas the percentage of continental Europeans who were naturalized fell from 57.88 in 1921 to 49.13 in 1931.

### Section 9.—Language Spoken and Mother Tongue.

**Official Languages.**—In the Census of 1931, 1,322,370 persons were reported as speaking both the official languages of Canada, 6,999,913 speaking English, 1,779,338 speaking French and 275,165 as unable to speak either English or French. In a table on p. 121 of the 1936 Year Book the population was classified by racial origins and as able to speak one, both, or neither of the official languages.

**Mother Tongue.**—At p. 122 of the 1936 Year Book will be found a table showing the mother tongue of the population, by provinces and for the Dominion.

### Section 10.—Rural and Urban Population.

For the purposes of the census the population residing in cities, towns, and incorporated villages has been defined as urban, and that outside of such localities as rural. Thus the distinction here made between 'rural' and 'urban' population is a distinction of provincial legal status rather than of size of aggregations of population within limited areas. Since the laws of the various provinces differ in regard to the population necessary before a municipality may be incorporated as urban (the laws of Saskatchewan, for example, making provision that 50 people actually resident on an area not greater than 640 acres may claim incorporation as a village, while the Ontario law now requires that villages asking for incorporation shall have a population of 750 on an area not exceeding 500 acres), the line of demarcation between rural and urban population is not at all uniformly drawn throughout the Dominion, as far as comparable aggregations of population are concerned.

A table published at p. 147 of the 1934-35 Year Book gives the rural and urban populations, by provinces and sex, and divides the incorporated urban centres into two groups, *viz.*, under one thousand, and one thousand and over, thereby allowing a closer comparison than is possible from Table 17. The population in urban places having less than one thousand was shown to have decreased for the whole of Canada but increased in Prince Edward Island, Nova Scotia, and British Columbia. In Table 17 are given statistics showing the growth of rural and urban population, respectively, by provinces, since 1891. To a limited extent Table 18 will permit the student of population statistics to make, at least for Canada as a whole, his own line of demarcation between rural and urban populations.\*

\* In the United States, urban population, prior to 1930, was classified by the Census Bureau as that residing in cities and other incorporated places having 2,500 inhabitants or more with certain minor qualifications, but in 1930 the definition was slightly modified to include townships and other political divisions, not incorporated as municipalities, having a total population of 10,000 or more each, and a population density of 1,000 or more per square mile. The direct result of this modification has been to increase slightly the proportion of urban population.

While a summary comparison between urbanization in Canada in 1931 and in the United States in 1930 would lead us to the conclusion that our country, though far less densely peopled than the United States, had an almost equally large percentage of its population in urban communities, *viz.*, 53.70 p.c. in Canada as compared with 56.2 p.c. in the United States, the fact that in the United States, inhabitants of places having under 2,500 population are included with rural population must be taken into account. A fairer basis of comparison is secured if the same population limits are taken for both countries, as may be done by using Table 18. Thus, at the Census of 1930, the United States had 29.5 p.c. of its population resident in cities of 100,000 and over, while Canada in 1931 had only 22.44 p.c. of its population in such places. The United States had an additional 18 p.c. of its population residing in cities of between 10,000 and 100,000 population, and 4.8 p.c. in cities and towns of 5,000 to 10,000, while Canada had in cities of these categories only 14.87 p.c. and 4.42 p.c., respectively, of its population. Thus, taking all places of 5,000 and over—the lowest population for which comparative figures are readily available—52.3 p.c. of the population of the United States resided in such places as compared with 41.73 p.c. of the population of Canada, showing the much higher degree of urbanization which has been reached in the United States—a natural thing in an older settled and more densely peopled country.

On the basis of the census classification, it is apparent from Table 17 that in the decade 1921-31, as in the previous one, urban communities absorbed nearly 77 p.c. of the total increase in population, with the result that the urban population of Canada in 1931 exceeded the rural by 767,330. Out of every 1,000 persons in the country, 463 were resident, on June 1, 1931, in rural and 537 in urban communities, as compared with 505 in rural and 495 in urban communities on June 1, 1921; 546 in rural and 454 in urban communities in 1911; 625 in rural and 375 in urban communities in 1901; and 682 in rural and 318 in urban communities in 1891.

From Table 18, showing the distribution of urban population in Canada by size of cities and towns, it is seen that Canada possessed, in 1931, two cities of more than half a million population. These are Montreal and Toronto, with 818,577 and 631,207 inhabitants, respectively. Two other cities, Vancouver and Winnipeg, have attained the 200,000 mark and Hamilton, Quebec, and Ottawa each have populations of over 100,000. The two western cities of Calgary and Edmonton are now in the 75,000 to 100,000 class. In this respect London, which excelled Edmonton in 1921, now takes the next lower place with a population of 71,148. Details of the population of these and other smaller cities and towns of 5,000 and over, are given by censuses from 1871 to 1931 in Table 19, while the populations of urban communities having, in 1931, a population of from 1,000 to 5,000 each, are given for 1901, 1911, 1921, and 1931 in Table 20.

All the larger cities have in their neighbourhoods growing "satellite" towns or other densely settled areas in close economic relationship with the central municipality. This phenomenon is to-day of increasing importance largely as a result of the greater ease and speed of transportation by motor vehicle. It has, therefore, been considered advisable to calculate the total populations resident in what the United States census authorities call the "metropolitan districts". On this basis the total

populations of the larger cities at the Census of 1931 were as follows: 'Greater Montreal', 1,000,159; 'Greater Toronto', 808,864; 'Greater Vancouver', 308,340; 'Greater Winnipeg', 280,202; 'Greater Ottawa' (including Hull), 175,988; 'Greater Quebec', 166,435; 'Greater Hamilton', 163,710; 'Greater Windsor', 110,385; 'Greater Halifax', 74,161; and 'Greater Saint John', 55,611.\*

\*See 1931 Census Monograph No. 6, *The Rural and Urban Composition of the Canadian Population*, by S. A. Cudmore and H. G. Caldwell.

**17.—Rural and Urban Populations, by Provinces and Territories, Decennial Censuses 1871-1931 and Numerical Increases 1921-31.**

| Province or Territory.   | 1871.                        |                | 1881.                        |                  | 1891.                        |                     | 1901.                |                     |
|--------------------------|------------------------------|----------------|------------------------------|------------------|------------------------------|---------------------|----------------------|---------------------|
|                          | Rural.                       | Urban.         | Rural.                       | Urban.           | Rural.                       | Urban.              | Rural.               | Urban.              |
| P. E. Island.....        | 86,149                       | 7,872          | 95,693                       | 13,198           | 94,823                       | 14,255              | 88,304               | 14,955              |
| Nova Scotia.....         | 355,718                      | 32,062         | 377,030                      | 63,542           | 373,403                      | 76,993              | 330,191              | 129,383             |
| New Brunswick...         | 235,381                      | 50,213         | 262,141                      | 59,092           | 272,362                      | 48,901 <sup>1</sup> | 253,835              | 77,285              |
| Quebec.....              | 919,065                      | 271,851        | 980,515                      | 378,512          | 988,820                      | 499,715             | 994,833              | 654,065             |
| Ontario.....             | 1,264,854                    | 385,907        | 1,351,074                    | 575,848          | 1,295,323                    | 818,998             | 1,246,969            | 935,978             |
| Manitoba.....            | 24,170                       | 1,058          | 52,015                       | 10,245           | 111,498                      | 41,008              | 184,775 <sup>2</sup> | 70,436 <sup>3</sup> |
| Saskatchewan.....        | "                            | "              | "                            | "                | "                            | "                   | 77,013 <sup>4</sup>  | 14,266 <sup>4</sup> |
| Alberta.....             | "                            | "              | "                            | "                | "                            | "                   | 54,489               | 18,533              |
| British Columbia..       | 32,977                       | 3,270          | 40,389                       | 9,070            | 60,945                       | 37,228              | 88,478               | 90,179              |
| Yukon.....               | "                            | "              | "                            | "                | "                            | "                   | 18,077               | 9,142               |
| N.W.T.....               | "                            | "              | "                            | "                | "                            | "                   | 20,129               | "                   |
| Royal Canadian Navy..... | "                            | "              | "                            | "                | "                            | "                   | "                    | "                   |
| <b>Canada.....</b>       | <b>2,966,914<sup>5</sup></b> | <b>722,343</b> | <b>3,215,363<sup>6</sup></b> | <b>1,169,567</b> | <b>3,296,141<sup>7</sup></b> | <b>1,537,098</b>    | <b>3,357,093</b>     | <b>2,014,222</b>    |

| Province or Territory.   | 1911.                  |                      | 1921.            |                  | 1931.            |                      | Numerical Increases in Decade 1921-31. |                  |
|--------------------------|------------------------|----------------------|------------------|------------------|------------------|----------------------|--|------------------|
|                          | Rural.                 | Urban.               | Rural.           | Urban.           | Rural.           | Urban.               | Rural.                                 | Urban.           |
| P. E. Island.....        | 78,758                 | 14,970               | 69,522           | 19,093           | 67,653           | 20,385               | -1,899                                 | 1,292            |
| Nova Scotia.....         | 306,210                | 136,128              | 296,799          | 227,038          | 281,192          | 231,654              | -15,607                                | 4,616            |
| New Brunswick...         | 252,342                | 99,547               | 263,432          | 124,444          | 270,279          | 128,940              | 15,847                                 | 4,496            |
| Quebec.....              | 1,038,934 <sup>8</sup> | 966,842 <sup>9</sup> | 1,038,096        | 1,322,569        | 1,060,649        | 1,813,606            | 22,553                                 | 491,037          |
| Ontario.....             | 1,198,803 <sup>8</sup> | 1,328,489            | 1,227,030        | 1,706,632        | 1,335,691        | 2,095,992            | 108,661                                | 389,360          |
| Manitoba.....            | 201,029 <sup>8</sup>   | 200,365              | 348,502          | 261,616          | 384,170          | 315,969              | 35,668                                 | 54,353           |
| Saskatchewan.....        | 361,037 <sup>7</sup>   | 131,395 <sup>4</sup> | 538,552          | 218,958          | 630,880          | 290,905              | 92,328                                 | 71,947           |
| Alberta.....             | 236,033 <sup>7</sup>   | 137,662 <sup>7</sup> | 365,550          | 222,004          | 453,097          | 278,508              | 87,547                                 | 55,604           |
| British Columbia..       | 188,796                | 203,684              | 277,020          | 247,502          | 299,524          | 394,739 <sup>9</sup> | 22,504                                 | 147,177          |
| Yukon.....               | 4,647                  | 3,865                | 2,851            | 1,306            | 2,870            | 1,360                | 19                                     | 54               |
| N.W.T.....               | 6,507 <sup>8</sup>     | "                    | 7,988            | "                | 9,723            | "                    | 1,735                                  | "                |
| Royal Canadian Navy..... | "                      | "                    | 485              | "                | "                | "                    | "                                      | "                |
| <b>Canada.....</b>       | <b>3,933,696</b>       | <b>3,272,947</b>     | <b>4,435,827</b> | <b>4,352,122</b> | <b>4,804,728</b> | <b>5,572,058</b>     | <b>368,901</b>                         | <b>1,219,936</b> |

<sup>1</sup> Some of the towns of 1891 were included with rural.

<sup>2</sup> The populations (48,000, 56,446 and 98,967, respectively) in territory now comprised in the provinces of Alberta and Saskatchewan and in Yukon and the Northwest Territories were classified as rural in the Censuses of 1871, 1881, and 1891.

<sup>3</sup> Urban and rural populations for 1911 and 1901 are as corrected in Census Report, Prairie Provinces, 1916. <sup>4</sup> The urban population of 1901, shown in Vol. I, Census 1911, is reduced to 956,842 by the transfer of the populations of Maniwaki, Martinville, Moisie, St. Bruno, St. Martin and St. Vincent de Paul from urban to rural; by adjustments in area of the villages of St. Anne and Ste. Genevieve; and Extension of Boundaries Act, 1912.

<sup>5</sup> Vol. I, Census 1911, places the urban population of Alberta for that year at 141,937. Included in this figure was the population (5,250) of twelve places which, according to the Report of the Municipal Commissioner for Alberta, were not then incorporated. The places so included were Aetna, Banff, Bankhead, Bellevue, Bickerdike, Canmore, Cardiff, Exshaw, Hillcrest, Passburg, Queenston and Elmpark. The correction resulting from this and from other small adjustments consequent upon more definite knowledge as to incorporated areas, places the urban population for 1911 at 137,062. Similar corrections have been made in the urban and rural figures for the Census of 1901. <sup>6</sup> This includes South Vancouver and Point Grey, with 1921 populations of 32,267 and 13,736, respectively, which were then classified as 'rural'. <sup>7</sup> Members of the Royal Canadian Navy were counted at their homes in the Census of 1931.

**18.—Urban Populations, Classified by Size of Municipality Groups, 1911, 1921, and 1931.**

| In Cities, Towns, or Villages of— | 1911.             |                  |                        | 1921.             |                  |                        | 1931.             |                  |                        |
|-----------------------------------|-------------------|------------------|------------------------|-------------------|------------------|------------------------|-------------------|------------------|------------------------|
|                                   | Number of Places. | Population.      | Per Cent of Total Pop. | Number of Places. | Population.      | Per Cent of Total Pop. | Number of Places. | Population.      | Per Cent of Total Pop. |
| Over 500,000.....                 | Nil               | —                | —                      | 2                 | 1,140,399        | 12.98                  | 2                 | 1,449,784        | 13.97                  |
| Between—                          |                   |                  |                        |                   |                  |                        |                   |                  |                        |
| 400,000 and 500,000               | 1                 | 490,504          | 6.81                   | Nil               | —                | —                      | Nil               | —                | —                      |
| 300,000 and 400,000               | 1                 | 381,833          | 5.30                   | Nil               | —                | —                      | Nil               | —                | —                      |
| 200,000 and 300,000               | Nil               | —                | —                      | Nil               | —                | —                      | 2                 | 465,378          | 4.48                   |
| 100,000 and 200,000               | 2                 | 236,436          | 3.28                   | 4                 | 518,293          | 5.90                   | 3                 | 413,013          | 3.98                   |
| 50,000 and 100,000                | 3                 | 247,221          | 3.43                   | 5                 | 336,650          | 3.83                   | 7                 | 470,443          | 4.53                   |
| 25,000 and 50,000                 | 7                 | 272,071          | 3.78                   | 7                 | 239,096          | 2.72                   | 10                | 339,521          | 3.27                   |
| 15,000 and 25,000                 | 11                | 193,977          | 2.69                   | 19                | 370,990          | 4.22                   | 23                | 457,292          | 4.41                   |
| 10,000 and 15,000                 | 18                | 225,423          | 3.13                   | 18                | 224,033          | 2.55                   | 23                | 275,944          | 2.66                   |
| 5,000 and 10,000                  | 44                | 313,100          | 4.34                   | 54                | 382,762          | 4.38                   | 68                | 458,784          | 4.42                   |
| 3,000 and 5,000                   | 59                | 222,274          | 3.08                   | 72                | 272,720          | 3.10                   | 71                | 273,276          | 2.63                   |
| 1,000 and 3,000                   | 250               | 428,250          | 5.94                   | 293               | 492,116          | 5.60                   | 324               | 557,466          | 5.37                   |
| 500 and 1,000                     | 241               | 174,781          | 2.43                   | 290               | 215,648          | 2.45                   | 322               | 231,375          | 2.23                   |
| Under 500.....                    | 419               | 87,077           | 1.21                   | 679               | 159,410          | 1.81                   | 750               | 179,782          | 1.73                   |
| <b>Totals.....</b>                | <b>1,050</b>      | <b>3,272,947</b> | <b>45.42</b>           | <b>1,443</b>      | <b>4,352,122</b> | <b>49.52</b>           | <b>1,605</b>      | <b>5,572,058</b> | <b>53.70</b>           |

Population is shown in Table 18 to be increasingly attracted to the larger cities. Thus, not only have cities of over 500,000 population (Montreal and Toronto) increased their proportions to the total, but cities of from 100,000 to 500,000 have increased their aggregate population from 5.90 p.c. of the total to 8.46 p.c., and cities of between 5,000 and 100,000 from 17.68 p.c. to 19.29 p.c. in the decade 1921-31. As will be seen, the large absolute increases in the total population of municipalities of less than 1,000 persons for 1921 and 1931 were due almost entirely to the addition of newly incorporated places.\*

\*See also reference in text footnote (\*) at top of p. 145.

**19.—Populations of Cities and Towns having over 5,000 Inhabitants, Decennial Censuses 1871-1931 and the Quinquennial Census of 1936.<sup>1</sup>**

NOTE.—The cities and towns in which a Board of Trade exists are indicated by an asterisk (\*), and those in which there is a Chamber of Commerce by a dagger (†). In all cases the populations for previous censuses have been rearranged as far as possible to cover the same area as in 1931.

| City or Town.        | Province. | Populations. |         |         |         |         |         |         |                    |
|----------------------|-----------|--------------|---------|---------|---------|---------|---------|---------|--------------------|
|                      |           | 1871.        | 1881.   | 1891.   | 1901.   | 1911.   | 1921.   | 1931.   | 1936. <sup>1</sup> |
| *†Montreal.....      | Que.      | 130,833      | 177,377 | 256,723 | 328,172 | 490,804 | 618,506 | 818,577 | —                  |
| *Toronto.....        | Ont.      | 59,000       | 96,196  | 181,215 | 209,892 | 331,833 | 521,893 | 631,207 | —                  |
| *Vancouver.....      | B.C.      | —            | —       | 13,709  | 29,432  | 120,847 | 153,220 | 246,503 | —                  |
| *Winnipeg.....       | Man.      | 241          | 7,085   | 25,639  | 42,340  | 136,035 | 179,087 | 218,785 | 215,514            |
| †Hamilton.....       | Ont.      | 26,880       | 36,661  | 48,959  | 52,634  | 81,969  | 114,151 | 155,547 | —                  |
| *Quebec.....         | Que.      | 59,699       | 62,446  | 63,090  | 68,840  | 78,710  | 95,193  | 130,594 | —                  |
| *Ottawa.....         | Ont.      | 24,141       | 31,307  | 44,154  | 59,928  | 87,062  | 107,843 | 126,872 | —                  |
| *Calgary.....        | Alta.     | —            | —       | 3,876   | 4,302   | 43,704  | 63,305  | 83,761  | 83,407             |
| †Edmonton.....       | Alta.     | —            | —       | —       | 4,176   | 31,064  | 58,821  | 79,197  | 85,774             |
| London.....          | Ont.      | 18,000       | 27,867  | 31,977  | 37,970  | 46,300  | 60,959  | 71,148  | —                  |
| Windsor.....         | Ont.      | 4,353        | 6,561   | 10,352  | 12,153  | 17,829  | 38,591  | 63,108  | —                  |
| Verdun.....          | Que.      | —            | 278     | 296     | 1,898   | 11,629  | 25,001  | 60,745  | —                  |
| *Halifax.....        | N.S.      | 29,582       | 36,100  | 38,437  | 40,332  | 46,019  | 53,372  | 59,275  | —                  |
| *Regina.....         | Sask.     | —            | —       | —       | 2,240   | 30,213  | 34,432  | 53,309  | 53,354             |
| *Saint John.....     | N.B.      | 41,325       | 41,353  | 39,179  | 40,711  | 42,511  | 47,166  | 47,514  | —                  |
| *Saskatoon.....      | Sask.     | —            | —       | —       | 113     | 12,004  | 25,739  | 43,291  | 41,734             |
| Victoria.....        | B.C.      | 3,270        | 5,925   | 16,841  | 20,819  | 31,660  | 38,727  | 39,082  | —                  |
| †Three Rivers.....   | Que.      | 7,570        | 8,670   | 8,334   | 9,081   | 13,691  | 22,367  | 35,450  | —                  |
| *Kitchener.....      | Ont.      | 2,743        | 4,054   | 7,425   | 9,747   | 15,196  | 21,763  | 30,793  | —                  |
| *Bramford.....       | Ont.      | 8,107        | 9,616   | 12,753  | 16,019  | 23,132  | 29,440  | 30,107  | —                  |
| *Hull.....           | Que.      | 3,800        | 6,890   | 11,264  | 13,993  | 18,222  | 24,117  | 29,433  | —                  |
| †Sherbrooke.....     | Que.      | 4,432        | 7,227   | 10,097  | 11,705  | 16,405  | 23,515  | 28,933  | —                  |
| Outremont.....       | Que.      | —            | —       | 387     | 795     | 1,143   | 1,349   | 28,641  | —                  |
| †Fort William.....   | Ont.      | —            | —       | 890     | 2,176   | 8,638   | 16,499  | 26,277  | —                  |
| †St. Catharines..... | Ont.      | 7,864        | 9,631   | 9,170   | 9,940   | 12,434  | 19,851  | 24,753  | —                  |
| Westmount.....       | Que.      | 200          | 884     | 3,076   | 8,856   | 14,673  | 17,583  | 24,235  | —                  |
| †Kingston.....       | Ont.      | 12,407       | 14,091  | 19,263  | 17,961  | 18,874  | 21,753  | 28,439  | —                  |

<sup>1</sup> The 1936 figures cover cities and towns of the Prairie Provinces only.

19.—Populations of Cities and Towns having over 5,000 Inhabitants, Decennial Censuses 1871-1931 and the Quinquennial Census of 1936<sup>1</sup>—continued.

| City or Town.                         | Province. | Populations. |        |        |        |        |        |        |                    |
|---------------------------------------|-----------|--------------|--------|--------|--------|--------|--------|--------|--------------------|
|                                       |           | 1871.        | 1881.  | 1891.  | 1901.  | 1911.  | 1921.  | 1931.  | 1936. <sup>1</sup> |
| *Oshawa.....                          | Ont.      | 3,185        | 3,092  | 4,066  | 4,394  | 7,436  | 11,940 | 23,429 | -                  |
| *Sydney.....                          | N.S.      | 1,700        | 2,180  | 2,427  | 9,909  | 17,723 | 22,545 | 23,089 | -                  |
| *Sault Ste. Marie.                    | Ont.      | 879          | 780    | 2,414  | 7,169  | 14,920 | 21,092 | 23,082 | -                  |
| †Peterborough.....                    | Ont.      | 4,611        | 6,812  | 9,717  | 12,886 | 18,360 | 20,994 | 22,327 | -                  |
| *Moose Jaw.....                       | Sask.     | -            | -      | -      | 1,658  | 13,823 | 19,285 | 21,299 | 19,805             |
| *Guelph.....                          | Ont.      | 6,878        | 9,890  | 10,537 | 11,496 | 15,175 | 18,128 | 21,075 | -                  |
| *Gloucester.....                      | N.S.      | -            | 2,459  | 6,945  | 10,562 | 17,007 | 20,706 | -      | -                  |
| *Moncton.....                         | N.B.      | 600          | 5,082  | 8,762  | 9,026  | 11,345 | 17,488 | 20,689 | -                  |
| †Port Arthur.....                     | Ont.      | -            | 1,275  | 2,698  | 3,214  | 11,220 | 14,880 | 19,818 | -                  |
| †Niagara Falls.....                   | Ont.      | 1,610        | 2,347  | 3,349  | 5,702  | 9,248  | 14,764 | 19,046 | -                  |
| †Leamington.....                      | Ont.      | 2,689        | 3,248  | 4,819  | 6,365  | 11,638 | 15,404 | 18,630 | -                  |
| †Sudbury.....                         | Ont.      | -            | -      | -      | 2,027  | 4,150  | 8,621  | 18,518 | -                  |
| †Sarnia.....                          | Ont.      | 2,929        | 3,874  | 6,692  | 8,176  | 9,947  | 14,877 | 18,191 | -                  |
| †Stratford.....                       | Ont.      | 4,313        | 8,239  | 9,500  | 9,959  | 12,946 | 16,094 | 17,742 | -                  |
| *New Westminster.                     | B.C.      | -            | 1,500  | 6,678  | 6,499  | 13,199 | 14,495 | 17,524 | -                  |
| *Brandon.....                         | Man.      | -            | -      | 3,778  | 5,620  | 13,839 | 15,397 | 17,082 | 16,461             |
| *St. Boniface.....                    | Man.      | 817          | 1,283  | 1,553  | 2,019  | 7,483  | 12,821 | 16,305 | 16,275             |
| *North Bay.....                       | Ont.      | -            | -      | 1,848  | 2,630  | 7,737  | 10,692 | 15,528 | -                  |
| †St. Thomas.....                      | Ont.      | 2,197        | 8,367  | 10,366 | 11,485 | 14,054 | 16,026 | 18,430 | -                  |
| †Shawinigan Falls.                    | Que.      | -            | -      | -      | -      | 4,265  | 10,625 | 16,345 | -                  |
| *Chatham.....                         | Ont.      | -            | -      | -      | -      | 10,770 | 13,256 | 14,560 | -                  |
| †East Windsor.....                    | Ont.      | 5,873        | 7,873  | 9,052  | 9,068  | -      | 5,870  | 14,251 | -                  |
| *Tinnis.....                          | Ont.      | -            | -      | -      | -      | -      | 3,843  | 14,200 | -                  |
| *Galt.....                            | Ont.      | 3,827        | 5,187  | 7,535  | 7,866  | 10,299 | 13,216 | 14,006 | -                  |
| †Belleville.....                      | Ont.      | 7,305        | 9,156  | 9,916  | 9,117  | 9,876  | 12,206 | 13,790 | -                  |
| *Lethbridge.....                      | Alta.     | -            | -      | -      | 2,072  | 9,035  | 11,067 | 13,489 | 13,523             |
| †St. Hyacinthe.....                   | Que.      | 3,746        | 5,321  | 7,016  | 9,210  | 9,797  | 10,859 | 13,448 | -                  |
| *Owen Sound.....                      | Ont.      | 3,569        | 4,426  | 7,497  | 8,776  | 12,558 | 12,100 | 12,839 | -                  |
| *Charlottetown.....                   | P.E.I.    | 7,972        | 10,345 | 10,995 | 10,718 | 9,383  | 10,814 | 12,351 | -                  |
| †Chicoutimi.....                      | Que.      | 1,893        | 1,935  | 2,277  | 3,820  | 5,880  | 9,937  | 11,877 | -                  |
| †Lévis.....                           | Que.      | 8,052        | 8,734  | 8,797  | 9,242  | 8,703  | 10,470 | 11,724 | -                  |
| *Valleyfield (Sain-<br>berry de)..... | Que.      | 1,800        | 3,906  | 5,515  | 11,055 | 9,449  | 9,215  | 11,411 | -                  |
| *Woodstock.....                       | Ont.      | 3,982        | 5,373  | 8,012  | 8,833  | 9,320  | 9,935  | 11,395 | -                  |
| *St. Jean.....                        | Que.      | 3,022        | 4,314  | 4,722  | 4,030  | 5,903  | 7,734  | 11,256 | -                  |
| *Cornwall.....                        | Ont.      | 2,033        | 4,468  | 6,805  | 6,704  | 6,598  | 7,419  | 11,126 | -                  |
| †Joliette.....                        | Que.      | 3,047        | 3,268  | 3,372  | 4,220  | 6,946  | 9,089  | 10,765 | -                  |
| †Sandwich.....                        | Ont.      | 1,660        | 1,143  | 1,352  | 1,450  | 2,302  | 4,415  | 10,715 | -                  |
| *Welland.....                         | Ont.      | 1,110        | 1,870  | 2,035  | 1,863  | 5,318  | 8,654  | 10,709 | -                  |
| †Theford Mines.....                   | Que.      | -            | -      | -      | 3,256  | 7,261  | 8,272  | 10,701 | -                  |
| *Granby.....                          | Que.      | 876          | 1,040  | 1,710  | 3,773  | 4,750  | 6,785  | 10,587 | -                  |
| †Sorel.....                           | Que.      | 5,636        | 5,791  | 6,669  | 7,067  | 8,420  | 8,174  | 10,320 | -                  |
| †Medicine Hat.....                    | Alta.     | -            | -      | -      | 1,570  | 5,608  | 9,634  | 10,300 | 9,592              |
| †Walkerville.....                     | Ont.      | -            | -      | 933    | 1,595  | 3,302  | 7,059  | 10,105 | -                  |
| *Prince Albert.....                   | Sask.     | -            | -      | -      | 1,785  | 6,254  | 7,352  | 9,905  | 11,040             |
| †Brockville.....                      | Ont.      | 5,102        | 7,609  | 8,791  | 8,940  | 9,374  | 10,943 | 9,736  | -                  |
| †Jocqueville.....                     | Que.      | -            | -      | -      | -      | 2,354  | 4,351  | 9,448  | -                  |
| *Penbrooke.....                       | Ont.      | 1,508        | 2,820  | 4,401  | 5,156  | 5,626  | 7,875  | 9,368  | -                  |
| *Dartmouth.....                       | N.S.      | 2,191        | 3,786  | 6,252  | 4,806  | 5,053  | 7,899  | 9,100  | -                  |
| †St. Jérôme.....                      | Que.      | 1,159        | 2,032  | 2,868  | 3,619  | 3,473  | 5,491  | 8,967  | -                  |
| *New Glasgow.....                     | N.S.      | 1,676        | 2,595  | 3,776  | 4,447  | 6,383  | 8,974  | 8,858  | -                  |
| *Fredericton.....                     | N.B.      | 6,006        | 6,218  | 6,502  | 7,117  | 7,208  | 8,114  | 8,830  | -                  |
| Cap de la Madeleine                   | Que.      | -            | -      | -      | -      | -      | 6,738  | 8,748  | -                  |
| North Vancouver.....                  | B.C.      | -            | -      | -      | 365    | 8,196  | 7,652  | 8,510  | -                  |
| †Rivière du Loup.....                 | Que.      | 1,541        | 2,291  | 4,175  | 4,569  | 6,774  | 7,703  | 8,499  | -                  |
| *Orillia.....                         | Ont.      | 1,322        | 2,610  | 4,752  | 4,907  | 6,828  | 7,631  | 8,183  | -                  |
| *Waterloo.....                        | Ont.      | 1,694        | 2,066  | 2,941  | 3,537  | 4,359  | 5,883  | 8,065  | -                  |
| *Turco.....                           | N.S.      | 2,114        | 3,461  | 5,102  | 5,993  | 6,107  | 7,562  | 7,901  | -                  |
| †La Tuque.....                        | Que.      | -            | -      | -      | -      | 2,934  | 5,603  | 7,871  | -                  |
| *Barrie.....                          | Ont.      | 3,398        | 4,854  | 5,550  | 5,949  | 6,420  | 6,936  | 7,776  | -                  |
| *Sydney Mines.....                    | N.S.      | 1,494        | 2,340  | 2,442  | 3,191  | 7,470  | 8,327  | 7,769  | -                  |
| *New Waterford.....                   | N.S.      | -            | -      | -      | -      | -      | 5,615  | 7,745  | -                  |
| *Trail.....                           | B.C.      | -            | -      | -      | 1,360  | 1,460  | 3,029  | 7,373  | -                  |
| *Lindsay.....                         | Ont.      | 4,049        | 5,080  | 6,081  | 7,003  | 6,964  | 7,620  | 7,505  | -                  |
| *Amherst.....                         | N.S.      | 1,839        | 2,274  | 3,781  | 4,964  | 8,973  | 9,998  | 7,450  | -                  |
| *New Toronto.....                     | Ont.      | -            | -      | -      | 209    | 956    | 2,669  | 7,146  | -                  |
| †Smiths Falls.....                    | Ont.      | 1,150        | 2,087  | 3,864  | 5,155  | 6,370  | 8,790  | 7,108  | -                  |
| †Lunenburg.....                       | Que.      | 2,827        | 4,578  | 4,391  | 4,267  | 4,982  | 6,428  | 7,084  | -                  |
| *Yarmouth.....                        | N.S.      | 4,696        | 5,324  | 6,089  | 6,430  | 6,600  | 7,073  | 7,055  | -                  |
| †Midland.....                         | Ont.      | -            | 1,095  | 2,088  | 3,174  | 4,663  | 7,016  | 6,920  | -                  |
| †Mimico.....                          | Ont.      | -            | -      | -      | 437    | 1,373  | 3,751  | 6,800  | -                  |

<sup>1</sup> The 1936 figures cover cities and towns of the Prairie Provinces only.



19.—Populations of Cities and Towns having over 5,000 Inhabitants, Decennial Censuses 1871-1931 and the Quinquennial Census of 1936<sup>1</sup>—concluded.

| City or Town.                   | Province. | Populations. |       |       |       |       |       |       |                    |
|---------------------------------|-----------|--------------|-------|-------|-------|-------|-------|-------|--------------------|
|                                 |           | 1871.        | 1881. | 1891. | 1901. | 1911. | 1921. | 1931. | 1936. <sup>1</sup> |
| *Kenora.....                    | Ont.....  | -            | -     | 1,806 | 5,202 | 6,158 | 5,407 | 6,766 | -                  |
| *Nanaimo.....                   | B.C.....  | -            | 1,645 | 4,595 | 6,130 | 6,254 | 6,559 | 6,745 | -                  |
| Eastview.....                   | Ont.....  | -            | -     | -     | -     | 3,169 | 5,324 | 6,686 | -                  |
| †Drummondville.....             | Que.....  | -            | 900   | 1,955 | 1,450 | 1,725 | 2,852 | 6,609 | -                  |
| *Portage la Prairie.....        | Man.....  | -            | -     | 3,363 | 3,901 | 5,892 | 6,766 | 6,597 | 6,538              |
| *Campbellton.....               | N.B.....  | -            | -     | 1,782 | 2,652 | 3,817 | 5,570 | 6,505 | -                  |
| †Port Colborne.....             | Ont.....  | 988          | 1,716 | 1,154 | 1,253 | 1,624 | 3,415 | 6,508 | -                  |
| *Grand Mère.....                | Que.....  | -            | -     | -     | 2,511 | 4,753 | 7,631 | 6,461 | -                  |
| *Edmonton.....                  | N.S.....  | -            | -     | -     | -     | 1,821 | 4,035 | 6,430 | -                  |
| *Springhill.....                | N.S.....  | -            | 900   | 4,813 | 4,559 | 5,713 | 5,681 | 6,355 | -                  |
| *Prince Rupert.....             | B.C.....  | -            | -     | -     | -     | 4,184 | 6,393 | 6,350 | -                  |
| *Magog.....                     | Que.....  | -            | -     | 2,100 | 3,516 | 3,978 | 5,159 | 6,302 | -                  |
| *Preston.....                   | Ont.....  | 1,408        | 1,419 | 1,843 | 2,308 | 3,883 | 5,423 | 6,280 | -                  |
| †Trenton.....                   | Ont.....  | 1,796        | 3,042 | 4,363 | 4,217 | 3,988 | 5,902 | 6,276 | -                  |
| †Victoriaville.....             | Que.....  | 1,425        | 1,474 | 1,300 | 1,663 | 3,028 | 3,759 | 6,213 | -                  |
| *Kamloops.....                  | B.C.....  | -            | -     | -     | -     | 3,772 | 4,501 | 6,167 | -                  |
| *North Sydney.....              | N.S.....  | 1,200        | 1,520 | 2,513 | 4,046 | 5,418 | 6,685 | 6,139 | -                  |
| *St. Lambert.....               | Que.....  | 327          | 832   | 906   | 1,362 | 3,344 | 5,890 | 6,075 | -                  |
| *Nelson.....                    | B.C.....  | -            | -     | -     | 5,273 | 4,476 | 5,230 | 5,992 | -                  |
| *North Battleford.....          | Sask..... | -            | -     | -     | -     | 2,105 | 4,108 | 5,988 | 4,710              |
| †Cobourg.....                   | Ont.....  | 4,442        | 4,957 | 4,829 | 4,239 | 5,074 | 5,927 | 5,834 | -                  |
| *Collingwood.....               | Ont.....  | 2,829        | 4,445 | 4,939 | 5,755 | 7,090 | 5,882 | 5,809 | -                  |
| Transcona.....                  | Man.....  | -            | -     | -     | -     | -     | 4,185 | 5,747 | 5,578              |
| †Rimouski.....                  | Que.....  | 1,189        | 1,417 | 1,429 | 1,804 | 3,097 | 3,612 | 5,589 | -                  |
| †Brampton.....                  | Ont.....  | 2,090        | 2,920 | 3,252 | 2,748 | 3,412 | 4,527 | 5,532 | -                  |
| *Fort Frances.....              | Ont.....  | -            | -     | 1,339 | 1,163 | 1,611 | 3,109 | 5,470 | -                  |
| Longueuil.....                  | Que.....  | 2,083        | 2,355 | 2,787 | 2,835 | 3,972 | 4,682 | 5,407 | -                  |
| *St. Laurent.....               | Que.....  | -            | -     | 1,194 | 1,399 | 1,800 | 3,232 | 5,348 | -                  |
| *Ranfurly.....                  | Ont.....  | 865          | 1,905 | 2,611 | 3,153 | 3,846 | 4,906 | 5,296 | -                  |
| *Swift Current.....             | Sask..... | -            | -     | -     | 121   | 1,852 | 3,518 | 5,296 | 5,074              |
| †Ingersoll.....                 | Ont.....  | 4,022        | 4,318 | 4,191 | 4,573 | 4,763 | 5,150 | 5,233 | -                  |
| †Simcoe.....                    | Ont.....  | 1,856        | 2,645 | 2,674 | 2,627 | 3,227 | 3,958 | 5,226 | -                  |
| Forest Hill (vil-<br>lage)..... | Ont.....  | -            | -     | -     | -     | -     | -     | 5,207 | -                  |
| *Hawkesbury.....                | Ont.....  | 1,671        | 1,920 | 2,042 | 4,150 | 4,400 | 5,544 | 5,177 | -                  |
| †Thorold.....                   | Ont.....  | 1,635        | 2,456 | 2,273 | 1,979 | 2,273 | 4,825 | 5,092 | -                  |
| †Whitby.....                    | Ont.....  | 2,732        | 3,140 | 2,786 | 2,110 | 2,248 | 3,957 | 5,046 | -                  |
| Swanssea (village).....         | Ont.....  | -            | -     | -     | -     | -     | -     | 5,031 | -                  |
| *Yorkton.....                   | Sask..... | -            | -     | -     | 700   | 2,309 | 5,151 | 5,027 | 4,961              |
| *Dundas.....                    | Ont.....  | 3,135        | 3,709 | 3,546 | 3,173 | 4,978 | 5,028 | 5,028 | -                  |
| *Stellarton.....                | N.S.....  | 1,750        | 1,569 | 2,410 | 2,335 | 3,910 | 5,312 | 5,002 | -                  |
| *Weyburn.....                   | Sask..... | -            | -     | -     | 113   | 2,210 | 3,193 | 5,002 | 5,338              |

<sup>1</sup> The 1936 figures cover cities and towns of the Prairie Provinces only.

20.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901-31 and the Quinquennial Census of 1936.<sup>1</sup>

| Town or Village.             | 1901. | 1911. | 1921. | 1931. | Town or Village.              | 1901. | 1911. | 1921. | 1931. |
|------------------------------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|
| <b>Prince Edward Island.</b> |       |       |       |       | <b>Nova Scotia—concluded.</b> |       |       |       |       |
| Summerside.....              | 2,875 | 2,678 | 3,228 | 3,750 | Bridgetown.....               | 858   | 996   | 1,086 | 1,126 |
| Souris.....                  | 1,140 | 1,089 | 1,094 | 1,063 | Mahone Bay.....               | 806   | 951   | 1,177 | 1,065 |
| <b>Nova Scotia.</b>          |       |       |       |       | Port Hawkesbury.....          | 633   | 664   | 899   | 1,011 |
| Westville.....               | 3,471 | 4,417 | 4,550 | 3,946 | Joggins.....                  | 1,088 | 1,648 | 1,732 | 1,000 |
| Bridgewater.....             | 2,203 | 2,775 | 3,147 | 3,262 | <b>New Brunswick.</b>         |       |       |       |       |
| Pictou.....                  | 3,235 | 3,179 | 2,988 | 3,152 | Chatham.....                  | 4,868 | 4,666 | 4,506 | 4,017 |
| Kentville.....               | 1,731 | 2,304 | 2,717 | 3,033 | Dalhousie.....                | 862   | 1,650 | 1,958 | 3,974 |
| Windsor.....                 | 2,849 | 2,804 | 2,946 | 3,032 | St. Stephen.....              | 2,840 | 2,836 | 3,452 | 3,437 |
| Inverness.....               | 306   | 2,719 | 2,963 | 2,900 | Newcastle.....                | 2,507 | 2,945 | 3,507 | 3,383 |
| Dominion.....                | 1,546 | 2,589 | 2,390 | 2,846 | Bathurst.....                 | 1,044 | 960   | 3,327 | 3,300 |
| Lunenburg.....               | 2,916 | 2,681 | 2,792 | 2,727 | Woodstock.....                | 3,644 | 3,856 | 3,380 | 3,269 |
| Liverpool.....               | 1,987 | 2,109 | 2,294 | 2,665 | Sussex.....                   | 1,398 | 1,906 | 2,198 | 2,252 |
| Trenton.....                 | 1,274 | 1,749 | 2,644 | 2,613 | Sackville.....                | 1,444 | 2,039 | 2,173 | 2,234 |
| Parrsboro.....               | 2,705 | 2,224 | 2,161 | 1,919 | Devon.....                    | -     | -     | 1,924 | 1,977 |
| Wolfville.....               | 1,412 | 1,458 | 1,743 | 1,819 | Shediac.....                  | 1,075 | 1,442 | 1,678 | 1,836 |
| Antigonish.....              | 1,838 | 1,787 | 1,746 | 1,764 | Milton.....                   | 2,044 | 1,804 | 1,976 | 1,735 |
| Canso.....                   | 1,479 | 1,617 | 1,626 | 1,575 | Grand Falls.....              | 644   | 1,280 | 1,327 | 1,556 |
| Shelburne.....               | 1,445 | 1,435 | 1,360 | 1,474 | Marysville.....               | 1,892 | 1,837 | 1,614 | 1,512 |
| Digby.....                   | 1,150 | 1,247 | 1,230 | 1,412 | St. Andrews.....              | 1,064 | 957   | 1,005 | 1,207 |
| Wedgeport.....               | 1,026 | 1,392 | 1,424 | 1,294 | St. George.....               | 733   | 988   | 1,110 | 1,087 |
| Oxford.....                  | 1,285 | 1,392 | 1,402 | 1,133 |                               |       |       |       |       |

<sup>1</sup> The 1936 figures cover towns and villages of the Prairie Provinces only.

26.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901-31 and the Quinquennial Census of 1936<sup>1</sup>—continued.

| Town or Village.            | 1901. | 1911. | 1921. | 1931. | Town or Village.            | 1901. | 1911. | 1921. | 1931. |
|-----------------------------|-------|-------|-------|-------|-----------------------------|-------|-------|-------|-------|
| <b>Quebec.</b>              |       |       |       |       | <b>Quebec—concluded.</b>    |       |       |       |       |
| St. Jérôme de Matane....    | 1,176 | 2,056 | 3,050 | 4,757 | St. Alexis de la Grande     | —     | —     | —     | —     |
| Buckingham.....             | 2,930 | 3,854 | 3,835 | 4,638 | Baie.....                   | —     | 1,355 | 1,735 | 1,790 |
| Montmorency.....            | —     | 2,710 | 3,367 | 4,575 | Lac au Saumon.....          | —     | 1,171 | 1,354 | 1,779 |
| Montreal North.....         | —     | —     | 1,360 | 4,519 | St. Raymond.....            | 1,272 | 1,653 | 1,693 | 1,772 |
| Kénogami.....               | —     | —     | 2,557 | 4,500 | Acton Vale.....             | 1,175 | 1,402 | 1,549 | 1,741 |
| Asbestos.....               | 783   | 2,224 | 2,189 | 4,394 | Chandler.....               | —     | —     | 1,756 | 1,720 |
| Farnham.....                | 3,114 | 3,560 | 3,343 | 4,205 | Maniwaki.....               | —     | —     | —     | —     |
| St. Pierre.....             | 505   | 2,201 | 3,535 | 4,185 | L'Epiphanie.....            | —     | —     | —     | 1,705 |
| Pointe Claire.....          | 555   | 793   | 3,617 | 4,058 | Courville.....              | —     | 910   | 1,293 | 1,678 |
| Coaticook.....              | 2,880 | 3,165 | 3,554 | 4,044 | St. Rose.....               | 1,154 | 1,480 | 1,811 | 1,661 |
| St. Joseph d'Alma.....      | —     | —     | 850   | 3,970 | Deschailons.....            | 1,213 | 1,161 | 1,680 | 1,650 |
| Montmagny.....              | 1,919 | 2,617 | 4,145 | 3,927 | St. Benoit Joseph Labre     | —     | 1,070 | 1,416 | 1,648 |
| Mégantic.....               | 2,171 | 2,816 | 3,140 | 3,911 | St. Joseph (Beauce).....    | 1,117 | 1,440 | 1,445 | 1,625 |
| Lachute.....                | 2,022 | 2,407 | 2,592 | 3,900 | Huntingdon.....             | 1,122 | 1,265 | 1,401 | 1,619 |
| Beauharnois.....            | 1,976 | 2,015 | 2,250 | 3,729 | Greenfield Park.....        | —     | —     | 1,112 | 1,010 |
| Giffard.....                | —     | —     | 1,254 | 3,573 | Arthabaska.....             | 995   | 1,458 | 1,234 | 1,008 |
| East Angus.....             | —     | —     | 3,802 | 3,556 | St. Félicien.....           | —     | 581   | 1,306 | 1,599 |
| Ste. Thérèse.....           | 1,541 | 2,120 | 3,043 | 3,292 | St. Marie.....              | —     | —     | 1,311 | 1,598 |
| Beauport.....               | —     | —     | 3,240 | 3,242 | L'Assomption.....           | 1,605 | 1,747 | 1,320 | 1,676 |
| Royan.....                  | —     | —     | —     | 3,225 | Bedford.....                | 1,364 | 1,432 | 1,669 | 1,570 |
| Montreal West.....          | 352   | 703   | 1,582 | 3,193 | St. Georges East.....       | —     | 1,410 | 1,058 | 1,543 |
| Mont Joli.....              | 822   | 2,141 | 2,799 | 3,143 | Lac St. Louis.....          | —     | —     | 597   | 1,377 |
| Pointe aux Trembles.....    | —     | 1,167 | 2,350 | 2,970 | St. Gabriel de Brandon..... | 1,199 | 1,602 | 1,667 | 1,530 |
| Ste. Agathe des Monts.....  | 1,073 | 2,020 | 2,812 | 2,949 | St. Jacques.....            | —     | —     | 1,332 | 1,529 |
| Baie St. Paul.....          | 1,408 | 1,857 | 2,291 | 2,916 | St. Michel de Laval.....    | —     | —     | 432   | 1,528 |
| Nicolet.....                | 2,225 | 2,593 | 2,342 | 2,868 | Bromptonville.....          | —     | 1,239 | 2,003 | 1,527 |
| Aylmer.....                 | 2,291 | 3,109 | 2,970 | 2,835 | Montebello.....             | 795   | 954   | 1,077 | 1,501 |
| Charny.....                 | —     | 1,408 | 2,265 | 2,823 | Disraeli.....               | 1,018 | 1,606 | 1,646 | 1,437 |
| St. Joseph de Grantham..... | —     | —     | —     | 2,812 | Belœil.....                 | —     | 1,501 | 1,418 | 1,434 |
| Iberville.....              | 1,512 | 1,905 | 2,454 | 2,778 | Rock Island.....            | 615   | 801   | 1,442 | 1,424 |
| Laprairie.....              | 1,451 | 2,388 | 2,158 | 2,774 | Causapscal.....             | —     | —     | —     | 1,300 |
| Roberval.....               | 1,248 | 1,737 | 2,068 | 2,770 | Danville.....               | 1,017 | 1,331 | 1,290 | 1,354 |
| Windor.....                 | 2,149 | 2,233 | 2,330 | 2,720 | Pont Rouge.....             | —     | —     | 1,419 | 1,353 |
| Danncona.....               | —     | 1,014 | 1,959 | 2,681 | Pierreville.....            | 1,108 | 1,363 | 1,394 | 1,352 |
| Richmond.....               | 2,057 | 2,175 | 2,450 | 2,590 | Baie de Shawinigan.....     | —     | 1,024 | 1,213 | 1,316 |
| Plessisville.....           | 1,586 | 1,550 | 2,032 | 2,539 | St. Casimir.....            | —     | —     | —     | 1,167 |
| Bagotville.....             | 507   | 1,011 | 2,204 | 2,468 | Thurso.....                 | 525   | 601   | 638   | 1,202 |
| Berthier.....               | 1,364 | 1,335 | 2,193 | 2,431 | Chumby Basin.....           | 849   | 900   | 1,063 | 1,287 |
| Ste. Anne de Bellevue.....  | 1,343 | 1,416 | 2,212 | 2,417 | Laurentides.....            | 934   | 1,128 | 1,150 | 1,243 |
| La Malbaie.....             | 826   | 1,449 | 1,883 | 2,408 | Le Providence.....          | 519   | 894   | 1,078 | 1,241 |
| Mont Laurier.....           | —     | 752   | 2,211 | 2,394 | St. Jérôme.....             | 498   | 719   | 923   | 1,235 |
| Louiseville.....            | 1,565 | 1,675 | 1,772 | 2,365 | St. Pacôme.....             | —     | —     | —     | 1,225 |
| La Salle.....               | —     | —     | 726   | 2,362 | L'Abord-à-Plouffe.....      | —     | —     | 1,011 | 1,227 |
| Saindon.....                | —     | —     | 1,793 | 2,355 | St. Rémi.....               | 1,080 | 1,021 | 1,135 | 1,201 |
| Port Alfred.....            | —     | —     | 1,213 | 2,342 | Scotstown.....              | 791   | 933   | 987   | 1,139 |
| Pricville.....              | —     | —     | —     | 2,310 | St. Eustache.....           | 1,079 | 996   | 1,098 | 1,187 |
| Pointe Gatineau.....        | 1,583 | 1,751 | 1,919 | 2,283 | Montreal South.....         | —     | 790   | 1,030 | 1,164 |
| Lorville.....               | 1,555 | 1,588 | 2,066 | 2,251 | Dorion.....                 | 275   | 631   | 833   | 1,155 |
| Noranda.....                | —     | —     | 2,246 | 2,246 | Cap Châtel.....             | —     | —     | —     | 1,150 |
| Montreal East.....          | —     | —     | 1,776 | 2,242 | Port Combourg.....          | 482   | 811   | 973   | 1,150 |
| Waterloo.....               | 1,797 | 1,880 | 2,063 | 2,192 | St. Joseph de la Rivière    | —     | —     | —     | —     |
| Cabano.....                 | —     | —     | —     | 2,187 | Bleue.....                  | —     | —     | 864   | 1,111 |
| Mont Royal.....             | —     | —     | 190   | 2,174 | Ste. Anne de Chicoutimi     | 516   | 657   | 838   | 1,102 |
| Black Lake.....             | —     | 2,045 | 2,656 | 2,167 | Rigaud.....                 | 779   | 856   | 939   | 1,099 |
| Amos.....                   | —     | —     | 1,488 | 2,153 | Châteauguay.....            | —     | —     | 881   | 1,067 |
| Dorval.....                 | 481   | 1,005 | 1,466 | 2,052 | L'Enfant Jésus.....         | —     | —     | —     | 1,066 |
| Dolbeau.....                | —     | —     | —     | 2,033 | Rawdon.....                 | —     | —     | 1,042 | 1,066 |
| Masson.....                 | 1,012 | 1,034 | 950   | 2,013 | Beebe Plain.....            | 477   | 808   | 921   | 1,053 |
| Almaville.....              | —     | —     | 1,174 | 2,010 | St. Océaire.....            | 865   | 941   | 985   | 1,051 |
| St. Marc des Carrières..... | 298   | 1,224 | 1,492 | 1,997 | Ville Marie.....            | 502   | 850   | 840   | 1,049 |
| Marieville.....             | 1,308 | 1,537 | 1,743 | 1,989 | Rivière du Moulin.....      | —     | —     | 738   | 1,040 |
| St. Tite.....               | 991   | 1,438 | 1,783 | 1,969 | Val Brilliant.....          | —     | —     | 962   | 1,032 |
| Terrebonne.....             | 1,322 | 1,990 | 2,056 | 1,953 | Bic.....                    | —     | —     | 812   | 1,020 |
| Lennoxville.....            | 1,120 | 1,211 | 1,554 | 1,927 | Notre-Dame de Portneuf      | —     | —     | 977   | 1,017 |
| Ste. Anne de Beaupré.....   | —     | 2,381 | 1,648 | 1,901 | <b>Ontario.</b>             |       |       |       |       |
| Charlesbourg.....           | —     | —     | 1,267 | 1,869 | Leamington.....             | 2,451 | 2,652 | 3,675 | 4,902 |
| St. Joseph (Richelieu)..... | 647   | 1,410 | 1,658 | 1,869 | Port Hope.....              | 4,188 | 5,092 | 4,456 | 4,723 |
| East Broughton.....         | —     | 996   | 1,709 | 1,868 | Weston.....                 | 1,083 | 1,875 | 3,166 | 4,723 |
| Cowansville.....            | 699   | 881   | 1,094 | 1,859 | Goderich.....               | 4,158 | 4,522 | 4,107 | 4,491 |
| Témiscamingue.....          | —     | —     | —     | 1,855 | Riverside.....              | —     | —     | 1,155 | 4,432 |
| Trois Pistoles.....         | —     | —     | 1,454 | 1,837 | Wallaceburg.....            | 2,763 | 3,438 | 4,006 | 4,326 |
| Quebec West.....            | —     | —     | 130   | 1,813 | Sturgeon Falls.....         | 1,418 | 2,199 | 4,125 | 4,234 |
| Arvida (city).....          | —     | —     | —     | 1,790 | Paris.....                  | 3,229 | 4,098 | 4,368 | 4,137 |

<sup>1</sup> The 1936 figures cover towns and villages of the Prairie Provinces only. Murray Bay.<sup>2</sup> Also known as

26.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901-31 and the Quinquennial Census of 1936<sup>1</sup>—continued.

| Town or Village.          | 1901. | 1911. | 1921. | 1931. | Town or Village.          | 1901. | 1911. | 1921. | 1931. |
|---------------------------|-------|-------|-------|-------|---------------------------|-------|-------|-------|-------|
| <b>Ontario—continued.</b> |       |       |       |       | <b>Ontario—concluded.</b> |       |       |       |       |
| Carleton Place.....       | 4,059 | 3,621 | 3,841 | 4,105 | Mitchell.....             | 1,945 | 1,706 | 1,800 | 1,588 |
| Perth.....                | 3,585 | 3,588 | 3,700 | 4,099 | Brighton.....             | 1,378 | 1,320 | 1,411 | 1,580 |
| Bowmanville.....          | 2,731 | 2,814 | 3,233 | 4,080 | Port Dalhousie.....       | 1,125 | 1,152 | 1,492 | 1,547 |
| Penetanguishene.....      | 2,422 | 2,568 | 4,037 | 4,035 | Palmerston.....           | 1,850 | 1,665 | 1,523 | 1,543 |
| Arnprior.....             | 4,152 | 4,405 | 4,077 | 4,023 | Dresden.....              | 1,613 | 1,551 | 1,339 | 1,529 |
| Cochrane.....             | —     | 1,715 | 2,555 | 3,963 | Southampton.....          | 1,636 | 1,685 | 1,537 | 1,489 |
| Long Branch.....          | —     | —     | —     | 3,962 | Forest.....               | 1,553 | 1,445 | 1,422 | 1,480 |
| Coltuit.....              | —     | 5,338 | 4,449 | 3,885 | Deseronto.....            | 3,527 | 2,015 | 1,178 | 1,476 |
| Oakville.....             | 1,643 | 2,372 | 3,298 | 3,857 | Oroquois Falls.....       | —     | —     | —     | —     |
| Kapuskasing.....          | —     | —     | 926   | 3,819 | New Hamburg.....          | 1,208 | 1,454 | 1,351 | 1,436 |
| St. Marys.....            | 3,384 | 3,388 | 3,847 | 3,802 | Keewatin.....             | 1,156 | 1,242 | 1,327 | 1,422 |
| Newmarket.....            | 2,125 | 2,996 | 3,626 | 3,745 | Morrisburg.....           | 1,693 | 1,696 | 1,444 | 1,420 |
| Gananoque.....            | 3,525 | 3,804 | 3,904 | 3,592 | Rainy River.....          | —     | 1,578 | 1,444 | 1,402 |
| Pictou.....               | 1,698 | 3,564 | 3,356 | 3,580 | Caledonia.....            | 801   | 952   | 1,223 | 1,396 |
| Perry Sound.....          | 1,356 | 1,770 | 2,400 | 3,521 | Hagersville.....          | 1,020 | 1,100 | 1,169 | 1,385 |
| Napanee.....              | 3,143 | 2,807 | 3,038 | 3,497 | Vankleek Hill.....        | 1,674 | 1,577 | 1,499 | 1,380 |
| Dunnville.....            | 2,105 | 2,861 | 3,224 | 3,405 | Point Edward.....         | 780   | 874   | 1,258 | 1,362 |
| Tilsonburg.....           | 2,241 | 2,758 | 2,974 | 3,385 | Alliston.....             | 1,256 | 1,279 | 1,179 | 1,355 |
| Copper Cliff.....         | 2,500 | 3,082 | 2,597 | 3,173 | Lakefield.....            | 1,244 | 1,397 | 1,886 | 1,332 |
| Hamover.....              | 1,392 | 2,342 | 2,781 | 3,077 | Dryden.....               | 140   | 715   | 1,019 | 1,326 |
| Burlington.....           | 1,119 | 1,831 | 2,709 | 3,046 | Uxbridge.....             | 1,657 | 1,433 | 1,456 | 1,325 |
| Prescott.....             | 3,019 | 2,801 | 2,636 | 2,984 | Cardinal.....             | 1,378 | 1,111 | 1,241 | 1,819 |
| Strathroy.....            | 2,933 | 2,823 | 2,691 | 2,964 | Port Elgin.....           | 1,313 | 1,235 | 1,291 | 1,805 |
| New Liskeard.....         | —     | —     | 2,108 | 2,880 | Harriston.....            | 1,637 | 1,491 | 1,263 | 1,296 |
| Huntsville.....           | 2,152 | 2,358 | 2,246 | 2,817 | Richmond Hill.....        | 629   | 652   | 1,055 | 1,295 |
| Halleybury.....           | —     | 3,874 | 3,743 | 3,803 | Kemptville.....           | 1,523 | 1,192 | 1,204 | 1,286 |
| Blind River.....          | 2,656 | 2,558 | 1,845 | 2,805 | Tweed.....                | 1,168 | 1,368 | 1,330 | 1,271 |
| Amherstburg.....          | 2,322 | 2,500 | 2,730 | 2,759 | Chippawa.....             | 460   | 707   | 1,137 | 1,266 |
| Hespeler.....             | 2,457 | 2,368 | 2,777 | 2,752 | Niagara.....              | 1,258 | 1,318 | 1,357 | 1,228 |
| Campbellford.....         | 2,485 | 3,051 | 2,890 | 2,744 | Waterford.....            | 1,322 | 1,083 | 1,123 | 1,213 |
| Portsmouth.....           | 1,527 | 1,786 | 2,351 | 2,741 | Englehart.....            | —     | 670   | 756   | 1,210 |
| Listowel.....             | 2,083 | 2,289 | 2,477 | 2,676 | Beamsville.....           | 832   | 1,096 | 1,256 | 1,203 |
| Meaford.....              | 1,916 | 2,811 | 2,650 | 2,624 | Elora.....                | 1,187 | 1,197 | 1,126 | 1,195 |
| Orangeville.....          | 2,111 | 2,340 | 2,187 | 2,614 | Havelock.....             | 924   | 1,436 | 1,268 | 1,173 |
| Petrolia.....             | 4,355 | 3,518 | 3,148 | 2,596 | Port Perry.....           | 1,465 | 1,148 | 1,143 | 1,163 |
| Fergus.....               | 1,396 | 1,534 | 1,799 | 2,594 | Norwich.....              | 1,209 | 1,112 | 1,176 | 1,158 |
| Aurora.....               | 1,590 | 1,901 | 2,307 | 2,587 | Stouffville.....          | 1,223 | 1,034 | 1,053 | 1,155 |
| Merriton.....             | 1,710 | 1,670 | 2,544 | 2,523 | Chester Bay.....          | 884   | 889   | 926   | 1,151 |
| Hummerstone.....          | —     | —     | 1,524 | 2,490 | Victoria Harbour.....     | 630   | 616   | 1,063 | 1,128 |
| Kincardine.....           | 2,077 | 1,950 | 2,077 | 2,465 | Delhi.....                | 823   | 825   | 733   | 1,121 |
| Bracebridge.....          | 2,479 | 2,776 | 2,451 | 2,455 | L'Orignal.....            | 1,020 | 1,347 | 1,298 | 1,121 |
| Walkerton.....            | 2,971 | 2,901 | 2,344 | 2,451 | Little Current.....       | 728   | 1,208 | 923   | 1,101 |
| Almonte.....              | 3,023 | 2,452 | 2,430 | 2,415 | Shelburne.....            | 1,188 | 1,113 | 1,072 | 1,077 |
| Fort Erie.....            | 890   | 1,146 | 1,546 | 2,383 | Madoc.....                | 1,157 | 1,058 | 1,058 | 1,059 |
| Georgetown.....           | 1,313 | 1,583 | 2,061 | 2,288 | Parkhill.....             | 1,430 | 1,289 | 1,152 | 1,130 |
| Aylmer.....               | 2,204 | 2,102 | 2,194 | 2,283 | Tavistock.....            | 403   | 981   | 1,011 | 1,029 |
| Grimsby.....              | 1,001 | 1,660 | 2,004 | 2,198 | Winchester.....           | 1,101 | 1,143 | 1,126 | 1,027 |
| Kingsville.....           | 1,537 | 1,427 | 1,783 | 2,174 | Arthur.....               | 1,285 | 1,102 | 1,104 | 1,021 |
| Elmira.....               | 1,060 | 1,782 | 2,016 | 2,170 | Eganville.....            | 1,107 | 1,189 | 1,015 | 1,020 |
| Tecumseh.....             | —     | —     | 978   | 2,129 | Stayner.....              | 1,225 | 1,039 | 972   | 1,019 |
| Rockland.....             | 1,998 | 3,397 | 3,496 | 2,118 | Colborne.....             | 1,017 | 999   | 932   | 1,015 |
| Stouk Lookout.....        | —     | 550   | 1,127 | 2,088 | Chesherville.....         | 932   | 888   | 967   | 1,012 |
| Alexandria.....           | 1,911 | 2,323 | 2,195 | 2,006 | Markham.....              | 967   | 909   | 1,012 | 1,008 |
| Tilbury.....              | 1,012 | 1,568 | 1,651 | 1,992 |                           |       |       |       |       |
| Wingham.....              | 2,392 | 2,776 | 2,992 | 1,950 |                           |       |       |       |       |
| Easer.....                | 1,391 | 1,353 | 1,558 | 1,954 |                           |       |       |       |       |
| Ridgetown.....            | 2,405 | 1,954 | 1,855 | 1,952 |                           |       |       |       |       |
| Warton.....               | 2,443 | 2,266 | 1,726 | 1,949 |                           |       |       |       |       |
| Gravenhurst.....          | 2,146 | 1,624 | 1,478 | 1,864 |                           |       |       |       |       |
| Acton.....                | 1,484 | 1,720 | 1,722 | 1,855 |                           |       |       |       |       |
| Milton.....               | 1,372 | 1,654 | 1,873 | 1,839 |                           |       |       |       |       |
| Mount Forest.....         | 2,019 | 1,839 | 1,718 | 1,801 |                           |       |       |       |       |
| Clinton.....              | 2,547 | 2,254 | 2,018 | 1,789 |                           |       |       |       |       |
| Durham.....               | 1,422 | 1,581 | 1,494 | 1,750 |                           |       |       |       |       |
| Blenheim.....             | 1,653 | 1,387 | 1,565 | 1,737 |                           |       |       |       |       |
| Port Dover.....           | 1,177 | 1,138 | 1,462 | 1,707 |                           |       |       |       |       |
| Cheesley.....             | 1,734 | 1,734 | 1,708 | 1,699 |                           |       |       |       |       |
| Seaforth.....             | 2,245 | 1,953 | 1,829 | 1,880 |                           |       |       |       |       |
| Capreol.....              | —     | —     | 1,287 | 1,884 |                           |       |       |       |       |
| Exeter.....               | 1,792 | 1,555 | 1,442 | 1,666 |                           |       |       |       |       |
| Port Credit.....          | —     | —     | 1,123 | 1,635 |                           |       |       |       |       |
| Thessalon.....            | 1,205 | 1,945 | 1,651 | 1,632 |                           |       |       |       |       |
| Mattawa.....              | 1,400 | 1,524 | 1,462 | 1,631 |                           |       |       |       |       |

<sup>1</sup> The 1936 figures cover towns and villages of the Prairie Provinces only.

20.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901-31 and the Quinquennial Census of 1936<sup>1</sup>—concluded.

| Town or Village.                | 1901. | 1911. | 1921. | 1931. | 1936. <sup>1</sup> | Town or Village.               | 1901. | 1911. | 1921. | 1931. | 1936. <sup>1</sup> |
|---------------------------------|-------|-------|-------|-------|--------------------|--------------------------------|-------|-------|-------|-------|--------------------|
| <b>Saskatchewan.</b>            |       |       |       |       |                    | <b>Alberta—<br/>concluded.</b> |       |       |       |       |                    |
| Melville.....                   | -     | 1,816 | 2,808 | 3,801 | 3,923              | Newcastle.....                 | -     | -     | -     | 304   | 1,278              |
| Estevan.....                    | 141   | 1,981 | 2,209 | 2,930 | 2,854              | Magrath.....                   | 424   | 995   | 1,069 | 1,224 | 1,217              |
| Biggar.....                     | -     | 315   | 1,635 | 2,369 | 1,953              | Stettler.....                  | -     | 1,444 | 1,410 | 1,219 | 1,202              |
| Melfort.....                    | -     | 599   | 1,740 | 1,809 | 1,948              | Olds.....                      | 218   | 917   | 764   | 1,050 | 1,197              |
| Humboldt.....                   | -     | 859   | 1,822 | 1,899 | 1,819              | Innisfail.....                 | 317   | 602   | 941   | 1,024 | 1,134              |
| Kamsack.....                    | -     | 473   | 2,002 | 2,087 | 1,810              | Clareholm.....                 | -     | 809   | 903   | 1,156 | 1,081              |
| Shaunavon.....                  | -     | -     | 1,140 | 1,761 | 1,636              | Vainwright.....                | -     | 788   | 975   | 1,147 | 1,048              |
| Rosetown.....                   | -     | 317   | 865   | 1,553 | 1,520              | Ponoka.....                    | 151   | 642   | 712   | 830   | 1,045              |
| Lloydminster <sup>2</sup> ..... | -     | 663   | 755   | 1,510 | 1,420              | Pincher Creek.....             | 335   | 1,027 | 888   | 1,024 | 999                |
| Indian Head.....                | 768   | 1,285 | 1,439 | 1,438 | 1,365              | Beverly.....                   | -     | -     | 1,039 | 1,111 | 998                |
| Rosthern.....                   | 413   | 1,172 | 1,074 | 1,412 | 1,355              | Redcliff.....                  | -     | 220   | 1,137 | 1,102 | 990                |
| Assiniboia.....                 | -     | -     | 1,006 | 1,454 | 1,257              | Port Saskatchewan.....         | 306   | 782   | 982   | 1,001 | 899                |
| Canora.....                     | -     | 435   | 1,230 | 1,179 | 1,254              |                                |       |       |       |       |                    |
| Tisdale.....                    | -     | 250   | 783   | 1,069 | 1,152              | <b>British<br/>Columbia.</b>   |       |       |       |       |                    |
| Watrous.....                    | -     | 781   | 1,101 | 1,303 | 1,147              | Kelowna (city)...              | 261   | 1,653 | 2,520 | 4,655 | -                  |
| Wilkie.....                     | -     | 537   | 778   | 1,222 | 1,220              | Vernon (city).....             | 802   | 2,671 | 3,685 | 3,937 | -                  |
| Battleford.....                 | 609   | 1,355 | 1,229 | 1,096 | 1,128              | Cranbrook (city)...            | 1,196 | 3,090 | 2,725 | 3,067 | -                  |
| Wynyard.....                    | -     | 515   | 849   | 1,042 | 1,110              | Rossland (city)...             | 6,150 | 2,826 | 2,097 | 2,848 | -                  |
| Moosomin.....                   | 868   | 1,143 | 1,099 | 1,119 | 1,104              | Revelstoke (city)...           | 1,000 | 3,017 | 2,782 | 2,756 | -                  |
| Maple Creek.....                | 382   | 936   | 1,002 | 1,154 | 1,032              | Pennie (city).....             | -     | 3,146 | 2,802 | 2,732 | -                  |
| Kindersley.....                 | -     | 456   | 1,003 | 1,037 | 1,030              | Prince George<br>(city).....   | -     | -     | 2,053 | 2,470 | -                  |
| Gravelbourg.....                | -     | -     | 1,106 | 1,137 | 985                | Chilliwack (city)...           | 277   | 1,657 | 1,767 | 2,461 | -                  |
| Sutherland.....                 | -     | 421   | 961   | 1,148 | 942                | Cumberland<br>(city).....      | 732   | 1,237 | 2,161 | 2,371 | -                  |
| Herbert.....                    | -     | 559   | 827   | 1,009 | 900                | Port Alberni<br>(city).....    | -     | -     | 1,056 | 2,356 | -                  |
| Radville.....                   | -     | 233   | 883   | 1,006 | 854                | Duncan (city).....             | -     | -     | 1,178 | 1,843 | -                  |
| <b>Alberta.</b>                 |       |       |       |       |                    | Ladysmith<br>(city).....       | 746   | 2,517 | 1,151 | 1,448 | -                  |
| Drumheller (city)...            | -     | -     | 2,490 | 2,987 | 2,012              | Mission (village)...           | -     | -     | -     | 1,314 | -                  |
| Red Deer (city)...              | 323   | 2,118 | 2,328 | 2,344 | 2,384              | Port Cominlam<br>(city).....   | -     | -     | 1,178 | 1,312 | -                  |
| Camrose.....                    | -     | 1,586 | 1,892 | 2,258 | 2,263              | Grand Forks<br>(city).....     | 1,012 | 1,577 | 1,469 | 1,298 | -                  |
| Coleman.....                    | -     | 1,557 | 1,590 | 1,704 | 2,129              | Merritt (city)....             | -     | 703   | 1,389 | 1,296 | -                  |
| Raymond.....                    | -     | 1,405 | 1,394 | 1,849 | 2,094              | Port Moody<br>(city).....      | -     | -     | 1,030 | 1,260 | -                  |
| Wetaskiwin (city)...            | 550   | 2,411 | 2,061 | 2,125 | 2,058              | Courtenay (city)...            | -     | -     | 810   | 1,219 | -                  |
| Cardston.....                   | 639   | 1,207 | 1,612 | 1,672 | 1,711              |                                |       |       |       |       |                    |
| Blairmore.....                  | 231   | 1,137 | 1,552 | 1,629 | 1,682              |                                |       |       |       |       |                    |
| Vegreville.....                 | -     | 1,029 | 1,479 | 1,659 | 1,672              |                                |       |       |       |       |                    |
| Edson.....                      | -     | 497   | 1,138 | 1,547 | 1,600              |                                |       |       |       |       |                    |
| Grande Prairie.....             | -     | -     | 1,061 | 1,464 | 1,478              |                                |       |       |       |       |                    |
| Lacombe.....                    | 490   | 1,029 | 1,133 | 1,259 | 1,414              |                                |       |       |       |       |                    |
| Hanna.....                      | -     | -     | 1,364 | 1,490 | 1,405              |                                |       |       |       |       |                    |
| Macleod.....                    | 796   | 1,844 | 1,723 | 1,447 | 1,365              |                                |       |       |       |       |                    |
| High River.....                 | 153   | 1,182 | 1,198 | 1,459 | 1,359              |                                |       |       |       |       |                    |
| Taber.....                      | -     | 1,400 | 1,705 | 1,279 | 1,341              |                                |       |       |       |       |                    |
| Vermilion.....                  | -     | 625   | 1,272 | 1,270 | 1,291              |                                |       |       |       |       |                    |

<sup>1</sup> The 1936 figures cover towns and villages of the Prairie Provinces only.

<sup>2</sup> Under the Saskatchewan Town Act, Lloydminster, Alberta, is merged with Lloydminster, Saskatchewan, for municipal purposes.

**Rural and Urban Farm Populations.**—At p. 126 of the 1937 Year Book statistics of rural and urban farm population, by provinces, as compiled from the Census of 1931, were given, and at p. 299 of the 1934-35 Year Book details regarding farm workers, those farms employing hired labour, the period of employment and the cost of labour were shown. The reader is also referred to the item "Wage-earners" (in agriculture) in the index of the present volume for further information on these topics.

## Section 11.—Literacy.

The subject of literacy was discussed at pp. 131-132 of the 1936 Year Book. At p. 157 of the 1934-35 Year Book will be found a table showing the literacy of the population of 5 years and over from 1901 to 1931, at pp. 158-159 of the same edition the same information as is now summarized in Table 21 was given by sex, while on p. 160 was shown the literacy of the population of cities and towns of 30,000 population or over, as in 1931.

### 21.—Literacy of the Population of 10 Years of Age or Over, by Provinces, 1931.

NOTE.—Corresponding figures for 1921 are to be found in the 1924 Year Book, p. 131.

| Provinces.                 | Popula-<br>tion<br>10 Years<br>or Over. | Can<br>Read<br>and<br>Write. | Can<br>Read<br>only. | Can<br>neither<br>Read nor<br>Write. | Percentages.                 |                      |                                      |
|----------------------------|---|------------------------------|----------------------|--------------------------------------|------------------------------|----------------------|--------------------------------------|
|                            |   |                              |                      |                                      | Can<br>Read<br>and<br>Write. | Can<br>Read<br>only. | Can<br>neither<br>Read nor<br>Write. |
|                            | No.                                     | No.                          | No.                  | No.                                  | p.c.                         | p.c.                 | p.c.                                 |
| Prince Edward Island.....  | 69,333                                  | 66,996                       | 502                  | 1,835                                | 96.63                        | 0.72                 | 2.65                                 |
| Nova Scotia.....           | 402,401                                 | 382,472                      | 2,700                | 17,139                               | 95.06                        | 0.60                 | 4.26                                 |
| New Brunswick.....         | 310,316                                 | 286,076                      | 12,200               | 21,440                               | 92.38                        | 0.71                 | 6.91                                 |
| Quebec.....                | 2,167,517                               | 2,049,778                    | 15,527               | 103,212                              | 94.62                        | 0.72                 | 4.76                                 |
| Ontario.....               | 2,791,072                               | 2,719,558                    | 7,357                | 64,157                               | 97.44                        | 0.26                 | 2.30                                 |
| Manitoba.....              | 557,806                                 | 530,779                      | 2,151                | 24,876                               | 95.15                        | 0.59                 | 4.46                                 |
| Saskatchewan.....          | 705,350                                 | 672,812                      | 3,441                | 29,097                               | 95.39                        | 0.49                 | 4.13                                 |
| Alberta.....               | 572,129                                 | 549,789                      | 2,671                | 19,669                               | 96.10                        | 0.47                 | 3.44                                 |
| British Columbia.....      | 583,135                                 | 558,417                      | 1,630                | 23,088                               | 95.76                        | 0.28                 | 3.96                                 |
| Yukon.....                 | 3,542                                   | 2,710                        | 30                   | 802                                  | 76.51                        | 0.85                 | 22.64                                |
| Northwest Territories..... | 7,021                                   | 2,832                        | 108                  | 4,081                                | 40.34                        | 1.54                 | 58.13                                |
| <b>Canada.....</b>         | <b>8,169,622</b>                        | <b>7,821,819</b>             | <b>38,407</b>        | <b>300,396</b>                       | <b>95.74</b>                 | <b>0.47</b>          | <b>3.79</b>                          |

### Section 12.—School Attendance.

At pp. 132-133 of the 1936 Year Book a treatment of this subject will be found, together with tables showing school attendance, (1) of the population 5-19 years of age, by sex, for the census years 1911, 1921, and 1931, (2) of the total rural and urban populations, by sex, for 1931, and (3) of the population 7-14 years of age, by nativity and sex, for 1931.

### Section 13.—Blind and Deaf-Mutes.

The 1936 Year Book showed, at pp. 134-135, figures of the number of blind and deaf-mutes by provinces and sex in 1931, together with the number and proportion of such persons as found at the decennial censuses from 1881 to 1931. Summary statistics are given below.

#### 22.—Deaf-Mutes<sup>1</sup> by Number and Proportion per 10,000 Population, by Provinces, 1881-1931.

| Province.                          | Number.      |              |              |              |              |              | Proportions per 10,000 Population. |             |             |            |            |            |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------------------------|-------------|-------------|------------|------------|------------|
|                                    | 1881.        | 1901.        | 1901.        | 1911.        | 1921.        | 1931.        | 1881.                              | 1901.       | 1901.       | 1911.      | 1921.      | 1931.      |
| Prince Edward Island.....          | 122          | 87           | 98           | 46           | 40           | 45           | 11.2                               | 8.0         | 9.5         | 5.0        | 4.5        | 5.1        |
| Nova Scotia.....                   | 581          | 495          | 627          | 472          | 437          | 455          | 13.2                               | 11.0        | 13.6        | 9.6        | 8.3        | 8.9        |
| New Brunswick.....                 | 401          | 354          | 443          | 273          | 297          | 345          | 12.6                               | 11.0        | 13.4        | 7.8        | 7.6        | 8.5        |
| Quebec.....                        | 2,225        | 2,108        | 2,488        | 1,635        | 1,891        | 2,778        | 16.4                               | 14.2        | 15.1        | 8.2        | 8.0        | 9.7        |
| Ontario.....                       | 1,963        | 1,603        | 2,002        | 1,410        | 1,842        | 1,807        | 10.2                               | 7.6         | 9.2         | 5.6        | 6.3        | 5.3        |
| Manitoba.....                      | 49           | 102          | 291          | 291          | 290          | 273          | 6.7                                | 11.4        | 6.5         | 4.5        | 6.7        |            |
| Saskatchewan.....                  | —            | —            | 73           | 180          | 256          | 361          | —                                  | —           | 8.0         | 3.7        | 3.4        | 3.9        |
| Alberta.....                       | —            | —            | 45           | 147          | 163          | 290          | —                                  | —           | 6.2         | 3.6        | 2.8        | 4.0        |
| British Columbia.....              | 27           | 44           | 92           | 108          | 132          | 218          | 5.5                                | 4.5         | 5.1         | 2.8        | 2.5        | 3.1        |
| <b>Totals, Nine Provinces.....</b> | <b>5,368</b> | <b>4,793</b> | <b>6,159</b> | <b>4,567</b> | <b>5,331</b> | <b>6,767</b> | <b>12.6</b>                        | <b>10.1</b> | <b>11.6</b> | <b>6.4</b> | <b>6.1</b> | <b>6.5</b> |

<sup>1</sup> Not including blind deaf-mutes.

### Section 14.—Dwellings and Family Households.

An extensive treatment of this subject, as it came under observation at the Census of 1931, will be found at pp. 136-139 of the 1936 Year Book.

### Section 15.—Occupations of the Canadian People.

An article specially prepared for the Year Book, and analysing comprehensively the occupations of the Canadian people as shown by the 1931 Census, appeared at pp. 128-146 of the 1937 Year Book.

## Section 16.—Quinquennial Census of the Prairie Provinces.

The latest census of the Prairie Provinces was that taken as of June 1, 1936. The 1937 edition of the Year Book, at pp. 146-152, showed statistics covering the population of each province, by electoral districts, sex, conjugal condition, age distribution, racial origin, birthplace, and by rural or urban habitation. Unfortunately, at the June 1 enumeration a small area in Saskatchewan with 654 inhabitants was not covered and had to be enumerated later. The 1936 figures as published for Saskatchewan in the 1937 Year Book should therefore be corrected by adding 654 to the total rural population there published. An adjustment is also to be made to the urban population by deducting 98 on account of disorganized urban centres; this is also to be added to the rural. The total difference to the rural population is therefore an addition of 752 and that to the urban a deduction of 98, the net result being an addition to the provincial total of 654. Normally the tables would have been republished in this edition, but the error was not apparent until most of the Year Book had been 'made-up'. In Volumes I and II of the 1936 Census, the figures are published in final form.

As the composition of the population of the three provinces, taken as a unit, cross classified according to racial origin and birthplace, is of general interest, the following table has been specially compiled for the Year Book. It shows the birth-places of both the rural and urban populations for each of the principal racial strains making up the population of the Prairie Provinces. Of the total population of 2,415,545, the number of persons of British racial origin was 1,189,612 or 49.2 p.c., of whom 1,120,242, or 94 p.c. (46.4 p.c. of the total) were born in Canada or in other British lands. The percentage born in Canada was 75. The population of French origin numbered 137,778, or 5.7 p.c. of the total, the great majority being Canadian-born.

Other important elements in the population are the German, Ukrainian, and Scandinavian racial strains, amounting to 12.8 p.c., 9.4 p.c., and 6.8 p.c., respectively. By place of birth, the population is divided as follows: Canada, 1,648,490, or 68.3 p.c.; other British countries, 275,820, or 11.4 p.c.; U.S.A. 152,908, or 6.3 p.c.; and other foreign countries, 338,327, or 14.0 p.c. From the information presented below, the reader will be able to make further analyses, according to the particular phase of the subject in which he may be interested.

## 23.—Rural and Urban Population of the Prairie Provinces, by Racial Origin, Birth-place, and Sex, as at June 1, 1936.

| Racial Origin.          | Born in Canada. |        | Born in Other British Countries. |        | Born in the United States. |        | Born in Other Foreign Countries. |        |
|-------------------------|-----------------|--------|----------------------------------|--------|----------------------------|--------|----------------------------------|--------|
|                         | Rural.          | Urban. | Rural.                           | Urban. | Rural.                     | Urban. | Rural.                           | Urban. |
| British—                |                 |        |                                  |        |                            |        |                                  |        |
| English.....M.          | 108,153         | 85,101 | 45,732                           | 46,490 | 10,913                     | 4,984  | 179                              | 129    |
| F.                      | 93,496          | 90,668 | 32,557                           | 41,904 | 8,771                      | 6,164  | 97                               | 146    |
| Irish.....M.            | 67,104          | 44,003 | 7,595                            | 7,940  | 8,094                      | 3,534  | 31                               | 30     |
| F.                      | 53,120          | 45,717 | 4,842                            | 6,544  | 5,822                      | 3,706  | 14                               | 23     |
| Scottish.....M.         | 72,027          | 56,671 | 19,148                           | 21,239 | 5,394                      | 2,620  | 43                               | 53     |
| F.                      | 59,041          | 58,580 | 13,210                           | 19,345 | 3,846                      | 2,836  | 25                               | 56     |
| Other.....M.            | 3,506           | 3,106  | 2,461                            | 2,147  | 737                        | 339    | 20                               | 15     |
| F.                      | 2,944           | 2,927  | 1,250                            | 1,491  | 401                        | 293    | 24                               | 10     |
| French.....M.           | 46,050          | 16,617 | 94                               | 101    | 3,660                      | 1,310  | 2,928                            | 947    |
| F.                      | 39,714          | 18,086 | 73                               | 90     | 3,079                      | 1,897  | 2,088                            | 1,038  |
| Austrian.....M.         | 3,334           | 1,432  | —                                | 4      | 126                        | 25     | 2,608                            | 1,312  |
| F.                      | 3,190           | 1,693  | —                                | 5      | 88                         | 47     | 1,500                            | 943    |
| Belgian.....M.          | 2,950           | 746    | 3                                | 3      | 127                        | 24     | 2,440                            | 867    |
| F.                      | 2,769           | 865    | 4                                | 5      | 104                        | 32     | 1,647                            | 738    |
| Czech and Slovak.....M. | 2,478           | 936    | 6                                | 2      | 410                        | 106    | 3,277                            | 1,222  |
| F.                      | 2,189           | 956    | —                                | 1      | 282                        | 129    | 1,873                            | 698    |

23.—Rural and Urban Population of the Prairie Provinces, by Racial Origin, Birth-place, and Sex, as at June 1, 1936—concluded.

| Racial Origin.              |    | Born in Canada. |         | Born in Other British Countries. |         | Born in the United States. |        | Born in Other Foreign Countries. |         |
|-----------------------------|----|-----------------|---------|----------------------------------|---------|----------------------------|--------|----------------------------------|---------|
|                             |    | Rural.          | Urban.  | Rural.                           | Urban.  | Rural.                     | Urban. | Rural.                           | Urban.  |
| Dutch.....                  | M. | 18,203          | 4,314   | 26                               | 24      | 1,891                      | 755    | 4,186                            | 1,189   |
|                             | F. | 16,606          | 4,578   | 24                               | 17      | 1,472                      | 739    | 3,001                            | 981     |
| Finnish.....                | M. | 1,443           | 130     | 1                                | —       | 294                        | 31     | 1,214                            | 191     |
|                             | F. | 1,260           | 226     | —                                | —       | 233                        | 66     | 764                              | 163     |
| German.....                 | M. | 78,977          | 20,771  | 99                               | 87      | 14,708                     | 3,419  | 33,071                           | 10,463  |
|                             | F. | 73,141          | 24,335  | 86                               | 69      | 11,308                     | 4,030  | 24,448                           | 8,948   |
| Hebrew.....                 | M. | 533             | 5,556   | 23                               | 161     | 10                         | 233    | 513                              | 5,834   |
|                             | F. | 444             | 5,648   | 17                               | 170     | 20                         | 269    | 410                              | 5,073   |
| Hungarian.....              | M. | 4,512           | 945     | 4                                | 1       | 112                        | 28     | 5,051                            | 1,682   |
|                             | F. | 3,966           | 1,141   | 2                                | 1       | 101                        | 43     | 3,016                            | 1,148   |
| Italian.....                | M. | 920             | 1,271   | 10                               | 23      | 56                         | 57     | 1,062                            | 1,196   |
|                             | F. | 925             | 1,376   | 4                                | 12      | 43                         | 54     | 491                              | 716     |
| Polish.....                 | M. | 18,329          | 6,225   | 13                               | 6       | 441                        | 94     | 14,460                           | 6,179   |
|                             | F. | 16,638          | 7,610   | 5                                | 7       | 349                        | 161    | 9,712                            | 4,965   |
| Roumanian.....              | M. | 3,709           | 1,095   | 2                                | —       | 34                         | 14     | 2,023                            | 905     |
|                             | F. | 3,470           | 1,185   | 3                                | —       | 47                         | 24     | 1,267                            | 530     |
| Russian.....                | M. | 10,136          | 2,453   | 13                               | 16      | 344                        | 104    | 6,593                            | 2,250   |
|                             | F. | 9,374           | 2,731   | 6                                | 14      | 281                        | 115    | 4,831                            | 1,715   |
| Scandinavian.....           | M. | 34,650          | 9,848   | 62                               | 44      | 12,706                     | 3,064  | 24,393                           | 6,896   |
|                             | F. | 31,026          | 11,743  | 62                               | 50      | 9,372                      | 3,705  | 12,258                           | 4,836   |
| Ukrainian.....              | M. | 50,767          | 18,866  | 18                               | 5       | 217                        | 78     | 33,686                           | 12,235  |
|                             | F. | 55,757          | 16,701  | 12                               | 14      | 106                        | 92     | 24,700                           | 8,998   |
| Other European.....         | M. | 1,043           | 760     | 9                                | 22      | 83                         | 38     | 1,729                            | 1,165   |
|                             | F. | 918             | 801     | 12                               | 21      | 69                         | 56     | 803                              | 556     |
| Asiatic—                    |    |                 |         |                                  |         |                            |        |                                  |         |
| Chinese and Japanese.....   | M. | 213             | 487     | 2                                | 3       | 3                          | 2      | 898                              | 5,399   |
|                             | F. | 172             | 389     | —                                | 8       | 1                          | 1      | 78                               | 124     |
| Other.....                  | M. | 192             | 316     | 17                               | 5       | 12                         | 11     | 168                              | 208     |
|                             | F. | 219             | 305     | 3                                | 2       | 9                          | 19     | 66                               | 115     |
| Indian.....                 | M. | 19,235          | 220     | —                                | —       | 47                         | 8      | —                                | —       |
|                             | F. | 18,468          | 266     | —                                | —       | 47                         | 5      | —                                | —       |
| Unspecified and others..... | M. | 12,023          | 1,492   | 16                               | 52      | 385                        | 317    | 25                               | 15      |
|                             | F. | 11,016          | 1,572   | 14                               | 15      | 269                        | 210    | 6                                | 13      |
| Totals.....                 | M. | 509,853         | 278,604 | 75,362                           | 78,384  | 60,714                     | 21,201 | 140,642                          | 60,352  |
|                             | F. | 409,872         | 300,161 | 52,186                           | 69,889  | 46,210                     | 24,733 | 93,059                           | 44,244  |
| Grand Totals.....           |    | 1,069,725       | 578,765 | 127,548                          | 148,272 | 106,924                    | 45,934 | 233,701                          | 104,636 |

### Section 17.—Annual Estimates of Population.

While the populations in different countries are actually counted at decennial or quinquennial censuses, annual estimates of populations are required by modern States for many purposes, such as the calculation of birth, death, and marriage rates, and of per capita figures of production, trade, finance, consumption, etc. In different countries various methods of obtaining annual figures of post-censal populations are adopted. For example, it is possible, with good vital statistics and records of arrivals and departures, to obtain the actual population at any particular date with approximate accuracy by the simple method of adding births and arrivals and subtracting deaths and departures during the period elapsed since the census. This method is impracticable for Canada, with 4,000 miles of common boundary line with the United States, crossed in both directions every day by many thousands of people. In almost all civilized countries, the actual methods of making the estimates vary. Thus, the method of arithmetical progression is widely used in estimating the populations in the older countries of the world; this method involves the annual addition to the population of the country and of particular areas within it of one-fifth or one-tenth of the numerical increase in the last quinquennial or decennial intercensal period. In the case of Canada annual figures of population

were purely estimates, made on the basis of past increases, prior to the Census of 1931. They have now been worked out on a basis which takes into consideration collateral data back to 1867, and the resulting figures are believed to state the populations at intercensal periods more accurately than any published prior to 1931.

The new method upon which calculations are based was described at pp. 108-109 of the 1932 Year Book.\*

#### 24.—Estimates of the Population of Canada, by Provinces, intercensal years, 1900-37.

NOTE.—At every census the previous post-censal data are adjusted to the newly recorded population figure. Figures for 1967-99 will be found at p. 141 of the 1936 Year Book.

(In thousands.)

| Year.                   | Can-<br>ada. | P.E.<br>Is-<br>land. | N.S. | N.B. | Que.  | Ont.  | Man. | Sask. | Alta. | B.C. | Yu-<br>kon. | N.W.<br>Terri-<br>tories. |
|-------------------------|--------------|----------------------|------|------|-------|-------|------|-------|-------|------|-------------|---------------------------|
| 1900.....               | 5,301        | 103                  | 459  | 329  | 1,630 | 2,172 | 245  | -     | -     | 170  | -           | 193                       |
| 1901.....               | 5,371        | 103                  | 460  | 331  | 1,649 | 2,183 | 255  | 91    | 73    | 178  | 27          | 20                        |
| 1902.....               | 5,494        | 101                  | 459  | 331  | 1,670 | 2,194 | 275  | 125   | 96    | 199  | 25          | 19                        |
| 1903.....               | 5,551        | 100                  | 460  | 331  | 1,709 | 2,217 | 296  | 159   | 119   | 220  | 23          | 17                        |
| 1904.....               | 5,527        | 99                   | 463  | 333  | 1,752 | 2,240 | 318  | 194   | 142   | 242  | 22          | 16                        |
| 1905.....               | 6,002        | 99                   | 464  | 333  | 1,771 | 2,289 | 344  | 236   | 166   | 264  | 21          | 15                        |
| 1906.....               | 6,097        | 96                   | 465  | 334  | 1,784 | 2,299 | 366  | 258   | 185   | 279  | 18          | 13                        |
| 1907.....               | 6,411        | 96                   | 475  | 341  | 1,853 | 2,365 | 395  | 311   | 236   | 300  | 18          | 12                        |
| 1908.....               | 6,625        | 95                   | 490  | 345  | 1,902 | 2,412 | 413  | 356   | 266   | 330  | 15          | 11                        |
| 1909.....               | 6,801        | 94                   | 486  | 340  | 1,931 | 2,444 | 427  | 401   | 301   | 350  | 13          | 10                        |
| 1910.....               | 6,958        | 94                   | 486  | 345  | 1,965 | 2,482 | 441  | 446   | 336   | 370  | 11          | 9                         |
| 1911.....               | 7,207        | 94                   | 492  | 352  | 2,006 | 2,527 | 461  | 492   | 374   | 393  | 9           | 7                         |
| 1912.....               | 7,389        | 94                   | 496  | 356  | 2,042 | 2,572 | 481  | 525   | 400   | 407  | 9           | 7                         |
| 1913.....               | 7,632        | 94                   | 504  | 363  | 2,096 | 2,639 | 505  | 563   | 429   | 424  | 8           | 7                         |
| 1914.....               | 7,879        | 95                   | 512  | 371  | 2,148 | 2,705 | 530  | 601   | 459   | 442  | 8           | 8                         |
| 1915.....               | 7,981        | 94                   | 511  | 371  | 2,162 | 2,724 | 545  | 628   | 480   | 450  | 8           | 8                         |
| 1916.....               | 8,001        | 92                   | 505  | 368  | 2,154 | 2,713 | 554  | 648   | 496   | 456  | 7           | 8                         |
| 1917.....               | 8,060        | 90                   | 503  | 368  | 2,169 | 2,724 | 558  | 662   | 508   | 464  | 6           | 8                         |
| 1918.....               | 8,148        | 89                   | 502  | 369  | 2,191 | 2,744 | 565  | 678   | 522   | 474  | 6           | 8                         |
| 1919.....               | 8,311        | 89                   | 507  | 372  | 2,234 | 2,789 | 577  | 700   | 541   | 488  | 5           | 8                         |
| 1920.....               | 8,556        | 89                   | 516  | 381  | 2,299 | 2,863 | 594  | 729   | 565   | 507  | 5           | 8                         |
| 1921.....               | 8,788        | 89                   | 524  | 388  | 2,361 | 2,934 | 610  | 767   | 588   | 525  | 4           | 8                         |
| 1922.....               | 8,919        | 89                   | 522  | 389  | 2,409 | 2,980 | 618  | 769   | 592   | 541  | 4           | 8                         |
| 1923.....               | 9,010        | 87                   | 518  | 389  | 2,446 | 3,013 | 619  | 778   | 593   | 555  | 4           | 8                         |
| 1924.....               | 9,143        | 86                   | 516  | 391  | 2,465 | 3,059 | 625  | 791   | 597   | 571  | 4           | 8                         |
| 1925.....               | 9,204        | 86                   | 515  | 393  | 2,449 | 3,111 | 632  | 806   | 602   | 588  | 4           | 8                         |
| 1926.....               | 9,451        | 87                   | 515  | 396  | 2,603 | 3,164 | 639  | 821   | 608   | 606  | 4           | 8                         |
| 1927.....               | 9,636        | 87                   | 515  | 398  | 2,657 | 3,219 | 651  | 841   | 633   | 633  | 4           | 8                         |
| 1928.....               | 9,855        | 88                   | 515  | 401  | 2,715 | 3,278 | 664  | 862   | 658   | 641  | 4           | 9                         |
| 1929.....               | 10,029       | 88                   | 515  | 404  | 2,772 | 3,334 | 677  | 883   | 684   | 650  | 4           | 9                         |
| 1930.....               | 10,208       | 88                   | 514  | 406  | 2,825 | 3,386 | 689  | 903   | 708   | 676  | 4           | 9                         |
| 1931.....               | 10,376       | 88                   | 513  | 408  | 2,874 | 3,432 | 700  | 922   | 732   | 694  | 4           | 9                         |
| 1932 <sup>1</sup> ..... | 10,506       | 89                   | 519  | 413  | 2,910 | 3,475 | 709  | 933   | 740   | 704  | 4           | 10                        |
| 1933 <sup>1</sup> ..... | 10,581       | 89                   | 523  | 420  | 2,970 | 3,564 | 710  | 932   | 748   | 712  | 4           | 10                        |
| 1934 <sup>1</sup> ..... | 10,824       | 89                   | 526  | 425  | 3,018 | 3,629 | 711  | 932   | 756   | 725  | 4           | 10                        |
| 1935 <sup>1</sup> ..... | 10,935       | 89                   | 527  | 429  | 3,062 | 3,673 | 711  | 931   | 764   | 735  | 4           | 10                        |
| 1936 <sup>1</sup> ..... | 11,028       | 92                   | 537  | 435  | 3,096 | 3,690 | 711  | 931   | 772   | 750  | 4           | 10                        |
| 1937 <sup>1</sup> ..... | 11,120       | 93                   | 542  | 440  | 3,135 | 3,711 | 717  | 939   | 778   | 751  | 4           | 10                        |

<sup>1</sup> These estimates are subject to adjustment as later data are made available.

### Section 18.—Area and Population of the British Empire.

Statistics of the areas and populations of the territories included in the British Empire in 1931, together with comparative figures of populations for 1921 and 1911, are given in a table on p. 165 of the 1934-35 Year Book.

### Section 19.—Area and Population of the World.

Statistics showing the areas and the populations of the various continents, and details of each country, as in 1931, are given in a table on pp. 168-169 of the 1934-35 Year Book.

\* The table of estimates and the description of the method upon which calculations are based are the work of M. C. MacLean, M.A., F.S.S., Chief of Social Analysis, Dominion Bureau of Statistics.



## CHAPTER V.—VITAL STATISTICS.\*

The collection of vital statistics commenced in Canada, as in England, with the registration of baptisms, marriages, and burials by the ecclesiastical authorities. These registers, maintained by the priests from the first settlement of the country, have made it possible for the vital statistics of the French colony to be compiled from the year 1610.† The system of registration by clergy was continued after the cession of the country to the British, and was extended to the newly-formed Protestant congregations of Lower Canada by an Act of 1795, but the registration, particularly of births, among these latter remained seriously defective, both in Lower Canada and in the new province of Upper Canada, the pioneer settlers often going out into the wilds far from the authority of government and the ministrations of religion. An early attempt was made to remedy the situation through the census by including a schedule requesting births and deaths for the preceding year, but the efforts made to secure records of births and deaths at the Censuses of 1851 and 1861 produced most unsatisfactory results. Nevertheless, in spite of the inherent unsoundness of securing, at a point of time in a decennial census, a record of births and deaths occurring over a considerable period of time, this method was followed down to 1911, when the obviously untrustworthy character of the results led to the discarding of the data obtained at the inquiry.

In English-speaking Canada, the earlier scheme of registration of baptisms, burials, and marriages by the clergy was succeeded after Confederation by Acts for the enforcement of registration of births, marriages, and deaths, with the civil authorities. Such Acts were passed in Nova Scotia in 1864, in Ontario in 1869, in British Columbia in 1872, in Manitoba in 1881, in New Brunswick in 1887, and in Prince Edward Island in 1906. The provinces of Saskatchewan and Alberta were not established until 1905 and, until provincial Acts were passed after this date, civil registration in these provinces was governed by ordinances for the Northwest Territories, the first of which was passed in 1888.

The Dominion Government instituted in the early '80's a plan for compiling the annual mortuary statistics of cities of 25,000 population and over, by subsidizing local boards of health to supply the information under special regulations. A beginning was made with the five cities of Montreal, Toronto, Hamilton, Halifax, and Saint John. By 1891 the list had grown to 25, at a time when, in most of the provinces, the only birth and death statistics were those of the municipalities. Upon the organization of provincial bureaus of vital statistics, however, this work was abandoned, though a conference of Dominion and provincial officials, held in 1893, passed a resolution calling upon the provincial and Dominion authorities to co-operate in the work of collecting, compiling, and publishing the vital statistics of the Dominion. This resolution had no immediate practical results in securing accurate or comparable vital statistics.

The 1912 Commission on Official Statistics, recommended that "for the Dominion, now engaged in building up its national unity, it is important that uniform data should render possible to statisticians the institution of true interprovincial and international comparisons. By effective co-operation of the provinces with

\* This chapter has been revised by W. R. Tracey, B.A., Chief, Vital Statistics, Dominion Bureau of Statistics. A list of the publications of this Branch will be found in Chapter XXIX, Section I, under "Population".

† For a summary of the vital statistics of the Roman Catholic population from 1610 to 1883, see the Statistical Year Book of Quebec, 1921, English or French edition, p. 51. For details, by years, of this movement of population, see Vol. V of the Census of Canada, 1871, pp. 160-265, and Vol. IV of the Census of Canada, 1881, pp. 134-145.

the Dominion, this object should be capable of attainment without sacrificing the liberty of each province to satisfy its own special statistical requirements". Yet, prior to 1920, it was impossible to compile any satisfactory series of vital statistics figures for Canada as a whole. Among the obstacles to such a national compilation were the inequalities of registration between the provinces, the lack of uniformity in classification and in the method of presentation, the omission in some cases of important data, the choice in some cases of the fiscal instead of the calendar year as the unit of time, and the fact that for some of the provinces within comparatively recent years the series of publications was broken, while for New Brunswick no provincial vital statistics at all were published from 1895 until 1920.

Co-operation was finally effected as a consequence of the establishment of the Dominion Bureau of Statistics under the Statistics Act of 1918, which specifically provided that the Bureau should publish an annual report on vital statistics. A scheme was first drawn up in the Bureau and submitted to the various provinces; then Dominion-Provincial conferences on vital statistics were held in June and December, 1918, when final discussions took place.

In 1919, as a result of conference, a plan was devised whereby the Bureau of Statistics and the Registrar General's office in each province would co-operate in producing national vital statistics for the Dominion. Under this national system, while registration of births, marriages, and deaths, is carried out as heretofore by the provincial authorities, the legislation of each province conforms in its essentials to a model bill, prepared by the Dominion Bureau of Statistics, one of the features of which was compulsory registration. The Bureau of Statistics undertakes compilation and tabulation.

Under the scheme outlined above, the vital statistics for all the provinces except Quebec were secured and compiled on a uniform basis for the years 1921 to 1925. The annual reports for these years may be obtained on application to the Dominion Statistician.

Quebec has been included in the registration area as from Jan. 1, 1926, from which date her statistics are on a comparable basis with those of the other provinces. The final reports for 1926 to 1935, including the statistics of all the nine provinces, have appeared and may be procured from the Dominion Statistician, with the exception of the report for 1931, which is out of print.

Two important considerations should be borne in mind by the student who uses either the tables which follow or the detailed reports issued by the Bureau of Statistics for comparative purposes. First, in spite of the improvements of the past decade, registration generally, and the registration of births in particular, is not as yet universally carried out. Secondly, the very considerable differences in the age and sex distribution of the population in different provinces make comparisons of crude births rates and crude death rates, as among the provinces, unfair and misleading. All rates in this chapter have been recalculated on the basis of the revised estimates of population given on p. 155.

**Yukon and Northwest Territories.**—The vital statistics of Yukon and the Northwest Territories have been collected and compiled since 1924. They are not, however, presented with those of the nine provinces in the tables of this chapter because the figures are not regarded as complete, the details are in many cases not available, and the small and varying population is not known with sufficient accuracy for each year to enable the rates to be calculated. As these territories contain

less than 1/700th of the population of Canada, their vital statistics are a negligible factor in the total. Births, marriages, and deaths in Yukon and the Northwest Territories, for the years 1924-36, are summarized in the statement herewith:—

VITAL STATISTICS OF YUKON AND THE NORTHWEST TERRITORIES, 1924-36.

| Year.                   | Yukon.  |            |         | Northwest Territories. |            |                  |
|-------------------------|---------|------------|---------|------------------------|------------|------------------|
|                         | Births. | Marriages. | Deaths. | Births.                | Marriages. | Deaths.          |
| 1924.....               | 31      | 5          | 38      | 95                     | 39         | 47               |
| 1925.....               | 22      | 17         | 63      | 57                     | 35         | 32               |
| 1926.....               | 27      | 12         | 68      | 75                     | 3          | 51               |
| 1927.....               | 29      | 19         | 33      | 126                    | 20         | 133              |
| 1928.....               | 30      | 13         | 46      | 222                    | 30         | 367              |
| 1929.....               | 35      | 10         | 54      | 133                    | 29         | 168              |
| 1930.....               | 45      | 17         | 69      | 232                    | 36         | 206              |
| 1931.....               | 40      | 24         | 66      | 141                    | 36         | 106              |
| 1932.....               | 44      | 26         | 62      | 195                    | 33         | 122              |
| 1933.....               | 53      | 15         | 60      | 179                    | 26         | 128              |
| 1934.....               | 44      | 29         | 48      | 203                    | 47         | 154              |
| 1935.....               | 53      | 27         | 69      | 231 <sup>1</sup>       | 63         | 175 <sup>1</sup> |
| 1936 <sup>2</sup> ..... | 38      | 26         | 83      | 198                    | 64         | 170              |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

<sup>2</sup> Preliminary figures.

The vital statistics of the provinces are taken up in the following order: births, marriages, deaths, and finally natural increase.

### Section 1.—Births.

Throughout almost the whole of the civilized world the birth rate has, in the past generation, been on the decline, though the consequent reduction in the rate of natural increase has been partly offset by the synchronous decline in the death rate.

The crude birth rate of England and Wales, for example, was 35.4 per 1,000 population for the average of the decennium 1871-80, 32.5 in 1881-90, and 29.9 in 1891-1900. In 1913 the birth rate was 24.1, and, though it rose to 25.5 in 1920, it has fallen quite rapidly, with minor fluctuations since then to 14.7 in 1935.

Similarly, in France the crude birth rate declined from an average of 25.4 per 1,000 population in the 1870's, 23.9 in the 1880's and 22.2 in the 1890's to 21.4 in 1920, 16.1 in 1934, and 15.2 in 1935. In Germany, again, the crude birth rate was 39.1 in the 1870's, 36.8 in the 1880's, 36.1 in the 1890's, 25.9 in 1920, 17.6 in 1930, and 14.7 in 1933. Since then the rate has recovered to 18.9 in 1935.

In Canada the crude birth rate still stands at a comparatively high figure, being 20.0 per 1,000 in 1936. This, however, is largely due to the influence of Quebec, where the rate, although declining, stood at 24.3 per 1,000 in 1936, as compared with 16.9 per 1,000 in Ontario. In the other provinces the figures varied from a low of 14.1 in British Columbia to a high of 24.2 in New Brunswick.

Birth statistics are given by sex in Table 1, p. 159. Table 2 gives the number of live births in cities and towns of 10,000 population or over for the years 1932 to 1936, inclusive. For some years previous to 1930 there was a definite tendency for such births to increase, but the figures given indicate an opposite trend since that year.

**Sex of Live Births.**—Table 1 shows the number and proportion of live male and female births reported for each province of Canada during the calendar years 1934, 1935, and 1936, with averages for the five-year periods 1921-25, 1926-30, and 1931-35. The figures for Quebec commence only with the year 1926, when that

province entered the registration area, and the totals for Canada are limited in the same manner in consequence. Every province shows an excess of male births for the years or averages shown in the table. The table shows that among every 1,000 born in 1936 in the whole of Canada, 514 were males and 486 females. In other words, there were 1,058 males born to every 1,000 females.

1.—Births (Exclusive of Stillbirths) by Sex, and Ratio of Males to Females, by Provinces, 1934-36, with Averages for 1921-25, 1926-30, and 1931-35.

NOTE.—For corresponding figures for single years 1921-25, see p. 165 of the Canada Year Book for 1927-28, for those for 1926-30, p. 156 of the Canada Year Book for 1933, and those for 1931-33, p. 156 of the 1936 Year Book.

| Province and Year.                                      | Total. <sup>1</sup> | Males.  |                    | Females. |                    | Males to 1,000 Females. |       |
|---|---------------------|---------|--------------------|----------|--------------------|-------------------------|-------|
|   |                     | Number. | Per Cent of Total. | Number.  | Per Cent of Total. |                         |       |
| Prince Edward Island.....                               | Av. 1921-25         | 1,966   | 993                | 50.5     | 973                | 49.5                    | 1.02  |
|   | Av. 1926-30         | 1,734   | 898                | 51.8     | 836                | 48.2                    | 1.074 |
|   | Av. 1931-35         | 1,961   | 1,012              | 51.6     | 949                | 48.4                    | 1.057 |
|   | 1934                | 1,943   | 988                | 50.8     | 955                | 49.2                    | 1.035 |
|   | 1935                | 2,010   | 1,013              | 50.4     | 997                | 49.6                    | 1.018 |
|   | 1936                | 1,977   | 1,044              | 52.8     | 933                | 47.2                    | 1.119 |
| Nova Scotia.....  | Av. 1921-25         | 12,119  | 6,275              | 51.8     | 5,844              | 48.2                    | 1.074 |
|   | Av. 1926-30         | 11,016  | 5,653              | 51.3     | 5,363              | 48.7                    | 1.054 |
|   | Av. 1931-35         | 11,486  | 5,906              | 51.4     | 5,580              | 48.6                    | 1.058 |
|   | 1934                | 11,407  | 5,878              | 51.5     | 5,529              | 48.5                    | 1.063 |
|   | 1935                | 11,617  | 5,980              | 51.5     | 5,637              | 48.5                    | 1.061 |
|   | 1936                | 11,808  | 6,127              | 51.9     | 5,681              | 48.1                    | 1.079 |
| New Brunswick.....                                      | Av. 1921-25         | 11,080  | 5,708              | 51.5     | 5,372              | 48.5                    | 1.063 |
|   | Av. 1926-30         | 10,327  | 5,292              | 51.2     | 5,035              | 48.8                    | 1.051 |
|   | Av. 1931-35         | 10,440  | 5,344              | 51.2     | 5,096              | 48.8                    | 1.049 |
|   | 1934                | 10,164  | 5,149              | 50.7     | 5,015              | 49.3                    | 1.027 |
|   | 1935                | 10,388  | 5,257              | 50.6     | 5,131              | 49.4                    | 1.025 |
|   | 1936                | 10,513  | 5,368              | 51.1     | 5,145              | 48.9                    | 1.043 |
| Quebec <sup>2</sup> .....                               | Av. 1926-30         | 82,771  | 42,644             | 51.5     | 40,127             | 48.5                    | 1.063 |
|   | Av. 1931-35         | 78,889  | 40,466             | 51.3     | 38,423             | 48.7                    | 1.053 |
|   | 1934                | 76,432  | 39,123             | 51.2     | 37,309             | 48.8                    | 1.049 |
|   | 1935                | 75,267  | 38,444             | 51.1     | 36,823             | 48.9                    | 1.044 |
|   | 1936                | 75,285  | 38,578             | 51.2     | 36,707             | 48.8                    | 1.061 |
| Ontario.....  | Av. 1921-25         | 71,454  | 36,725             | 51.4     | 34,729             | 48.6                    | 1.057 |
|   | Av. 1926-30         | 68,708  | 35,268             | 51.3     | 33,439             | 48.7                    | 1.055 |
|   | Av. 1931-35         | 65,900  | 33,324             | 51.3     | 31,576             | 48.7                    | 1.052 |
|   | 1934                | 62,234  | 31,850             | 51.2     | 30,384             | 48.8                    | 1.048 |
|   | 1935                | 63,069  | 32,307             | 51.3     | 30,762             | 48.7                    | 1.054 |
|   | 1936                | 62,451  | 32,124             | 51.4     | 30,327             | 48.6                    | 1.059 |
| Manitoba.....   | Av. 1921-25         | 16,500  | 8,443              | 50.9     | 8,147              | 49.1                    | 1.036 |
|   | Av. 1926-30         | 14,391  | 7,399              | 51.4     | 6,992              | 48.6                    | 1.058 |
|   | Av. 1931-35         | 13,690  | 7,005              | 51.2     | 6,685              | 48.8                    | 1.048 |
|   | 1934                | 13,310  | 6,842              | 51.4     | 6,468              | 48.6                    | 1.058 |
|   | 1935                | 13,335  | 6,770              | 50.8     | 6,565              | 49.2                    | 1.031 |
|   | 1936                | 12,885  | 6,670              | 51.9     | 6,185              | 48.1                    | 1.078 |
| Saskatchewan.....                                       | Av. 1921-25         | 21,580  | 11,119             | 51.5     | 10,461             | 48.6                    | 1.063 |
|   | Av. 1926-30         | 21,298  | 10,979             | 51.5     | 10,319             | 48.5                    | 1.064 |
|   | Av. 1931-35         | 20,325  | 10,444             | 51.4     | 9,881              | 48.6                    | 1.057 |
|   | 1934                | 19,764  | 10,175             | 51.5     | 9,589              | 48.5                    | 1.061 |
|   | 1935                | 19,569  | 10,063             | 51.4     | 9,506              | 48.6                    | 1.059 |
|   | 1936                | 19,125  | 9,839              | 51.4     | 9,286              | 48.6                    | 1.060 |
| Alberta.....  | Av. 1921-25         | 15,461  | 7,887              | 51.0     | 7,574              | 49.0                    | 1.041 |
|   | Av. 1926-30         | 15,924  | 8,153              | 51.2     | 7,771              | 48.8                    | 1.049 |
|   | Av. 1931-35         | 16,556  | 8,505              | 51.4     | 8,051              | 48.6                    | 1.056 |
|   | 1934                | 16,236  | 8,246              | 50.8     | 7,990              | 49.2                    | 1.032 |
|   | 1935                | 16,133  | 8,309              | 51.3     | 7,824              | 48.7                    | 1.055 |
|   | 1936                | 15,786  | 8,081              | 51.2     | 7,705              | 48.8                    | 1.049 |
| British Columbia.....                                   | Av. 1921-25         | 10,250  | 5,310              | 51.8     | 4,946              | 48.2                    | 1.074 |
|   | Av. 1926-30         | 10,356  | 5,266              | 50.8     | 5,090              | 49.2                    | 1.035 |
|   | Av. 1931-35         | 10,005  | 5,136              | 51.3     | 4,869              | 48.7                    | 1.055 |
|   | 1934                | 9,813   | 5,072              | 51.7     | 4,741              | 48.3                    | 1.070 |
|   | 1935                | 10,013  | 5,090              | 50.8     | 4,923              | 49.2                    | 1.034 |
|   | 1936                | 10,571  | 5,458              | 51.6     | 5,113              | 48.4                    | 1.067 |
| Canada <sup>2</sup> (Exclusive of the Territories)..... | Av. 1926-30         | 236,520 | 121,552            | 51.4     | 114,968            | 48.6                    | 1.057 |
|   | Av. 1931-35         | 228,352 | 117,142            | 51.3     | 111,210            | 48.7                    | 1.053 |
|   | 1934                | 221,303 | 113,323            | 51.2     | 107,980            | 48.8                    | 1.049 |
|   | 1935                | 221,451 | 113,293            | 51.2     | 108,158            | 48.8                    | 1.047 |
|   | 1936                | 226,371 | 113,289            | 51.4     | 107,082            | 48.6                    | 1.058 |

<sup>1</sup> Corresponding crude birth rates appear in Table 32, pp. 191-193.

<sup>2</sup> Quebec was not included in the registration area prior to 1926.

2.—Live Births in Cities and Towns of 10,000 Population or Over, 1932-36, with Averages, 1926-30 and 1931-35.

| Province and City or Town. | Census Population, 1931. | Average, 1926-30. | Average, 1931-35. | 1932.  | 1933.  | 1934.  | 1935.  | 1936.  |
|----------------------------|--------------------------|-------------------|-------------------|--------|--------|--------|--------|--------|
| <b>P. E. Island—</b>       |                          |                   |                   |        |        |        |        |        |
| Charlottetown.....         | 12,361                   | 287               | 361               | 388    | 337    | 358    | 350    | 405    |
| <b>Nova Scotia—</b>        |                          |                   |                   |        |        |        |        |        |
| Glouce Bay.....            | 20,706                   | 672               | 702               | 724    | 602    | 715    | 779    | 803    |
| Halifax.....               | 59,275                   | 1,457             | 1,628             | 1,020  | 1,591  | 1,607  | 1,679  | 1,755  |
| Sydney.....                | 23,089                   | 511               | 586               | 601    | 512    | 588    | 589    | 602    |
| <b>New Brunswick—</b>      |                          |                   |                   |        |        |        |        |        |
| Moncton.....               | 20,689                   | 518               | 494               | 511    | 463    | 480    | 459    | 487    |
| Saint John.....            | 47,514                   | 1,144             | 1,208             | 1,297  | 1,127  | 1,211  | 1,164  | 1,223  |
| <b>Quebec—</b>             |                          |                   |                   |        |        |        |        |        |
| Chicoutimi.....            | 11,877                   | 553               | 508               | 558    | 499    | 486    | 508    | 504    |
| Granby.....                | 10,587                   | 298               | 354               | 378    | 348    | 348    | 308    | 300    |
| Hull.....                  | 29,433                   | 1,001             | 875               | 874    | 852    | 853    | 810    | 822    |
| Joliette.....              | 10,765                   | 347               | 329               | 352    | 334    | 285    | 332    | 289    |
| Lachine.....               | 18,630                   | 442               | 398               | 411    | 373    | 368    | 348    | 355    |
| Lévis.....                 | 11,724                   | 307               | 261               | 288    | 261    | 242    | 232    | 212    |
| Montreal.....              | 818,577                  | 20,265            | 19,002            | 19,742 | 18,449 | 18,403 | 17,780 | 17,309 |
| Outremont.....             | 28,641                   | 124               | 95                | 115    | 94     | 82     | 84     | 68     |
| Quebec.....                | 130,504                  | 4,379             | 4,137             | 4,285  | 4,040  | 4,017  | 3,871  | 3,894  |
| St. Hyacinthe.....         | 13,448                   | 333               | 352               | 363    | 330    | 331    | 356    | 370    |
| St. Jean.....              | 11,256                   | 324               | 295               | 310    | 278    | 296    | 275    | 307    |
| Shawinigan Falls.....      | 15,345                   | 658               | 570               | 624    | 559    | 530    | 511    | 529    |
| Sherbrooke.....            | 28,933                   | 786               | 753               | 769    | 730    | 728    | 740    | 783    |
| Sorel.....                 | 10,320                   | 297               | 265               | 279    | 246    | 248    | 236    | 240    |
| Thetford Mines.....        | 10,701                   | 465               | 351               | 376    | 305    | 364    | 293    | 294    |
| Three Rivers.....          | 35,450                   | 1,329             | 1,187             | 1,232  | 1,050  | 1,196  | 1,129  | 1,121  |
| Valleyfield.....           | 11,411                   | 317               | 358               | 387    | 326    | 367    | 357    | 344    |
| Verdun.....                | 60,745                   | 1,087             | 1,021             | 1,106  | 1,003  | 925    | 851    | 891    |
| Westmount.....             | 24,235                   | 110               | 313               | 325    | 308    | 312    | 207    | 208    |
| <b>Ontario—</b>            |                          |                   |                   |        |        |        |        |        |
| Belleville.....            | 13,790                   | 370               | 376               | 365    | 349    | 367    | 377    | 430    |
| Brantford.....             | 30,107                   | 682               | 627               | 641    | 630    | 575    | 601    | 666    |
| Chatham.....               | 14,569                   | 485               | 484               | 461    | 468    | 506    | 528    | 578    |
| Cornwall.....              | 11,126                   | 468               | 482               | 452    | 465    | 434    | 600    | 563    |
| Fort William.....          | 26,277                   | 635               | 568               | 593    | 535    | 474    | 530    | 485    |
| Galt.....                  | 14,006                   | 277               | 296               | 309    | 282    | 289    | 278    | 207    |
| Georgetown.....            | 21,075                   | 396               | 351               | 366    | 356    | 327    | 341    | 269    |
| Hamilton.....              | 155,547                  | 3,041             | 2,887             | 3,111  | 2,864  | 2,730  | 2,763  | 2,758  |
| Kingston.....              | 28,439                   | 695               | 687               | 658    | 685    | 606    | 687    | 674    |
| Kitchener.....             | 30,703                   | 754               | 752               | 729    | 693    | 727    | 759    | 743    |
| London.....                | 71,148                   | 1,381             | 1,379             | 1,397  | 1,281  | 1,337  | 1,296  | 1,410  |
| Niagara Falls.....         | 19,016                   | 466               | 421               | 402    | 398    | 405    | 437    | 484    |
| North Bay.....             | 15,528                   | 417               | 390               | 398    | 387    | 368    | 390    | 383    |
| Oshawa.....                | 23,439                   | 645               | 525               | 516    | 469    | 510    | 523    | 524    |
| Ottawa.....                | 126,872                  | 2,965             | 2,960             | 3,027  | 2,873  | 2,824  | 3,040  | 3,028  |
| Owen Sound.....            | 12,539                   | 334               | 319               | 296    | 310    | 323    | 320    | 327    |
| Peterborough.....          | 22,327                   | 579               | 577               | 502    | 567    | 545    | 571    | 621    |
| Port Arthur.....           | 19,518                   | 542               | 511               | 534    | 518    | 477    | 524    | 541    |
| St. Catharines.....        | 24,753                   | 596               | 589               | 581    | 573    | 605    | 548    | 577    |
| St. Thomas.....            | 15,430                   | 326               | 296               | 300    | 258    | 323    | 297    | 291    |
| Sarnia.....                | 18,191                   | 431               | 413               | 398    | 378    | 400    | 424    | 433    |
| Sault Ste. Marie.....      | 23,082                   | 613               | 574               | 584    | 564    | 493    | 532    | 554    |
| Stratford.....             | 17,742                   | 384               | 340               | 330    | 307    | 320    | 350    | 348    |
| Sudbury.....               | 18,518                   | 498               | 797               | 706    | 717    | 767    | 876    | 879    |
| Timmins.....               | 14,200                   | 491               | 563               | 519    | 545    | 590    | 631    | 687    |
| Toronto.....               | 631,207                  | 12,210            | 11,436            | 12,065 | 11,285 | 10,615 | 10,474 | 10,391 |
| Welland.....               | 10,709                   | 288               | 286               | 275    | 292    | 254    | 308    | 313    |
| Windsor.....               | 98,179                   | 2,791             | 2,037             | 1,977  | 1,923  | 1,901  | 2,032  | 2,111  |
| Woodstock.....             | 11,395                   | 246               | 237               | 242    | 246    | 214    | 224    | 236    |
| <b>Manitoba—</b>           |                          |                   |                   |        |        |        |        |        |
| Brandon.....               | 16,401 <sup>2</sup>      | 390               | 303               | 314    | 297    | 270    | 264    | 250    |
| St. Boniface.....          | 16,275 <sup>2</sup>      | 843               | 1,004             | 1,147  | 1,028  | 1,024  | 1,104  | 1,129  |
| Winnipeg.....              | 215,814 <sup>2</sup>     | 4,527             | 3,944             | 4,087  | 3,796  | 3,728  | 3,668  | 3,559  |
| <b>Saskatchewan—</b>       |                          |                   |                   |        |        |        |        |        |
| Moose Jaw.....             | 19,805 <sup>2</sup>      | 623               | 464               | 492    | 463    | 426    | 427    | 450    |
| Prince Albert.....         | 11,019 <sup>2</sup>      | 334               | 398               | 359    | 359    | 438    | 469    | 435    |
| Regina.....                | 53,354 <sup>2</sup>      | 1,368             | 1,270             | 1,262  | 1,174  | 1,231  | 1,172  | 1,145  |
| Saskatoon.....             | 41,734 <sup>2</sup>      | 1,058             | 955               | 1,009  | 892    | 857    | 872    | 886    |

<sup>1</sup> Includes East Windsor, Sandwich, and Walkerville.

<sup>2</sup> Census of 1936.

**2.—Live Births in Cities and Towns of 10,000 Population and Over, 1932-36, with Averages, 1926-30 and 1931-35—concluded.**

| Province and City or Town. | Census Population, 1931. | Averages, 1926-30. | Averages, 1931-35. | 1932. | 1933. | 1934. | 1935. | 1936. |
|----------------------------|--------------------------|--------------------|--------------------|-------|-------|-------|-------|-------|
| <b>Alberta—</b>            |                          |                    |                    |       |       |       |       |       |
| Calgary.....               | 83,407 <sup>1</sup>      | 1,806              | 1,685              | 1,726 | 1,624 | 1,601 | 1,640 | 1,623 |
| Edmonton.....              | 85,774 <sup>1</sup>      | 2,122              | 2,246              | 2,320 | 2,085 | 2,148 | 2,278 | 2,317 |
| Lethbridge.....            | 13,523 <sup>1</sup>      | 436                | 531                | 526   | 517   | 468   | 582   | 580   |
| <b>British Columbia—</b>   |                          |                    |                    |       |       |       |       |       |
| New Westminster.....       | 17,524                   | 525                | 558                | 565   | 535   | 544   | 558   | 639   |
| Vancouver.....             | 246,503                  | 3,776              | 3,357              | 3,450 | 3,188 | 3,179 | 3,248 | 3,410 |
| Victoria.....              | 39,082                   | 717                | 696                | 700   | 674   | 714   | 709   | 710   |

<sup>1</sup> Census of 1936.

**Nativity of Mothers.**—Table 3 shows, by provinces, the percentages of legitimate children born alive to Canadian-born, British-born, and foreign-born mothers, respectively, for the years 1934, 1935, and 1936. The influence of the limited immigration in recent years is reflected in the figures. In the Prairie Provinces of Manitoba, Saskatchewan, and Alberta, where the percentages born to foreign-born mothers in 1933 were 25.9, 36.3, and 40.4, respectively, they were 20.4, 28.6, and 32.0, respectively, in 1936. Thus more and more of the children of the West are coming within the class of third generation Canadian.

**3.—Percentages of Legitimate Children Born Alive to Canadian-Born, British-Born or Foreign-Born Mothers, by Provinces, 1934-36.**

| Province.                      | Nativity of Mothers. |             |             |               |            |            |               |             |             |
|--------------------------------|----------------------|-------------|-------------|---------------|------------|------------|---------------|-------------|-------------|
|                                | Canadian Born.       |             |             | British Born. |            |            | Foreign Born. |             |             |
|                                | 1934.                | 1935.       | 1936.       | 1934.         | 1935.      | 1936.      | 1934.         | 1935.       | 1936.       |
|                                | p.c.                 | p.c.        | p.c.        | p.c.          | p.c.       | p.c.       | p.c.          | p.c.        | p.c.        |
| Prince Edward Island.....      | 94.9                 | 94.2        | 94.3        | 1.3           | 1.4        | 1.5        | 3.7           | 4.4         | 4.1         |
| Nova Scotia.....               | 88.9                 | 88.4        | 89.2        | 7.6           | 8.0        | 7.4        | 3.6           | 3.6         | 3.3         |
| New Brunswick.....             | 93.1                 | 93.8        | 93.7        | 3.0           | 2.5        | 2.6        | 4.0           | 3.7         | 3.8         |
| Quebec.....                    | 94.3                 | 94.7        | 95.3        | 2.1           | 2.0        | 1.8        | 3.6           | 3.3         | 2.9         |
| Ontario.....                   | 74.4                 | 76.2        | 77.8        | 15.3          | 14.0       | 12.9       | 10.3          | 9.8         | 9.3         |
| Manitoba.....                  | 69.7                 | 69.0        | 71.6        | 9.9           | 9.2        | 8.0        | 23.4          | 21.8        | 20.4        |
| Saskatchewan.....              | 58.2                 | 62.2        | 64.8        | 8.4           | 7.4        | 6.6        | 33.4          | 30.5        | 28.6        |
| Alberta.....                   | 51.4                 | 54.8        | 58.1        | 12.0          | 10.6       | 9.9        | 36.7          | 34.6        | 33.0        |
| British Columbia.....          | 55.4                 | 58.4        | 63.1        | 22.1          | 20.5       | 18.3       | 22.5          | 21.1        | 18.6        |
| <b>Canada<sup>1</sup>.....</b> | <b>78.6</b>          | <b>80.1</b> | <b>81.7</b> | <b>8.7</b>    | <b>8.1</b> | <b>7.4</b> | <b>12.6</b>   | <b>11.8</b> | <b>10.9</b> |

<sup>1</sup> Exclusive of the Territories.

**Fertility Rates.**—The crude birth rate of a young country is subject to influences which vitiate comparison with older lands. These influences are the result, to some extent, of differences in age or sex constitution or in conjugal condition. For this reason birth rates are frequently based on the number of births per thousand women within suitably chosen age-groups. Such rates are commonly known as fertility rates. At pp. 150-152 of the 1936 Year Book specific fertility rates of married women between the ages of 15 and 49 years were given, by provinces, for 1921, 1922, and 1930-32. Such statistics will not again be compiled until 1941 census data are available, and the interested reader is referred to that table for this information.

**Multiple Births in Canada.**—During the eleven-year period 1926-36, out of a total of 2,591,395, recorded confinements, 31,316 or 1 in 82.7 were multiple confinements. Of these 31,000 were twin and 314 were triplet confinements, while one, in British Columbia in 1931, was a quadruplet confinement from which all the children died within a few hours of birth. The remaining multiple confinement resulted in the birth of the Dionne quintuplets (May 28, 1934).

Table 4 shows the incidence of multiple births in each year from 1926 to 1936. In 1936 one in every 86 confinements was a twin confinement, a proportion which is fairly representative for the other years as well. There were only 31 triplet confinements in 1936. Of the children born alive or dead one in every 43 was the product of a multiple confinement. For children born alive the proportion was one in 44 and for children stillborn one in 21. In the multiple confinements stillborn children formed 5.6 p.c. of the total births as against 2.7 p.c. in single confinements.

**4.—Live Births and Stillbirths Classified as Single and Multiple, by Sex, 1926-36.**

| Year and Sex. | Total Births.        |             | Single Births. |             | Twins. |             |             | Triplets. |             |             |
|---------------|----------------------|-------------|----------------|-------------|--------|-------------|-------------|-----------|-------------|-------------|
|               | Born Alive.          | Still-born. | Born Alive.    | Still-born. | No.    | Children.   |             | No.       | Children.   |             |
|               |                      |             |                |             |        | Born Alive. | Still-born. |           | Born Alive. | Still-born. |
| 1926—         |                      |             |                |             |        |             |             |           |             |             |
| Total.....    | 232,750              | 7,105       | 227,084        | 6,723       | 2,970  | 5,562       | 378         | 36        | 104         | 4           |
| Male.....     | 119,893              | 4,116       | 117,081        | 3,899       | —      | 2,726       | 217         | —         | 56          | —           |
| Female....    | 112,857              | 2,989       | 110,003        | 2,824       | —      | 2,836       | 161         | —         | 48          | 4           |
| 1927—         |                      |             |                |             |        |             |             |           |             |             |
| Total.....    | 234,188              | 7,330       | 228,578        | 6,952       | 2,940  | 5,502       | 378         | 38        | 108         | 6           |
| Male.....     | 120,655              | 4,232       | 117,854        | 4,010       | —      | 2,754       | 210         | —         | 47          | 3           |
| Female....    | 113,533              | 3,104       | 110,724        | 2,933       | —      | 2,748       | 168         | —         | 61          | 3           |
| 1928—         |                      |             |                |             |        |             |             |           |             |             |
| Total.....    | 236,757              | 7,577       | 231,188        | 7,114       | 2,965  | 5,480       | 450         | 34        | 89          | 13          |
| Male.....     | 121,505              | 4,417       | 118,674        | 4,154       | —      | 2,786       | 254         | —         | 45          | 9           |
| Female....    | 115,252              | 3,160       | 112,514        | 2,960       | —      | 2,694       | 196         | —         | 44          | 4           |
| 1929—         |                      |             |                |             |        |             |             |           |             |             |
| Total.....    | 235,415              | 7,566       | 229,848        | 7,150       | 2,939  | 5,474       | 404         | 35        | 93          | 12          |
| Male.....     | 120,891              | 4,354       | 118,105        | 4,104       | —      | 2,751       | 241         | —         | 35          | 9           |
| Female....    | 114,524              | 3,212       | 111,743        | 3,046       | —      | 2,723       | 163         | —         | 58          | 3           |
| 1930—         |                      |             |                |             |        |             |             |           |             |             |
| Total.....    | 243,495              | 7,707       | 238,056        | 7,283       | 2,900  | 5,386       | 414         | 21        | 53          | 10          |
| Male.....     | 124,852              | 4,397       | 122,053        | 4,146       | —      | 2,769       | 246         | —         | 30          | 5           |
| Female....    | 118,643              | 3,310       | 116,003        | 3,137       | —      | 2,617       | 168         | —         | 23          | 5           |
| 1931—         |                      |             |                |             |        |             |             |           |             |             |
| Total.....    | 240,473 <sup>1</sup> | 7,619       | 234,845        | 7,248       | 2,966  | 5,568       | 384         | 21        | 56          | 7           |
| Male.....     | 123,822              | 4,339       | 120,853        | 4,125       | —      | 2,741       | 210         | —         | 28          | 4           |
| Female....    | 116,851              | 3,280       | 113,992        | 3,123       | —      | 2,827       | 154         | —         | 28          | 3           |
| 1932—         |                      |             |                |             |        |             |             |           |             |             |
| Total.....    | 235,606              | 7,284       | 230,302        | 6,960       | 2,817  | 5,311       | 323         | 18        | 53          | 1           |
| Male.....     | 121,082              | 4,130       | 118,396        | 3,949       | —      | 2,660       | 181         | —         | 20          | —           |
| Female....    | 114,584              | 3,154       | 111,906        | 3,011       | —      | 2,645       | 142         | —         | 33          | 1           |
| 1933—         |                      |             |                |             |        |             |             |           |             |             |
| Total.....    | 222,868              | 6,848       | 217,812        | 6,510       | 2,655  | 4,979       | 331         | 28        | 77          | 7           |
| Male.....     | 114,385              | 3,837       | 111,807        | 3,695       | —      | 2,537       | 191         | —         | 44          | 1           |
| Female....    | 108,480              | 2,961       | 106,005        | 2,815       | —      | 2,442       | 140         | —         | 33          | 6           |
| 1934—         |                      |             |                |             |        |             |             |           |             |             |
| Total.....    | 221,393 <sup>2</sup> | 6,452       | 216,230        | 6,150       | 2,658  | 5,018       | 298         | 18        | 50          | 4           |
| Male.....     | 113,323              | 3,636       | 110,776        | 3,470       | —      | 2,525       | 165         | —         | 22          | 1           |
| Female....    | 107,980 <sup>2</sup> | 2,816       | 105,454        | 2,680       | —      | 2,493       | 133         | —         | 28          | 3           |
| 1935—         |                      |             |                |             |        |             |             |           |             |             |
| Total.....    | 221,451              | 6,449       | 216,482        | 6,136       | 2,590  | 4,872       | 308         | 34        | 97          | 5           |
| Male.....     | 113,293              | 3,046       | 110,763        | 3,498       | —      | 2,473       | 175         | —         | 57          | 3           |
| Female....    | 108,158              | 2,803       | 105,719        | 2,668       | —      | 2,399       | 133         | —         | 40          | 2           |
| 1936—         |                      |             |                |             |        |             |             |           |             |             |
| Total.....    | 220,371              | 6,350       | 215,377        | 6,051       | 2,600  | 4,913       | 287         | 31        | 81          | 12          |
| Male.....     | 113,280              | 3,605       | 110,722        | 3,433       | —      | 2,528       | 162         | —         | 39          | 10          |
| Female....    | 107,082              | 2,745       | 104,655        | 2,618       | —      | 2,385       | 125         | —         | 42          | 2           |

<sup>1</sup> Including 4 females born alive in a quadruplet confinement.  
all females, born alive.

<sup>2</sup> Including Dionne quintuplets.

**Ages of Parents.**—Table 5 shows the age distribution of married fathers and mothers in 1926 (the first year for which the figures are available for the whole of Canada) and for the years 1933-35. The fathers and mothers in each of these years are arranged according to age and then divided into four equal groups. Each point of age at which a separation comes is called a quartile. To obtain these points of age it is assumed that those in the same year of age are evenly distributed from its lower to its upper limit. In similar manner the deciles divide fathers or mothers in each year into ten equal groups.

In 1935 one-quarter of the married fathers were under 27.99 years of age, one-half under 32.62 years and three-quarters under 38.56 years. One-quarter of the married mothers were under 24.12 years of age, one-half under 28.41 years and three-quarters under 33.71 years. Nine-tenths of the fathers were under 44.22 years and nine-tenths of the mothers under 38.36 years. It will be noted that in every case, except in the ninth decile for fathers, the 1926 figure is appreciably greater than that for 1935. In other words, parents, generally speaking, are somewhat younger than in 1926, although for brief intervening periods the trend has been reversed.

**5.—Quartile and Decile Ages of Married Fathers and Mothers, in Canada, 1926, 1933-35.**

| Position in Array, by Age. | Fathers. |        |        |        | Mothers. |        |        |        |
|----------------------------|----------|--------|--------|--------|----------|--------|--------|--------|
|                            | 1926.    | 1933.  | 1934.  | 1935.  | 1926.    | 1933.  | 1934.  | 1935.  |
|                            | Years.   | Years. | Years. | Years. | Years.   | Years. | Years. | Years. |
| First quartiles.....       | 28.35    | 27.97  | 28.04  | 27.99  | 24.43    | 24.17  | 24.22  | 24.12  |
| Second quartiles.....      | 33.31    | 32.77  | 32.78  | 32.62  | 28.89    | 28.45  | 28.52  | 28.41  |
| Third quartiles.....       | 39.01    | 38.74  | 38.72  | 38.56  | 34.26    | 33.79  | 33.91  | 33.71  |
| First deciles.....         | 24.91    | 24.69  | 24.74  | 24.72  | 21.41    | 21.25  | 21.29  | 21.25  |
| Second deciles.....        | 27.28    | 26.98  | 27.04  | 27.01  | 23.50    | 23.28  | 23.32  | 23.24  |
| Third deciles.....         | 29.35    | 28.88  | 28.95  | 28.88  | 25.34    | 25.02  | 25.07  | 24.99  |
| Fourth deciles.....        | 31.28    | 30.71  | 30.76  | 30.67  | 27.79    | 26.69  | 26.78  | 26.68  |
| Fifth deciles.....         | 33.31    | 32.77  | 32.78  | 32.62  | 28.89    | 28.45  | 28.52  | 28.41  |
| Sixth deciles.....         | 35.48    | 34.83  | 34.81  | 34.77  | 30.82    | 30.36  | 30.39  | 30.26  |
| Seventh deciles.....       | 37.81    | 37.38  | 37.35  | 37.16  | 33.41    | 32.65  | 32.66  | 32.47  |
| Eighth deciles.....        | 40.40    | 40.21  | 40.22  | 40.07  | 35.61    | 35.20  | 35.17  | 35.08  |
| Ninth deciles.....         | 44.19    | 44.26  | 44.33  | 44.22  | 38.09    | 38.45  | 38.51  | 38.36  |

**Birthplaces of Parents.**—Table 6 classifies the children born in 1935 and 1936 by country of birth of parents, and furnishes some idea to what extent the coming generation of Canadian born will be the offspring of Canadian-born, British-born or foreign-born parents. The term "country not specified", under country of birth, includes for the father illegitimate births and births of incomplete record, while for the mother it includes births of incomplete record only. Between 1926 and 1936 the percentage of births for which both parents were born in Canada rose from 61.4 in 1926 to 66.4 and 67.8 for 1935 and 1936, respectively.



**6.—Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers Born in Specified Countries, 1935 and 1936.**

| Country of Birth of Parents.      | Numbers of Births with<br>Father, Mother, or Both<br>Parents Born in Specified<br>Country. |         |                      | Percentages of Births with<br>Father, Mother, or Both<br>Parents Born in Specified<br>Country. |         |                   |
|-----------------------------------|--|---------|----------------------|--|---------|-------------------|
|                                   | Father.  | Mother. | Both<br>Parents.     | Father.  | Mother. | Both<br>Parents.  |
| Canada.....1935                   | 160,241  | 177,077 | 147,077              | 72.4   | 80.0    | 66.4              |
| .....1936                         | 162,127  | 179,757 | 149,410              | 73.6   | 81.6    | 67.8              |
| England.....1935                  | 12,109   | 9,885   | 3,721                | 5.5  | 4.5     | 1.7               |
| .....1936                         | 11,382   | 9,008   | 3,176                | 5.2  | 4.1     | 1.4               |
| Ireland.....1935                  | 2,181  | 1,666   | 627                  | 1.0  | 0.8     | 0.3               |
| .....1936                         | 1,995  | 1,466   | 531                  | 0.9  | 0.7     | 0.2               |
| Scotland.....1935                 | 4,762  | 4,626   | 1,579                | 2.2  | 2.1     | 0.7               |
| .....1936                         | 4,611  | 4,074   | 1,284                | 2.1  | 1.8     | 0.6               |
| Wales.....1935                    | 566  | 368     | 70                   | 0.3  | 0.2     | 1                 |
| .....1936                         | 455  | 351     | 60                   | 0.2  | 0.2     | 1                 |
| Other British Isles.....1935      | 60   | 41      | 4                    | 1  | 1       | 1                 |
| .....1936                         | 59   | 35      | 5                    | 1  | 1       | 1                 |
| Newfoundland.....1935             | 881  | 879     | 353                  | 0.4  | 0.4     | 0.2               |
| .....1936                         | 846  | 802     | 319                  | 0.4  | 0.4     | 0.1               |
| Other British Empire.....1935     | 433  | 282     | 118                  | 0.2  | 0.1     | 0.1               |
| .....1936                         | 391  | 324     | 113                  | 0.2  | 0.1     | 0.1               |
| Austria.....1935                  | 2,110  | 1,390   | 1,009                | 1.0  | 0.6     | 0.5               |
| .....1936                         | 1,898  | 1,182   | 837                  | 0.9  | 0.5     | 0.4               |
| Belgium.....1935                  | 482  | 360     | 214                  | 0.2  | 0.2     | 0.1               |
| .....1936                         | 439  | 307     | 178                  | 0.2  | 0.1     | 0.1               |
| Finland.....1935                  | 437  | 460     | 311                  | 0.2  | 0.2     | 0.1               |
| .....1936                         | 411  | 428     | 276                  | 0.2  | 0.2     | 0.1               |
| France.....1935                   | 333  | 219     | 77                   | 0.2  | 0.1     | 1                 |
| .....1936                         | 284  | 217     | 63                   | 0.1  | 0.1     | 1                 |
| Germany.....1935                  | 1,130  | 833     | 428                  | 0.5  | 0.4     | 0.2               |
| .....1936                         | 1,013  | 678     | 328                  | 0.5  | 0.3     | 0.1               |
| Hungary.....1935                  | 957  | 787     | 603                  | 0.4  | 0.4     | 0.3               |
| .....1936                         | 809  | 673     | 553                  | 0.4  | 0.3     | 0.3               |
| Italy.....1935                    | 1,660  | 1,009   | 914                  | 0.7  | 0.5     | 0.4               |
| .....1936                         | 1,464  | 868     | 780                  | 0.7  | 0.4     | 0.4               |
| Norway.....1935                   | 704  | 402     | 228                  | 0.3  | 0.2     | 0.1               |
| .....1936                         | 746  | 394     | 205                  | 0.3  | 0.2     | 0.1               |
| Poland.....1935                   | 5,068  | 4,254   | 3,240                | 2.3  | 1.9     | 1.5               |
| .....1936                         | 4,802  | 3,987   | 2,989                | 2.2  | 1.8     | 1.4               |
| Russia <sup>1</sup> .....1935     | 4,163  | 3,373   | 2,276                | 1.9  | 1.5     | 1.0               |
| .....1936                         | 3,944  | 2,968   | 2,069                | 1.8  | 1.3     | 0.9               |
| Sweden.....1935                   | 775  | 366     | 183                  | 0.3  | 0.2     | 0.1               |
| .....1936                         | 749  | 307     | 136                  | 0.3  | 0.1     | 0.1               |
| Other European Countries.....1935 | 3,828  | 2,519   | 1,874                | 1.7  | 1.1     | 0.8               |
| .....1936                         | 3,548  | 2,307   | 1,689                | 1.6  | 1.0     | 0.8               |
| China and Japan.....1935          | 708  | 535     | 481                  | 0.3  | 0.2     | 0.2               |
| .....1936                         | 700  | 495     | 450                  | 0.3  | 0.2     | 0.2               |
| Other Asiatic Countries.....1935  | 198  | 124     | 107                  | 0.1  | 0.1     | 1                 |
| .....1936                         | 183  | 89      | 72                   | 0.1  | 1       | 1                 |
| United States.....1935            | 8,983  | 8,886   | 2,264                | 4.1  | 4.0     | 1.0               |
| .....1936                         | 8,647  | 8,531   | 2,138                | 3.9  | 3.9     | 1.0               |
| Country not specified.....1935    | 8,682  | 1,130   | 192                  | 3.9  | 0.5     | 0.1               |
| .....1936                         | 8,868  | 1,123   | 82                   | 4.0  | 0.5     | 1                 |
| Totals.....1935                   | 221,451  | 221,451 | 168,010 <sup>2</sup> | 100.0  | 100.0   | 75.9 <sup>4</sup> |
| .....1936                         | 220,371  | 220,371 | 167,743 <sup>2</sup> | 100.0  | 100.0   | 76.1 <sup>4</sup> |

<sup>1</sup> Less than one-tenth of one per cent.

<sup>2</sup> Includes the Ukraine.

<sup>3</sup> This figure gives the number of children whose fathers and mothers were born in the same country. The difference between this figure and the total number of births represents the number of children whose fathers and mothers were born in different countries.

<sup>4</sup> This excludes the percentage of "mixed parentage", i.e., where the two parents were not born in the same country.

**Origins of Parents.**—Table 7 gives the numbers and percentages of births during 1935 and 1936, distributed by the principal origins.

7.—Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers of Specified Origins, 1935 and 1936.

| Origin of Parents.               | Numbers of Births with<br>Father, Mother, or Both<br>Parents of Specified Origin. |         |                  | Percentages of Births with<br>Father, Mother, or Both<br>Parents of Specified Origin. |         |                  |
|----------------------------------|---|---------|------------------|---|---------|------------------|
|                                  | Father.   | Mother. | Both<br>Parents. | Father.   | Mother. | Both<br>Parents. |
| English.....1935                 | 44,302  | 47,192  | 28,794           | 20.0  | 21.3    | 13.0             |
| .....1936                        | 44,114  | 46,857  | 28,277           | 20.0  | 21.3    | 12.8             |
| Irish.....1935                   | 20,100  | 19,484  | 7,822            | 9.1   | 8.8     | 3.6              |
| .....1936                        | 20,108  | 19,608  | 7,789            | 9.1   | 8.9     | 3.5              |
| Scottish.....1935                | 20,472  | 20,661  | 8,166            | 9.2   | 9.3     | 3.7              |
| .....1936                        | 20,219  | 20,300  | 7,819            | 9.2   | 9.2     | 3.5              |
| Welsh.....1935                   | 936   | 739     | 101              | 0.4   | 0.3     | 1                |
| .....1936                        | 942   | 732     | 84               | 0.4   | 0.3     | 1                |
| French.....1935                  | 83,386  | 87,052  | 78,012           | 37.7  | 39.3    | 35.5             |
| .....1936                        | 83,545  | 87,169  | 78,065           | 37.9  | 39.6    | 35.7             |
| German.....1935                  | 11,027  | 12,266  | 8,034            | 5.3   | 5.5     | 3.6              |
| .....1936                        | 11,263  | 11,883  | 7,534            | 5.1   | 5.4     | 3.4              |
| Armenian.....1935                | 42  | 30      | 33               | 1   | 1       | 1                |
| .....1936                        | 33  | 23      | 20               | 1   | 1       | 1                |
| Austrian.....1935                | 634   | 664     | 372              | 0.3   | 0.3     | 0.2              |
| .....1936                        | 578   | 591     | 295              | 0.3   | 0.3     | 0.1              |
| Belgian.....1935                 | 622   | 601     | 312              | 0.3   | 0.3     | 0.1              |
| .....1936                        | 588   | 565     | 270              | 0.3   | 0.3     | 0.1              |
| Bulgarian.....1935               | 46  | 19      | 15               | 1   | 1       | 1                |
| .....1936                        | 45  | 28      | 19               | 1   | 1       | 1                |
| Chinese.....1935                 | 212   | 163     | 156              | 0.1   | 0.1     | 0.1              |
| .....1936                        | 206   | 169     | 163              | 0.1   | 0.1     | 0.1              |
| Czech and Slovak.....1935        | 774   | 727     | 570              | 0.3   | 0.3     | 0.3              |
| .....1936                        | 757   | 759     | 562              | 0.3   | 0.3     | 0.3              |
| Danish.....1935                  | 811   | 569     | 238              | 0.4   | 0.3     | 0.1              |
| .....1936                        | 788   | 547     | 237              | 0.4   | 0.2     | 0.1              |
| Dutch.....1935                   | 2,669   | 2,624   | 1,289            | 1.2   | 1.1     | 0.6              |
| .....1936                        | 2,644   | 2,608   | 1,314            | 1.2   | 1.2     | 0.6              |
| Finnish.....1935                 | 524   | 731     | 451              | 0.2   | 0.3     | 0.2              |
| .....1936                        | 541   | 734     | 443              | 0.2   | 0.3     | 0.2              |
| Greek.....1935                   | 186   | 127     | 105              | 0.1   | 0.1     | 1                |
| .....1936                        | 192   | 124     | 104              | 0.1   | 0.1     | 1                |
| Hebrew.....1935                  | 2,155   | 2,128   | 2,003            | 1.0   | 1.0     | 0.9              |
| .....1936                        | 2,132   | 2,120   | 2,045            | 1.0   | 1.0     | 0.9              |
| Hindu.....1935                   | 55  | 51      | 51               | 1   | 1       | 1                |
| .....1936                        | 50  | 50      | 49               | 1   | 1       | 1                |
| Hungarian.....1935               | 1,022   | 1,060   | 869              | 0.5   | 0.5     | 0.4              |
| .....1936                        | 914   | 938     | 742              | 0.4   | 0.4     | 0.3              |
| Icelandic.....1935               | 390   | 388     | 214              | 0.2   | 0.2     | 0.1              |
| .....1936                        | 362   | 377     | 181              | 0.2   | 0.2     | 0.1              |
| Indian.....1935                  | 3,506   | 4,074   | 3,343            | 1.6   | 1.8     | 1.5              |
| .....1936                        | 3,508   | 4,136   | 3,365            | 1.6   | 1.9     | 1.5              |
| Italian.....1935                 | 2,166   | 1,818   | 1,517            | 1.0   | 0.8     | 0.7              |
| .....1936                        | 2,023   | 1,734   | 1,387            | 0.9   | 0.8     | 0.6              |
| Japanese.....1935                | 561   | 554     | 552              | 0.3   | 0.3     | 0.3              |
| .....1936                        | 573   | 571     | 568              | 0.3   | 0.3     | 0.3              |
| Negro.....1935                   | 375   | 434     | 334              | 0.2   | 0.2     | 0.2              |
| .....1936                        | 388   | 452     | 342              | 0.2   | 0.2     | 0.2              |
| Norwegian.....1935               | 1,700   | 1,759   | 655              | 0.8   | 0.8     | 0.3              |
| .....1936                        | 1,786   | 1,887   | 668              | 0.8   | 0.9     | 0.3              |
| Polish.....1935                  | 2,894   | 3,231   | 2,042            | 1.3   | 1.5     | 0.9              |
| .....1936                        | 2,789   | 3,184   | 1,926            | 1.3   | 1.4     | 0.9              |
| Roumanian.....1935               | 454   | 402     | 288              | 0.2   | 0.2     | 0.1              |
| .....1936                        | 449   | 417     | 242              | 0.2   | 0.2     | 0.1              |
| Russian.....1935                 | 1,311   | 1,265   | 894              | 0.6   | 0.6     | 0.4              |
| .....1936                        | 1,339   | 1,247   | 841              | 0.6   | 0.6     | 0.4              |
| Serbo-Croatian.....1935          | 431   | 387     | 326              | 0.2   | 0.2     | 0.1              |
| .....1936                        | 417   | 369     | 316              | 0.2   | 0.2     | 0.1              |
| Swedish.....1935                 | 1,505   | 1,436   | 477              | 0.7   | 0.6     | 0.2              |
| .....1936                        | 1,492   | 1,377   | 420              | 0.7   | 0.6     | 0.2              |
| Swiss.....1935                   | 331   | 222     | 77               | 0.1   | 0.1     | 1                |
| .....1936                        | 279   | 203     | 43               | 0.1   | 0.1     | 1                |
| Syrian.....1935                  | 208   | 169     | 128              | 0.1   | 0.1     | 0.1              |
| .....1936                        | 214   | 167     | 125              | 0.1   | 0.1     | 0.1              |
| Ukrainian <sup>2</sup> .....1935 | 5,992   | 6,838   | 5,326            | 2.7   | 3.1     | 2.4              |
| .....1936                        | 5,842   | 6,731   | 5,164            | 2.7   | 3.1     | 2.3              |

For footnotes, see end of table, p. 166.

**7.—Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers of Specified Origins, 1935 and 1936—concluded.**

| Origin of Parents.        |             | Numbers of Births with<br>Father, Mother, or Both<br>Parents of Specified Origin. |                |                            | Percentages of Births with<br>Father, Mother, or Both<br>Parents of Specified Origin. |              |                         |
|---------------------------|-------------|---|----------------|----------------------------|---|--------------|-------------------------|
|                           |             | Father.   | Mother.        | Both<br>Parents.           | Father.   | Mother.      | Both<br>Parents.        |
| Other.....                | 1935        | 264   | 260            | 127                        | 0.1   | 0.1          | 0.1                     |
|                           | 1936        | 249   | 260            | 125                        | 0.1   | 0.1          | 0.1                     |
| Origin not specified..... | 1935        | 8,776   | 1,360          | 296                        | 4.0   | 0.6          | 0.1                     |
|                           | 1936        | 9,012   | 1,360          | 217                        | 4.1   | 0.6          | 0.1                     |
| <b>Totals.....</b>        | <b>1935</b> | <b>221,451</b>  | <b>221,451</b> | <b>154,618<sup>1</sup></b> | <b>100.0</b>  | <b>100.0</b> | <b>69.8<sup>4</sup></b> |
|                           | <b>1936</b> | <b>220,371</b>  | <b>220,371</b> | <b>152,351<sup>2</sup></b> | <b>100.0</b>  | <b>100.0</b> | <b>69.1<sup>4</sup></b> |

<sup>1</sup> Less than one-tenth of one per cent.

<sup>2</sup> Including "Gallician" and "Bukovinian".

<sup>3</sup> This

figure gives the number of children whose fathers and mothers have the same origin. The difference between this figure and the total number of births represents the number of children whose fathers and mothers are of different origins.

<sup>4</sup> This excludes the percentage of "mixed parentage", i.e., parents not of the same origin.

**Illegitimacy.**—The ratio of illegitimate to total births is, generally speaking, low in Canada as compared with other countries. The steady increase which is noticeable in recent years is probably due, in some measure, to more complete data.

Out of 221,451 live births in the nine provinces of Canada in 1935, 8,344, or 3.77 p.c., were returned as the issue of unmarried mothers. Figures for 1936 show a total of 220,371 live births, of which 8,633, or 3.92 p.c., were returned as the issue of unmarried mothers. Out of this number, 4,492 were males and 4,141 females—a ratio of 1,085 males to every 1,000 females, as compared with 1,069 males per 1,000 females in 1935, and a general 1936 rate for all live births of 1,058 males to 1,000 females. (See Table 8.)

**8.—Numbers of Illegitimate Births, Classified by Age of Mother, by Provinces, 1936, Percentages to Total Live Births, and Totals of Illegitimate Births, by Sex, 1934, 1935 and 1936, with Averages or Totals, 1926-36.**

| Age Group of Mother and Item.          | P.E.I.      | N.S.        | N.B.        | Que.         | Ont.         | Man.        | Sask.       | Alta.       | B.C.        | Canada. <sup>1</sup> |
|--|-------------|-------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|----------------------|
| <b>1936.</b>                           |             |             |             |              |              |             |             |             |             |                      |
| Under 15 years.....                    | 1           | 4           | 4           | 9            | 29           | 5           | 4           | 2           | 3           | 61                   |
| 15-19 years.....                       | 31          | 268         | 144         | 488          | 905          | 141         | 221         | 186         | 113         | 2,497                |
| 20-24 years.....                       | 22          | 285         | 172         | 553          | 1,094        | 201         | 289         | 227         | 142         | 2,985                |
| 25-29 years.....                       | 9           | 96          | 45          | 193          | 419          | 78          | 106         | 98          | 64          | 1,168                |
| 30-34 years.....                       | 3           | 41          | 22          | 64           | 186          | 23          | 33          | 47          | 30          | 449                  |
| 35-39 years.....                       | 2           | 23          | 15          | 33           | 93           | 24          | 40          | 32          | 15          | 277                  |
| 40-44 years.....                       | Nil         | 5           | 3           | 4            | 41           | 15          | 8           | 8           | 5           | 89                   |
| 45 years or over.....                  | Nil         | 1           | Nil         | 1            | 2            | Nil         | 1           | 6           | 2           | 13                   |
| Not given.....                         | Nil         | Nil         | Nil         | 1,124        | 19           | 6           | 1           | 1           | 3           | 1,154                |
| <b>Av. 1926-36.....</b>                | <b>42</b>   | <b>558</b>  | <b>299</b>  | <b>2,334</b> | <b>2,196</b> | <b>561</b>  | <b>489</b>  | <b>479</b>  | <b>240</b>  | <b>7,138</b>         |
| <b>Av. 1931-35.....</b>                | <b>74</b>   | <b>652</b>  | <b>373</b>  | <b>2,431</b> | <b>2,707</b> | <b>501</b>  | <b>651</b>  | <b>413</b>  | <b>339</b>  | <b>8,332</b>         |
| <b>Totals—</b>                         |             |             |             |              |              |             |             |             |             |                      |
| <b>1934.....</b>                       | <b>84</b>   | <b>659</b>  | <b>367</b>  | <b>2,335</b> | <b>2,500</b> | <b>512</b>  | <b>678</b>  | <b>589</b>  | <b>346</b>  | <b>8,070</b>         |
| <b>1935.....</b>                       | <b>83</b>   | <b>663</b>  | <b>402</b>  | <b>2,506</b> | <b>2,612</b> | <b>473</b>  | <b>640</b>  | <b>614</b>  | <b>320</b>  | <b>8,344</b>         |
| <b>1936.....</b>                       | <b>68</b>   | <b>723</b>  | <b>405</b>  | <b>2,469</b> | <b>2,785</b> | <b>496</b>  | <b>703</b>  | <b>607</b>  | <b>377</b>  | <b>8,633</b>         |
| <b>Percentages of All Live Births—</b> | <b>p.c.</b> | <b>p.c.</b> | <b>p.c.</b> | <b>p.c.</b>  | <b>p.c.</b>  | <b>p.c.</b> | <b>p.c.</b> | <b>p.c.</b> | <b>p.c.</b> | <b>p.c.</b>          |
| 1934.....                              | 4.3         | 5.8         | 3.6         | 3.1          | 4.0          | 3.8         | 3.4         | 3.6         | 3.5         | 3.65                 |
| 1935.....                              | 4.1         | 5.7         | 3.9         | 3.3          | 4.2          | 3.5         | 3.3         | 3.8         | 3.2         | 3.77                 |
| 1936.....                              | 3.4         | 6.1         | 3.9         | 3.3          | 4.5          | 3.8         | 3.7         | 3.8         | 3.6         | 3.92                 |
| <b>Male Illegitimate Births—</b>       | <b>No.</b>  | <b>No.</b>  | <b>No.</b>  | <b>No.</b>   | <b>No.</b>   | <b>No.</b>  | <b>No.</b>  | <b>No.</b>  | <b>No.</b>  | <b>No.</b>           |
| 1934.....                              | 47          | 340         | 191         | 1,231        | 1,272        | 243         | 333         | 296         | 179         | 4,132                |
| 1935.....                              | 37          | 341         | 218         | 1,298        | 1,368        | 237         | 329         | 314         | 160         | 4,311                |
| 1936.....                              | 36          | 394         | 198         | 1,302        | 1,446        | 248         | 375         | 304         | 180         | 4,492                |
| <b>Female Illegitimate Births—</b>     |             |             |             |              |              |             |             |             |             |                      |
| 1934.....                              | 37          | 319         | 176         | 1,104        | 1,228        | 269         | 345         | 293         | 167         | 3,938                |
| 1935.....                              | 46          | 322         | 185         | 1,208        | 1,274        | 236         | 311         | 300         | 151         | 4,033                |
| 1936.....                              | 32          | 320         | 207         | 1,167        | 1,342        | 245         | 328         | 303         | 188         | 4,141                |

<sup>1</sup> Exclusive of the Territories.

**Stillbirths.**—Statistics of the number of children born dead in 1936 are shown below for Canada, according to the status and age of the mother. Stillbirths to unmarried mothers were 3.7 p.c. of total illegitimate births in 1936, whereas total stillbirths were only 2.8 p.c. of total births in the same year.

**9.—Stillbirths, Classified by Age of Mother, by Provinces and Legitimacy of Child, 1936, with Averages or Totals, 1926-36, and Ratios to Totals, 1934, 1935 and 1936.**

| Age Group of Mother and Item. | Born to All Mothers. |        |      |      |       |       |      |       |       |      | Born to Unmarried Mothers. |
|-------------------------------|----------------------|--------|------|------|-------|-------|------|-------|-------|------|----------------------------|
|                               | Canada.              | P.E.I. | N.S. | N.B. | Que.  | Ont.  | Man. | Sask. | Alta. | B.C. |                            |
| <b>1936.</b>                  |                      |        |      |      |       |       |      |       |       |      |                            |
| Under 15 years.....           | 1                    | Nil    | Nil  | Nil  | Nil   | Nil   | Nil  | 1     | Nil   | Nil  | 1                          |
| 15-19 years.....              | 316                  | 3      | 27   | 21   | 81    | 118   | 14   | 18    | 22    | 12   | 81                         |
| 20-24 years.....              | 1,355                | 25     | 71   | 63   | 420   | 454   | 62   | 109   | 93    | 58   | 96                         |
| 25-29 years.....              | 1,528                | 16     | 56   | 52   | 585   | 492   | 81   | 89    | 94    | 63   | 40                         |
| 30-34 years.....              | 1,259                | 5      | 45   | 40   | 481   | 410   | 69   | 90    | 75    | 41   | 17                         |
| 35-39 years.....              | 1,076                | 11     | 55   | 44   | 444   | 330   | 49   | 71    | 45    | 27   | 18                         |
| 40-44 years.....              | 645                  | 10     | 32   | 14   | 250   | 188   | 45   | 48    | 37    | 21   | 8                          |
| 45 years or over.....         | 80                   | Nil    | 4    | 2    | 38    | 24    | 3    | 3     | 6     | Nil  | 1                          |
| Not given.....                | 93                   | Nil    | 2    | 1    | 66    | 18    | Nil  | 2     | 4     | Nil  | 71                         |
| Av. 1926-30.....              | 7,458                | 43     | 365  | 283  | 2,212 | 2,761 | 479  | 551   | 467   | 297  | 356                        |
| Av. 1931-35.....              | 6,931                | 67     | 461  | 302  | 2,337 | 2,284 | 383  | 488   | 421   | 247  | 331                        |
| <b>Totals—</b>                |                      |        |      |      |       |       |      |       |       |      |                            |
| 1934.....                     | 6,452                | 67     | 350  | 234  | 2,232 | 2,091 | 369  | 465   | 363   | 231  | 354                        |
| 1935.....                     | 6,449                | 67     | 342  | 266  | 2,317 | 2,149 | 331  | 403   | 363   | 218  | 348                        |
| 1936.....                     | 6,330                | 70     | 292  | 237  | 2,365 | 2,634 | 323  | 431   | 376   | 222  | 333                        |
| <b>Ratios to Total Births</b> |                      |        |      |      |       |       |      |       |       |      |                            |
| 1934.....                     | 2.8                  | 3.3    | 3.0  | 2.7  | 2.8   | 3.3   | 2.7  | 2.3   | 2.2   | 2.3  | 4.2                        |
| 1935.....                     | 2.8                  | 3.2    | 2.9  | 2.5  | 3.0   | 3.3   | 2.4  | 2.0   | 2.2   | 2.1  | 4.0                        |
| 1936.....                     | 2.8                  | 3.4    | 2.4  | 2.2  | 3.0   | 3.2   | 2.5  | 2.2   | 2.3   | 2.1  | 3.7                        |

<sup>1</sup> Exclusive of the Territories.

**Birth Rates in Various Countries.**—The relative positions occupied by Canada and its individual provinces among various countries of the world with respect to crude birth rate (the annual number of births per 1,000 of population) are shown in Table 10.

**10.—Crude Birth Rates of Various Countries of the World and of Provinces of Canada in Recent Years.**

| Country.                            | Year. | Crude Birth Rate. | Country.                       | Year. | Crude Birth Rate. |
|-------------------------------------|-------|-------------------|--------------------------------|-------|-------------------|
| <b>Country—</b>                     |       |                   | <b>Country—continued.</b>      |       |                   |
| Palestine.....                      | 1935  | 45.2              | Italy.....                     | 1935  | 23.3              |
| Costa Rica.....                     | 1935  | 43.2              | Newfoundland.....              | 1935  | 22.4              |
| Egypt.....                          | 1935  | 41.0              | Iceland.....                   | 1935  | 22.1              |
| Straits Settlements.....            | 1935  | 41.8              | Hungary.....                   | 1935  | 21.2              |
| Salvador.....                       | 1934  | 39.8              | Uruguay.....                   | 1935  | 20.4              |
| British India.....                  | 1935  | 34.9              | Netherlands.....               | 1935  | 20.2              |
| Ceylon.....                         | 1935  | 34.4              | Canada.....                    | 1936  | 26.0              |
| Chile.....                          | 1935  | 34.1              | Irish Free State.....          | 1935  | 19.6              |
| Jamaica.....                        | 1935  | 33.5              | Northern Ireland.....          | 1935  | 19.2              |
| Japan.....                          | 1935  | 31.6              | Germany.....                   | 1935  | 18.9              |
| Roumania.....                       | 1935  | 30.7              | Finland.....                   | 1935  | 18.5              |
| Greece.....                         | 1935  | 28.3              | Czechoslovakia.....            | 1935  | 17.9              |
| Panama.....                         | 1934  | 27.1              | Scotland.....                  | 1935  | 17.8              |
| Bulgaria.....                       | 1935  | 26.3              | Denmark.....                   | 1935  | 17.7              |
| Poland.....                         | 1935  | 26.1              | Latvia.....                    | 1935  | 17.6              |
| Spain.....                          | 1935  | 25.2              | United States (reg. area)..... | 1935  | 16.9              |
| Union of South Africa (whites)..... | 1935  | 24.2              | Australia.....                 | 1935  | 16.6              |
| Lithuania.....                      | 1935  | 23.4              | New Zealand.....               | 1935  | 16.1              |

**10.—Crude Birth Rates of Various Countries of the World and of Provinces of Canada in Recent Years—concluded.**

| Country.               | Year. | Crude Birth Rate. | Province.                 | Year. | Crude Birth Rate. |
|------------------------|-------|-------------------|---------------------------|-------|-------------------|
| Country—concluded.     |       |                   | Province of Canada—       |       |                   |
| Switzerland.....       | 1935  | 16.0              | Quebec.....               | 1935  | 24.3              |
| Estonia.....           | 1935  | 15.9              | New Brunswick.....        | 1935  | 24.2              |
| Belgium.....           | 1935  | 15.5              | Nova Scotia.....          | 1935  | 22.0              |
| British Isles.....     | 1935  | 15.4              | Prince Edward Island..... | 1935  | 21.5              |
| France.....            | 1935  | 15.2              | Saskatchewan.....         | 1935  | 20.5              |
| England and Wales..... | 1935  | 14.7              | Alberta.....              | 1935  | 20.4              |
| Norway.....            | 1935  | 14.3              | Manitoba.....             | 1935  | 18.1              |
| Sweden.....            | 1935  | 13.8              | Ontario.....              | 1935  | 16.9              |
| Austria.....           | 1935  | 13.2              | British Columbia.....     | 1935  | 14.1              |

## Section 2.—Marriages and Divorces.

### Subsection 1.—Marriages.

The marriage rate in modern countries of the western world is appreciably influenced by the general level of prosperity prevailing. Marriages in such English-speaking countries, for instance, as the United Kingdom, the United States, Canada, and Australia tend to increase in "good times" and to diminish in "hard times", when great numbers of those who are contemplating marriage are led to postpone the event. Thus an examination of the figures for individual years over the past decade clearly shows that marriages reached a peak in 1929 after which the recession was steady and marked until 1932; for 1933 there was an improvement, though of little more than 2 p.c. over 1932, for 1934 a further improvement of over 14 p.c. was recorded, and the improvement continued in 1935 and 1936. This general trend for Canada as a whole was followed in the figures for each province, although in the cases of Prince Edward Island and Alberta the large increases in 1934 were not held in the following year.

Summary statistics of marriages and marriage rates, 1934-36, with averages for 1921-25, 1926-30, and 1931-35, are given in Table 13, p. 170 and in Table 32, p. 191.

**Age at Marriage.**—The average age of all bridegrooms in the Dominion in 1935 was 29.0 years and that of all brides 25.0 years. The average excess of the bridegroom's age was thus 4.0 years. It may be noted in Table 11 that when the contracting parties are grouped by age of bridegroom, the average difference in age is less for the younger groups, grooms under 20 being 0.4 years younger than the brides, while the excess of the average bridegroom's age was 1.5 years in the group 20-24, and steadily increased for each quinquennial age group until it was 11.3 years for the bridegrooms 50 years or over in 1935. On the other hand, when the parties are grouped by the age of the bride, the same regularity is not shown. In the case of brides in the age groups 25-29 years and 30-34 years, the bridegrooms approximate most closely in age to their brides. Since these tables are based upon all marriages contracted during the year, the figures given should not be understood to signify the average ages at *first* marriage. Out of each 1,000 bridegrooms in 1936, 930 were bachelors, 60 widowers, 11 divorced men; out of each 1,000 brides, 954 were spinsters, 37 widows, 9 divorced women. The first year in which as many as 1 p.c. of those marrying had previously been divorced was 1928. The comparison between the figures of divorces granted, as shown in Table 15 of this chapter, and the number of divorced persons re-married is of some interest.

Thus 1,526 divorces were granted in 1936, while 851 divorced males and 727 divorced females married again. This, of course, does not mean that these were the same persons. Table 12 gives the average ages of brides and grooms by provinces.

11.—Differences in Ages of Bridegrooms and Brides, 1935.

| Age Group of Bridegrooms. | Average Age of Bridegrooms. | Average Age of Brides. | Excess of Average Age of Bridegrooms. | Age Group of Brides. | Average Age of Brides. | Average Age of Bridegrooms. | Excess of Average Age of Bridegrooms. |
|---------------------------|-----------------------------|------------------------|---------------------------------------|----------------------|------------------------|-----------------------------|---------------------------------------|
| All bridegrooms....       | 29.0                        | 25.0                   | 4.0                                   | All brides.....      | 25.0                   | 29.0                        | 4.0                                   |
| Under 20 years.....       | 19.1                        | 19.5                   | -0.4                                  | Under 20 years.....  | 18.5                   | 24.6                        | 6.1                                   |
| 20-24 years.....          | 22.9                        | 21.4                   | 1.5                                   | 20-24 years.....     | 22.4                   | 26.6                        | 4.2                                   |
| 25-29 years.....          | 27.3                        | 23.7                   | 3.6                                   | 25-29 years.....     | 27.1                   | 29.9                        | 2.8                                   |
| 30-34 years.....          | 32.1                        | 26.1                   | 6.0                                   | 30-34 years.....     | 32.1                   | 34.5                        | 2.4                                   |
| 35-39 years.....          | 37.2                        | 28.8                   | 8.4                                   | 35-39 years.....     | 37.2                   | 40.5                        | 3.3                                   |
| 40-44 years.....          | 42.2                        | 32.3                   | 9.9                                   | 40-44 years.....     | 42.3                   | 45.7                        | 4.4                                   |
| 45-49 years.....          | 47.4                        | 36.9                   | 10.5                                  | 45-49 years.....     | 47.3                   | 51.8                        | 4.5                                   |
| 50 years or over....      | 59.7                        | 48.4                   | 11.3                                  | 50 years or over.... | 53.7                   | 61.1                        | 2.4                                   |

12.—Average Ages of Parties Contracting Marriage, by Provinces, 1934 and 1935.

| Province.                                  | 1934.                       |                        |                                       | 1935.                       |                        |                                       |
|--|-----------------------------|------------------------|---------------------------------------|-----------------------------|------------------------|---------------------------------------|
|  | Average Age of Bridegrooms. | Average Age of Brides. | Excess of Average Age of Bridegrooms. | Average Age of Bridegrooms. | Average Age of Brides. | Excess of Average Age of Bridegrooms. |
| Prince Edward Island.....                  | 29.7                        | 24.8                   | 4.9                                   | 29.4                        | 25.0                   | 4.4                                   |
| Nova Scotia.....                           | 28.6                        | 24.4                   | 4.2                                   | 28.6                        | 24.3                   | 4.3                                   |
| New Brunswick.....                         | 28.7                        | 24.2                   | 4.5                                   | 28.4                        | 24.2                   | 4.2                                   |
| Quebec.....                                | 29.2                        | 25.5                   | 3.7                                   | 29.2                        | 25.6                   | 3.6                                   |
| Ontario.....                               | 28.9                        | 25.0                   | 3.9                                   | 28.8                        | 25.0                   | 3.8                                   |
| Manitoba.....                              | 29.3                        | 24.6                   | 4.7                                   | 29.5                        | 24.8                   | 4.7                                   |
| Saskatchewan.....                          | 28.7                        | 23.4                   | 5.3                                   | 28.7                        | 23.7                   | 5.0                                   |
| Alberta.....                               | 29.3                        | 23.9                   | 5.4                                   | 29.2                        | 24.1                   | 5.1                                   |
| British Columbia.....                      | 30.3                        | 25.6                   | 4.7                                   | 30.2                        | 25.7                   | 4.5                                   |
| Canada (Exclusive of the Territories)..... | 29.1                        | 24.9                   | 4.2                                   | 29.0                        | 25.0                   | 4.0                                   |

**Nativity of Brides and Bridegrooms.**—The majority of marriages contracted in the western provinces in past years were between persons born outside Canada. This condition, however, is being quickly changed and such percentages in all the western provinces show a general reduction over the past few years. (See Table 13.) Both Canadian-born brides and bridegrooms are now in the majority in each province, and in the Maritime Provinces and Quebec they show a marked predominance. Taking Canada as a whole, nearly 79 p.c. of all grooms and over 86 p.c. of all brides in 1936 were born in Canada; these are the highest percentages shown for the period covered by the statistics.

### 13.—Percentage Distribution by Nativity of Persons Married in Canada, by Provinces, 1931, 1935, and 1936, with Averages for 1921-25, 1926-30, and 1931-35.

NOTE.—For figures for single years 1921-25, see the 1929 Year Book, p. 166; for 1926-30, the 1933 Year Book, pp. 153-164; and for 1931-35, the 1936 Year Book, p. 164.

| Province.  | Year.       | Marriages. |                       | Percentage Distribution of Grooms and Brides, by Nativity. |         |                          |         |                 |         |         |         |
|--|-------------|------------|-----------------------|--|---------|--------------------------|---------|-----------------|---------|---------|---------|
|  |             | Total.     | Per 1,000 Population. | Born in Province of Residence.                             |         | Born in Other Provinces. |         | Born Elsewhere. |         | Grooms. | Brides. |
|  |             |            |                       | Grooms.  | Brides. | Grooms.                  | Brides. | Grooms.         | Brides. |         |         |
|  |             | No.        | No.                   | p.c.   | p.c.    | p.c.                     | p.c.    | p.c.            | p.c.    |         |         |
| Prince Edward Island                               | Av. 1921-25 | 473        | 5.4                   | 90.8   | 93.8    | 5.1                      | 2.6     | 4.1             | 3.7     |         |         |
|  | Av. 1926-30 | 473        | 5.4                   | 90.8   | 93.5    | 4.1                      | 2.9     | 5.1             | 3.6     |         |         |
|  | Av. 1931-35 | 496        | 5.6                   | 89.7   | 92.6    | 4.7                      | 3.6     | 5.6             | 3.8     |         |         |
|  | 1934        | 536        | 6.0                   | 89.2   | 91.8    | 4.5                      | 2.8     | 6.3             | 5.4     |         |         |
|  | 1935        | 516        | 5.8                   | 90.3   | 93.6    | 4.5                      | 3.3     | 5.2             | 3.1     |         |         |
|  | 1936        | 595        | 6.5                   | 87.1   | 90.9    | 5.7                      | 5.2     | 7.2             | 3.9     |         |         |
| Nova Scotia  | Av. 1921-25 | 3,185      | 0.1                   | 78.2   | 83.2    | 5.6                      | 3.4     | 10.3            | 13.4    |         |         |
|  | Av. 1926-30 | 3,224      | 0.3                   | 78.7   | 84.0    | 5.0                      | 3.6     | 10.3            | 12.4    |         |         |
|  | Av. 1931-35 | 3,522      | 0.8                   | 81.8   | 87.1    | 5.4                      | 4.1     | 12.8            | 8.8     |         |         |
|  | 1934        | 3,755      | 7.2                   | 83.5   | 88.4    | 4.9                      | 3.9     | 11.6            | 7.7     |         |         |
|  | 1935        | 3,946      | 7.5                   | 82.8   | 87.3    | 5.5                      | 4.7     | 11.6            | 8.0     |         |         |
|  | 1936        | 4,120      | 7.7                   | 84.5   | 88.5    | 5.5                      | 4.0     | 9.9             | 7.5     |         |         |
| New Brunswick                                      | Av. 1921-25 | 2,953      | 7.6                   | 72.4   | 77.0    | 10.5                     | 8.0     | 17.2            | 14.9    |         |         |
|  | Av. 1926-30 | 2,970      | 7.4                   | 72.7   | 76.8    | 9.2                      | 8.1     | 18.2            | 15.0    |         |         |
|  | Av. 1931-35 | 2,737      | 6.6                   | 78.7   | 83.2    | 9.9                      | 8.8     | 11.4            | 8.5     |         |         |
|  | 1934        | 3,045      | 7.2                   | 79.2   | 84.2    | 10.0                     | 7.8     | 10.8            | 8.0     |         |         |
|  | 1935        | 3,200      | 7.5                   | 79.8   | 85.3    | 9.6                      | 7.4     | 10.6            | 7.3     |         |         |
|  | 1936        | 3,397      | 7.8                   | 81.6   | 86.3    | 8.0                      | 6.8     | 10.4            | 7.0     |         |         |
| Quebec <sup>1</sup>                                | Av. 1926-30 | 18,731     | 6.9                   | 80.6   | 83.5    | 4.0                      | 3.5     | 15.4            | 13.0    |         |         |
|  | Av. 1931-35 | 17,089     | 5.8                   | 81.3   | 84.7    | 4.2                      | 4.0     | 14.6            | 11.3    |         |         |
|  | 1934        | 18,242     | 6.0                   | 83.2   | 86.7    | 4.2                      | 3.8     | 12.4            | 9.5     |         |         |
|  | 1935        | 19,957     | 6.5                   | 84.5   | 87.6    | 4.3                      | 4.4     | 11.2            | 8.0     |         |         |
|  | 1936        | 21,654     | 7.0                   | 85.8   | 89.1    | 4.3                      | 4.0     | 9.9             | 6.8     |         |         |
| Ontario  | Av. 1921-25 | 24,037     | 8.0                   | 61.0   | 64.5    | 6.7                      | 5.8     | 32.4            | 29.6    |         |         |
|  | Av. 1926-30 | 25,449     | 7.8                   | 57.2   | 61.9    | 7.3                      | 6.8     | 35.5            | 31.3    |         |         |
|  | Av. 1931-35 | 24,260     | 6.8                   | 62.9   | 69.5    | 7.0                      | 7.4     | 30.1            | 28.1    |         |         |
|  | 1934        | 25,874     | 7.1                   | 65.3   | 72.6    | 6.9                      | 7.2     | 27.8            | 20.2    |         |         |
|  | 1935        | 26,843     | 7.3                   | 71.0   | 77.5    | 5.6                      | 6.1     | 23.4            | 16.4    |         |         |
|  | 1936        | 27,734     | 7.5                   | 74.0   | 79.6    | 5.3                      | 5.9     | 20.7            | 14.5    |         |         |
| Manitoba   | Av. 1921-25 | 4,634      | 7.5                   | 28.4   | 40.8    | 16.9                     | 13.1    | 54.7            | 46.1    |         |         |
|  | Av. 1926-30 | 4,951      | 7.5                   | 35.9   | 49.4    | 13.2                     | 10.9    | 50.9            | 39.7    |         |         |
|  | Av. 1931-35 | 5,015      | 7.1                   | 48.4   | 62.7    | 11.5                     | 10.8    | 40.1            | 26.5    |         |         |
|  | 1934        | 5,296      | 7.4                   | 52.4   | 66.7    | 12.2                     | 11.3    | 35.4            | 22.0    |         |         |
|  | 1935        | 5,341      | 7.5                   | 56.1   | 69.0    | 12.0                     | 11.7    | 31.9            | 19.3    |         |         |
|  | 1936        | 5,756      | 8.1                   | 57.6   | 70.7    | 12.2                     | 11.4    | 30.2            | 17.9    |         |         |
| Saskatchewan                                       | Av. 1921-25 | 4,982      | 6.4                   | 9.7  | 21.0    | 30.5                     | 26.7    | 59.8            | 52.3    |         |         |
|  | Av. 1926-30 | 6,036      | 7.0                   | 18.6   | 35.9    | 26.5                     | 21.2    | 54.9            | 42.9    |         |         |
|  | Av. 1931-35 | 5,680      | 6.1                   | 36.7   | 59.5    | 20.4                     | 15.0    | 42.9            | 25.5    |         |         |
|  | 1934        | 5,519      | 5.9                   | 41.7   | 66.2    | 19.5                     | 13.9    | 38.8            | 19.9    |         |         |
|  | 1935        | 6,036      | 6.5                   | 45.5   | 67.1    | 18.7                     | 14.1    | 35.8            | 18.9    |         |         |
|  | 1936        | 6,168      | 6.6                   | 48.3   | 71.0    | 18.8                     | 12.7    | 32.9            | 16.2    |         |         |
| Alberta  | Av. 1921-25 | 4,313      | 7.3                   | 9.8  | 19.2    | 25.1                     | 22.9    | 65.1            | 57.0    |         |         |
|  | Av. 1926-30 | 5,265      | 8.0                   | 16.3   | 28.6    | 22.3                     | 19.4    | 61.3            | 52.0    |         |         |
|  | Av. 1931-35 | 5,530      | 7.4                   | 28.5   | 47.3    | 20.6                     | 18.6    | 50.9            | 34.0    |         |         |
|  | 1934        | 6,053      | 8.0                   | 31.8   | 51.7    | 21.5                     | 19.3    | 46.7            | 29.0    |         |         |
|  | 1935        | 6,010      | 7.9                   | 34.7   | 54.9    | 21.7                     | 19.6    | 43.6            | 25.6    |         |         |
|  | 1936        | 6,020      | 7.8                   | 37.2   | 57.4    | 21.0                     | 18.7    | 41.8            | 23.9    |         |         |
| British Columbia                                   | Av. 1921-25 | 3,971      | 7.1                   | 16.2   | 21.4    | 22.0                     | 20.6    | 61.8            | 53.0    |         |         |
|  | Av. 1926-30 | 4,786      | 7.5                   | 18.1   | 24.0    | 20.9                     | 21.7    | 61.0            | 53.4    |         |         |
|  | Av. 1931-35 | 4,267      | 6.0                   | 26.5   | 37.5    | 25.4                     | 26.0    | 50.2            | 35.9    |         |         |
|  | 1934        | 4,771      | 6.6                   | 28.9   | 41.3    | 24.1                     | 27.3    | 47.1            | 31.4    |         |         |
|  | 1935        | 5,034      | 6.8                   | 30.9   | 42.2    | 26.0                     | 28.9    | 42.6            | 28.9    |         |         |
|  | 1936        | 5,451      | 7.3                   | 32.5   | 43.1    | 27.7                     | 31.6    | 39.8            | 25.3    |         |         |
| Canada <sup>1</sup> (Exclusive of the Territories) | Av. 1926-30 | 71,835     | 7.3                   | 54.9   | 61.4    | 10.4                     | 9.2     | 34.8            | 29.4    |         |         |
|  | Av. 1931-35 | 68,536     | 6.4                   | 60.9   | 69.8    | 9.9                      | 9.4     | 29.1            | 20.8    |         |         |
|  | 1934        | 73,092     | 6.8                   | 63.6   | 72.9    | 9.9                      | 9.3     | 26.5            | 17.8    |         |         |
|  | 1935        | 76,393     | 7.0                   | 67.1   | 75.5    | 9.5                      | 9.2     | 23.4            | 15.3    |         |         |
|  | 1936        | 80,904     | 7.3                   | 69.5   | 77.6    | 9.3                      | 8.9     | 21.2            | 13.5    |         |         |

<sup>1</sup> Quebec was not included in the registration area prior to 1926.

**Marriage Rates in Various Countries.**—For comparative purposes, the crude marriage rates per 1,000 of population in various countries of the world and in the provinces of Canada are shown for the indicated years in Table 14.

**14.—Crude Marriage Rates of Various Countries of the World and of Provinces of Canada in Recent Years.**

| Country.                       | Year.             | Crude Marriage Rate per 1,000 Population. | Country or Province.       | Year. | Crude Marriage Rate per 1,000 Population. |
|--------------------------------|-------------------|---|----------------------------|-------|---|
| <b>Country—</b>                |                   |   | <b>Country—concluded.</b>  |       |   |
| Union of South Africa (whites) | 1935              | 10.4                                      | Northern Ireland.....      | 1935  | 6.9                                       |
| Germany.....                   | 1935              | 9.7                                       | France.....                | 1935  | 6.8                                       |
| Denmark.....                   | 1935              | 9.3                                       | Austria.....               | 1935  | 6.8                                       |
| Roumania.....                  | 1935              | 8.7                                       | Greece.....                | 1935  | 6.7                                       |
| England and Wales.....         | 1935              | 8.6                                       | Italy.....                 | 1935  | 6.7                                       |
| Hungary.....                   | 1935              | 8.5                                       | Newfoundland.....          | 1935  | 6.4                                       |
| Latvia.....                    | 1935              | 8.4                                       | Iceland.....               | 1935  | 6.2                                       |
| Australia.....                 | 1935              | 8.4                                       | Spain.....                 | 1934  | 6.0                                       |
| Poland.....                    | 1935              | 8.3                                       | Uruguay.....               | 1935  | 5.6                                       |
| British Isles.....             | 1935              | 8.2                                       | Irish Free State.....      | 1935  | 4.8                                       |
| Estonia.....                   | 1935              | 8.2                                       | Ceylon.....                | 1935  | 4.5                                       |
| Sweden.....                    | 1935              | 8.2                                       | Japan.....                 | 1935  | 4.1                                       |
| New Zealand.....               | 1935              | 8.2                                       | Salvador.....              | 1934  | 3.6                                       |
| Japan.....                     | 1935              | 8.0                                       | Panama.....                | 1934  | 3.3                                       |
| Bulgaria.....                  | 1935              | 7.9                                       |                            |       |   |
| United States.....             | 1932 <sup>1</sup> | 7.9                                       | <b>Province of Canada—</b> |       |   |
| Scotland.....                  | 1935              | 7.7                                       | Manitoba.....              | 1936  | 8.1                                       |
| Czechoslovakia.....            | 1935              | 7.6                                       | New Brunswick.....         | 1936  | 7.8                                       |
| Belgium.....                   | 1935              | 7.6                                       | Alberta.....               | 1936  | 7.8                                       |
| Finland.....                   | 1935              | 7.6                                       | Nova Scotia.....           | 1936  | 7.7                                       |
| Lithuania.....                 | 1935              | 7.4                                       | Ontario.....               | 1936  | 7.6                                       |
| Switzerland.....               | 1935              | 7.3                                       | British Columbia.....      | 1936  | 7.3                                       |
| Canada.....                    | 1936              | 7.3                                       | Quebec.....                | 1936  | 7.0                                       |
| Chile.....                     | 1935              | 7.3                                       | Saskatchewan.....          | 1936  | 6.6                                       |
| Netherlands.....               | 1935              | 7.2                                       | Prince Edward Island.....  | 1936  | 6.5                                       |
| Norway.....                    | 1935              | 7.1                                       |                            |       |   |

<sup>1</sup> In the United States 1932 is the latest year for which the rate has been computed.

### Subsection 2.—Divorces.

For many years subsequent to Confederation the number of divorces granted in Canada was very small, 1883, with 13 divorces, being the first year in which the number attained two figures, while 1903, with 21 divorces, was the record year up to that time. Thereafter the numbers grew more rapidly, 1909 showing 51 divorces and 1913, the last pre-war year, 60 divorces. This number was, however, less than one per 1,000 of the marriages contracted in Canada in these years.

One effect of the War was to increase divorce. The causes may be found in the generally unsettling psychological influences of the war period, and the long separations between men on active service and their wives. The provision of new facilities for divorce is also to be considered; owing to a decision of the British Privy Council, divorces in the Prairie Provinces, have, subsequently to 1918, been granted by the courts of these provinces, so that Ontario and Quebec have since then been the only provinces in which the applicant for divorce must secure a special private Act of Parliament. In 1930, however, an Act of the Dominion Parliament (20-21 Geo. V, c. 14) gave jurisdiction in divorce cases to the Supreme Court of Ontario.

The above-mentioned causes tended to increase the number of divorces granted in Canada, which grew steadily from 114 in 1918 to 873 in 1930. The numbers



are those of final decrees, which alone really constitute divorces. In 1931 the number decreased to 692, this being largely due to the transfer of jurisdiction in Ontario divorces from the Parliament of Canada to the Supreme Court of the province, with the consequent delay between the granting of the decree *nisi* and the decree absolute. Since 1931 there has been an increase of 170 p.c. in the total number of divorces granted. All provinces except Nova Scotia show increases over that year. The statistics of divorces granted in the years 1918 to 1937, inclusive, will be found in Table 15. The figures in this table have been revised since the publication of the 1937 Year Book, as in some cases those of Dominion divorces for the earlier years included annulments, which are not included in the provincial figures. A redistribution as between provinces has also been made, the present figures being according to the domicile of the husband, whereas those previously published were arranged according to the residence of the petitioner.\*

#### 15.—Statistics of Divorces Granted in Canada, 1918-37.

NOTE.—In consequence of a decision of the British Privy Council, divorces in Manitoba, Saskatchewan, and Alberta have, subsequently to 1918, been granted by the courts of these provinces. The statistics shown here have been revised since the publication of the 1937 Year Book. For divorces in each year prior to 1918, see the 1921 Year Book, p. 825.

| Year.     | Granted by the<br>Dominion Parliament. |         |                  | Granted by the Courts. |                        |                 |                    |                 |                      | Total for<br>Canada. |
|-----------|--|---------|------------------|------------------------|------------------------|-----------------|--------------------|-----------------|----------------------|----------------------|
|           | P. E.<br>Island.                       | Quebec. | Ontario.         | Nova<br>Scotia.        | New<br>Brun-<br>swick. | Manitoba.       | Saskat-<br>chewan. | Alberta.        | British<br>Columbia. |                      |
| 1918..... | Nil                                    | 2       | 10               | 24                     | 10                     | Nil             | 1 <sup>1</sup>     | 2 <sup>1</sup>  | 65                   | 114                  |
| 1919..... | Nil                                    | 4       | 46               | 36                     | 13                     | 88 <sup>2</sup> | 3                  | 36 <sup>2</sup> | 147                  | 373                  |
| 1920..... | Nil                                    | 6       | 89               | 46                     | 15                     | 42              | 28                 | 65              | 186                  | 427                  |
| 1921..... | Nil                                    | 10      | 96               | 41                     | 13                     | 122             | 50                 | 84              | 128                  | 544                  |
| 1922..... | Nil                                    | 6       | 91               | 35                     | 12                     | 97              | 37                 | 129             | 138                  | 545                  |
| 1923..... | Nil                                    | 10      | 102              | 22                     | 19                     | 81              | 41                 | 87              | 139 <sup>2</sup>     | 501                  |
| 1924..... | Nil                                    | 13      | 113              | 42                     | 15                     | 77 <sup>2</sup> | 28                 | 118             | 136 <sup>2</sup>     | 542                  |
| 1925..... | Nil                                    | 13      | 119              | 30                     | 15                     | 79              | 42                 | 101             | 150                  | 549                  |
| 1926..... | Nil                                    | 10      | 111              | 19                     | 12                     | 85              | 48 <sup>2</sup>    | 154             | 167                  | 606                  |
| 1927..... | Nil                                    | 13      | 181              | 29                     | 17                     | 101             | 60                 | 148             | 187                  | 746                  |
| 1928..... | Nil                                    | 24      | 213              | 28                     | 13                     | 79              | 55                 | 168             | 203                  | 783                  |
| 1929..... | Nil                                    | 30      | 207              | 30                     | 21                     | 89              | 69                 | 147             | 222                  | 815                  |
| 1930..... | Nil                                    | 41      | 204              | 19                     | 27                     | 114             | 62                 | 151             | 255                  | 873                  |
| 1931..... | 1                                      | 38      | 90 <sup>4</sup>  | 36                     | 20                     | 94              | 51                 | 154             | 208                  | 692                  |
| 1932..... | Nil                                    | 27      | 338 <sup>4</sup> | 35                     | 26                     | 114             | 61                 | 149             | 245                  | 995                  |
| 1933..... | Nil                                    | 24      | 303 <sup>4</sup> | 27                     | 12                     | 116             | 48                 | 135             | 258                  | 923                  |
| 1934..... | Nil                                    | 38      | 356 <sup>4</sup> | 33                     | 17                     | 126             | 62                 | 168             | 306                  | 1,106                |
| 1935..... | 2                                      | 28      | 460 <sup>4</sup> | 52                     | 36                     | 145             | 60                 | 209             | 384                  | 1,376                |
| 1936..... | Nil                                    | 49      | 507 <sup>4</sup> | 41                     | 38                     | 179             | 79                 | 209             | 433                  | 1,526                |
| 1937..... | 2                                      | 43      | 596 <sup>4</sup> | 36                     | 54                     | 200             | 109                | 241             | 589                  | 1,870                |

<sup>1</sup> Granted by Parliament.

<sup>2</sup> One granted by Parliament.

<sup>3</sup> Two granted by Parliament.

<sup>4</sup> Granted by the courts.

### Section 3.—Deaths.

Within the past century, and more especially within the past generation, there has occurred throughout the countries of the white world a notable decline in the death rate, except where man has brought death upon himself through wars and the aftermath of wars. How far this decline has been due to advances in medical

\* The General Statistics Branch of the Dominion Bureau of Statistics publishes a bulletin on Divorces showing the sex of applicants and the number of persons re-married, together with comparisons with certain other countries. Application for this bulletin should be made to the Dominion Statistician.

science, how far to better sanitation, and how far to the improvement in the general conditions of living, as a result of the increase in the productive power of humanity, is in dispute, but concerning the facts there is no doubt.

Perhaps the most impressive testimony regarding this decline in the death rate is furnished by the mortality statistics of Sweden, where vital statistics have been kept with great accuracy for the whole nation ever since 1750. There, the crude death rate declined from an average of 27.4 per 1,000 in the decade 1751-60 to 14.3 in the decade 1911-20 and to 11.7 in 1935.

Similarly, in England and Wales, the crude death rate, which was 22.5 per 1,000 in the 60's, 21.4 in the 70's and 18.2 in the 90's of the past century, declined to 15.4 in the first decade of the present century and 12.1 in the third; it was 11.7 in 1935. In Scotland, again, the average rate was 22.1 in the '60's, 21.8 in the '70's, 18.6 in the '90's, 13.9 in 1921-25, 13.6 in 1926-30, and 13.2 in 1935.

There will always be years of specially high mortality, for instance 1918, when the death rate in Ontario, the most populous of the provinces of Canada, was 15.3 per 1,000, owing to the influenza-pneumonia epidemic, as against 12.0 in 1917 and 11.9 in 1919. Over a period, however, these abnormalities are reduced to negligibility, and it remains generally true that from decade to decade there is a decline in the crude death rates of the countries of the white man's world.

As for Canada, while the period elapsed since the introduction of complete and comprehensive vital statistics in 1920 has been too short to establish a definite downward trend, the rate of 12.4 per 1,000 for that year, in the eight provinces then included in the registration area, was substantially higher than in any subsequent year. A decided improvement is shown in the deaths and death rate of Quebec for the years 1933-36. This has been in evidence ever since 1926, but latterly Quebec has shown a lower rate than any of the provinces farther east.

#### Subsection 1.—General Mortality.

Summary statistics of total deaths and crude death rates in recent years are given in Table 32, p. 191, for Canada, by provinces. The absolute number of deaths as well as the crude death rate was higher for 1935 and 1936. In fact total deaths were greater than they have been since 1930, but the death rate was increased very little over the 1933 level although the advantage gained in 1934 was lost. A rising trend in the western provinces, where rates in the early '30's were unusually low, largely accounted for the increase.

**Age Distribution of Decedents.**—The numbers of males and females dying in the nine provinces in 1935 and 1936 are given by single years of age up to 5 and by quinquennial age groups thereafter in Table 16, together with the percentage of deaths occurring in each group in each of these years.

The quartile and decile ages of decedents for the years 1926, 1934, and 1935 are given for each sex and for the two sexes combined in Table 17. The fifth decile and second quartile (or the median) both mark the middle points of the arrays, and the deciles, dividing each half into five groups, give a more detailed picture of the age distribution in each half than do the quartiles. It is shown very definitely that the average ages of decedents have been increasing steadily. The method of construction and interpretation of this table is given on p. 163 in connection with a similar one showing quartile and decile ages of married fathers and mothers.

16.—Numerical and Percentage Distribution of Deaths in Canada by Sex and Age Groups, 1935-36.

| Age Group.                 | Numbers. |        |          |        | Percentages. |       |          |       |
|----------------------------|----------|--------|----------|--------|--------------|-------|----------|-------|
|                            | Males.   |        | Females. |        | Males.       |       | Females. |       |
|                            | 1935.    | 1936.  | 1935.    | 1936.  | 1935.        | 1936. | 1935.    | 1936. |
| Under 1 year.....          | 0,060    | 8,281  | 6,661    | 6,293  | 15.9         | 14.4  | 13.8     | 12.8  |
| 1 year.....                | 1,172    | 1,058  | 1,038    | 929    | 2.0          | 1.8   | 2.1      | 1.9   |
| 2 years.....               | 533      | 527    | 480      | 411    | 0.9          | 0.9   | 1.0      | 0.8   |
| 3 years.....               | 408      | 352    | 319      | 289    | 0.7          | 0.6   | 0.7      | 0.6   |
| 4 years.....               | 296      | 268    | 257      | 267    | 0.5          | 0.5   | 0.5      | 0.5   |
| Totals, Under 5 years..... | 11,478   | 10,486 | 8,755    | 8,189  | 20.1         | 18.2  | 18.1     | 16.6  |
| 5-9 years.....             | 1,011    | 1,021  | 831      | 930    | 1.8          | 1.8   | 1.7      | 1.9   |
| 10-14 years.....           | 876      | 796    | 724      | 675    | 1.5          | 1.4   | 1.5      | 1.4   |
| 15-19 years.....           | 1,127    | 1,108  | 949      | 1,019  | 2.0          | 1.9   | 2.0      | 2.1   |
| 20-24 years.....           | 1,289    | 1,347  | 1,335    | 1,427  | 2.3          | 2.3   | 2.8      | 2.9   |
| 25-29 years.....           | 1,266    | 1,304  | 1,368    | 1,352  | 2.2          | 2.3   | 2.8      | 2.7   |
| 30-34 years.....           | 1,283    | 1,357  | 1,269    | 1,364  | 2.2          | 2.2   | 2.6      | 2.8   |
| 35-39 years.....           | 1,430    | 1,425  | 1,506    | 1,496  | 2.5          | 2.5   | 3.1      | 3.0   |
| 40-44 years.....           | 1,775    | 1,748  | 1,550    | 1,582  | 3.1          | 3.0   | 3.2      | 3.2   |
| 45-49 years.....           | 2,337    | 2,350  | 1,813    | 1,806  | 4.1          | 4.1   | 3.7      | 3.7   |
| 50-54 years.....           | 3,041    | 3,104  | 2,152    | 2,304  | 5.3          | 5.4   | 4.5      | 4.7   |
| 55-59 years.....           | 3,536    | 3,761  | 2,563    | 2,637  | 6.2          | 6.5   | 5.3      | 5.3   |
| 60-64 years.....           | 4,182    | 4,377  | 2,980    | 3,139  | 7.3          | 7.6   | 6.2      | 6.4   |
| 65-69 years.....           | 4,747    | 4,997  | 3,788    | 3,898  | 8.3          | 8.7   | 7.8      | 7.9   |
| 70-74 years.....           | 5,539    | 5,697  | 4,559    | 4,758  | 9.7          | 9.9   | 9.4      | 9.6   |
| 75-79 years.....           | 5,368    | 5,648  | 4,772    | 5,034  | 9.4          | 9.8   | 9.9      | 10.2  |
| 80-89 years.....           | 6,027    | 6,367  | 6,186    | 6,445  | 10.5         | 11.0  | 12.8     | 13.1  |
| 90 years or over.....      | 875      | 892    | 1,247    | 1,261  | 1.5          | 1.5   | 2.6      | 2.6   |
| Totals, Stated Ages.....   | 57,177   | 57,685 | 49,353   | 49,316 | 100.0        | 100.0 | 100.0    | 100.0 |
| Ages not stated.....       | 29       | 43     | 8        | 6      | -            | -     | -        | -     |
| Totals, All Ages.....      | 57,206   | 57,728 | 49,361   | 49,322 | -            | -     | -        | -     |

17.—Quartile and Decile Ages of Decedents, by Sex, 1926, 1931, and 1935.

| Position in Array, by Age.        | Both Sexes. |       |       | Males. |       |       | Females. |       |       |
|-----------------------------------|-------------|-------|-------|--------|-------|-------|----------|-------|-------|
|                                   | 1926.       | 1934. | 1935. | 1926.  | 1934. | 1935. | 1926.    | 1934. | 1935. |
| First quartiles..... years of age | 1-83        | 20-00 | 21-19 | 1-34   | 17-93 | 19-27 | 2-85     | 21-06 | 23-11 |
| Second quartiles..... "           | 45-50       | 57-52 | 58-09 | 45-16  | 57-09 | 57-53 | 45-89    | 58-09 | 58-87 |
| Third quartiles..... "            | 70-70       | 73-79 | 74-14 | 70-05  | 73-02 | 73-27 | 71-51    | 74-70 | 75-11 |
| First deciles..... months of age  | 0-88        | 2-64  | 2-93  | 0-00   | 2-16  | 2-39  | 1-43     | 3-37  | 3-87  |
| Second deciles..... years of age  | 0-71        | 5-01  | 7-08  | 0-55   | 3-46  | 4-85  | 0-98     | 8-36  | 10-61 |
| Third deciles..... "              | 6-95        | 30-21 | 31-20 | 4-30   | 29-43 | 30-40 | 12-15    | 30-85 | 32-14 |
| Fourth deciles..... "             | 28-77       | 47-39 | 48-06 | 26-47  | 47-57 | 48-06 | 30-61    | 47-10 | 48-10 |
| Fifth deciles..... "              | 45-50       | 57-52 | 58-09 | 45-16  | 57-09 | 57-53 | 45-89    | 58-09 | 58-87 |
| Sixth deciles..... "              | 58-40       | 65-03 | 65-52 | 57-73  | 64-28 | 64-60 | 59-13    | 65-98 | 66-71 |
| Seventh deciles..... "            | 67-15       | 71-05 | 71-53 | 66-44  | 70-24 | 70-58 | 68-00    | 72-15 | 72-64 |
| Eighth deciles..... "             | 74-05       | 76-25 | 76-50 | 73-28  | 75-46 | 75-71 | 74-00    | 77-21 | 77-56 |
| Ninth deciles..... "              | 80-82       | 82-07 | 82-27 | 79-89  | 81-10 | 81-26 | 81-85    | 83-02 | 83-25 |

**Standardized Death Rates.**—While the crude death rate gives the actual mortality per 1,000 of population, the differing age constitution of the population in different communities and the high mortality among infants and elderly people make the crude death rate no true test of the relative expectation of life in such communities. Where the age constitution of a particular group is particularly favourable to low mortality, for example among the selected lives of soldiers in peace time, the crude rate will naturally be lower than elsewhere.

When comparisons of the rates of mortality in several communities are made by age groups the effects of differences in age constitution between these communities are eliminated, but by a process which does not bring together and express completely as a single figure the facts of the situation. It has therefore been considered

desirable to adopt a particular community as a standard, and to find what the death rates of other communities would have been if the age and sex constitution of their population had corresponded to those of the community taken as a standard. The "standard" population chosen for this purpose in England and Wales and the United States is the "standard million", based on the age and sex distribution per million of the population of England and Wales at the Census of 1901. That age and sex distribution was as follows:—

| Age Group.            | Both Sexes. | Males.  | Females. |
|-----------------------|-------------|---------|----------|
| All ages.....         | 1,000,000   | 483,543 | 516,457  |
| Under 5 years.....    | 114,262     | 57,039  | 57,223   |
| 5-9 years.....        | 107,209     | 53,462  | 53,747   |
| 10-14 years.....      | 102,735     | 51,370  | 51,365   |
| 15-19 years.....      | 99,796      | 49,420  | 50,376   |
| 20-24 years.....      | 95,946      | 45,273  | 50,673   |
| 25-34 years.....      | 161,579     | 76,425  | 85,154   |
| 35-44 years.....      | 122,849     | 59,304  | 63,545   |
| 45-54 years.....      | 89,222      | 42,924  | 46,298   |
| 55-64 years.....      | 59,741      | 27,913  | 31,828   |
| 65-74 years.....      | 33,080      | 14,691  | 18,389   |
| 75 years or over..... | 13,561      | 5,632   | 7,949    |

Regarding the standard million of England and Wales the Registrar General says: "As the population of this country in 1901 included relatively few infants and old people it forms a standard exceptionally favourable to low mortality". The relative fewness of old people in the population is presumably due to the great improvement in mortality during the 19th century; the relative fewness of infants, to the marked reduction of the birth rate between the 1870's and the end of the century.

The process above described has been applied to the population of the eight provinces, the former registration area of Canada, for the years 1921-36 and to the population of Quebec for the years 1926-36 in Table 18. Of the rates there given, those for 1921 and 1922 have been calculated directly, the proportion of the population in each sex and age group according to the Census of 1921 being assumed to hold true for 1922 also; similarly the rates for 1930, 1931, and 1932 have been calculated directly from the proportions shown in each sex and age group at the Census of 1931. For the intervening years, 1923-29, for which estimates of total population but not of population by age groups were available, the following method was adopted. The proportions which the standardized rates of 1921 and 1922 (correct to three decimal places) bore to the crude were averaged, similarly those of 1930 and 1931, and the change was assumed to have taken place in an arithmetical progression during the intervening seven years. Quebec not having been in the registration area in the year 1921, a standardized rate was not available for that year or for 1922, but as the proportion of the standardized rate to the crude depends primarily on the sex and age distribution of the population, and as this distribution was known for 1921 and 1931, and the actual proportion of standardized rate to crude rate for 1931, it was possible to compute a theoretical proportion for 1921. The same method was followed for the total of the nine provinces. The rates for 1933-36 have been computed on the assumption that the arithmetical progression, to which reference has been made, continued over those years in all provinces with the exception of the Prairie Provinces, for which the data of the 1936 Census were used.

In all of the eight provinces for which 1921 figures are given the proportion of the standardized rate to the crude was higher in 1921 than in 1931; in other words, the age distribution had become more unfavourable in the later year. In the Maritime Provinces, Quebec, and Ontario the process of "standardizing" the death rate results in a reduced rate. This is particularly true of Prince Edward Island, which has the largest proportion of aged persons of all Canadian provinces. In the western provinces, on the other hand, the standardized rates are higher than the crude.

18.—Crude and Standardized Death Rates in Canada, by Provinces, 1929-36, with Averages, 1921-25, 1926-30, and 1931-35.

| Province.                              | Averages. |          |          | 1929. | 1930. | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. |
|--|-----------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|
|  | 1921-25.  | 1926-30. | 1931-35. |       |       |       |       |       |       |       |       |
| P.E. Island—                           |           |          |          |       |       |       |       |       |       |       |       |
| Crude.....                             | 12.5      | 11.0     | 11.3     | 12.8  | 10.9  | 10.4  | 11.8  | 11.6  | 11.6  | 11.0  | 11.1  |
| Standardized....                       | 9.3       | 8.1      | 7.9      | 9.2   | 7.9   | 7.4   | 8.2   | 8.1   | 8.1   | 7.6   | 7.6   |
| Nova Scotia—                           |           |          |          |       |       |       |       |       |       |       |       |
| Crude.....                             | 12.6      | 12.4     | 11.7     | 12.9  | 12.0  | 11.6  | 11.9  | 11.6  | 11.5  | 11.7  | 11.0  |
| Standardized....                       | 10.4      | 10.0     | 9.1      | 10.4  | 9.7   | 9.3   | 9.2   | 9.0   | 8.9   | 9.0   | 8.4   |
| New Brunswick—                         |           |          |          |       |       |       |       |       |       |       |       |
| Crude.....                             | 13.1      | 12.5     | 11.2     | 12.9  | 12.3  | 11.4  | 11.0  | 11.7  | 11.0  | 11.1  | 11.0  |
| Standardized....                       | 11.5      | 10.9     | 9.6      | 11.2  | 10.7  | 9.8   | 9.4   | 9.9   | 9.3   | 9.4   | 9.3   |
| Quebec—                                |           |          |          |       |       |       |       |       |       |       |       |
| Crude.....                             | 1         | 13.5     | 11.1     | 13.4  | 12.7  | 12.0  | 11.4  | 10.7  | 10.6  | 10.7  | 10.3  |
| Standardized....                       | 1         | 13.1     | 10.8     | 13.1  | 12.4  | 11.7  | 11.1  | 10.4  | 10.3  | 10.4  | 10.1  |
| Ontario—                               |           |          |          |       |       |       |       |       |       |       |       |
| Crude.....                             | 11.3      | 11.2     | 10.1     | 11.4  | 11.0  | 10.4  | 10.5  | 9.9   | 9.7   | 9.9   | 10.2  |
| Standardized....                       | 10.3      | 9.8      | 8.5      | 9.9   | 9.5   | 8.9   | 8.8   | 8.5   | 8.3   | 8.1   | 8.3   |
| Manitoba—                              |           |          |          |       |       |       |       |       |       |       |       |
| Crude.....                             | 8.6       | 8.3      | 7.6      | 8.6   | 8.3   | 7.6   | 7.5   | 7.7   | 7.3   | 8.1   | 8.7   |
| Standardized....                       | 9.4       | 8.8      | 7.6      | 9.0   | 8.6   | 7.9   | 7.8   | 7.6   | 7.0   | 7.8   | 8.4   |
| Saskatchewan—                          |           |          |          |       |       |       |       |       |       |       |       |
| Crude.....                             | 7.5       | 7.3      | 6.5      | 7.6   | 7.0   | 6.6   | 6.5   | 6.5   | 6.4   | 6.6   | 6.8   |
| Standardized....                       | 8.5       | 8.2      | 7.1      | 8.6   | 7.8   | 7.5   | 7.4   | 7.0   | 6.7   | 6.9   | 7.1   |
| Alberta—                               |           |          |          |       |       |       |       |       |       |       |       |
| Crude.....                             | 8.3       | 8.4      | 7.3      | 9.1   | 7.8   | 7.2   | 7.5   | 7.1   | 7.1   | 7.5   | 8.0   |
| Standardized....                       | 9.5       | 9.4      | 7.8      | 10.2  | 8.5   | 8.0   | 8.4   | 7.6   | 7.3   | 7.7   | 8.2   |
| British Columbia—                      |           |          |          |       |       |       |       |       |       |       |       |
| Crude.....                             | 8.7       | 9.3      | 8.9      | 9.7   | 9.5   | 8.8   | 8.7   | 8.7   | 8.8   | 9.3   | 9.6   |
| Standardized....                       | 9.0       | 8.9      | 8.0      | 9.1   | 8.7   | 8.1   | 8.0   | 7.8   | 7.8   | 8.1   | 8.2   |
| Canada (Exclusive of the Territories)— |           |          |          |       |       |       |       |       |       |       |       |
| Crude.....                             | 1         | 11.1     | 9.7      | 11.3  | 10.7  | 10.1  | 9.9   | 9.6   | 9.4   | 9.7   | 9.7   |
| Standardized....                       | 1         | 10.5     | 9.1      | 10.7  | 10.1  | 9.5   | 9.3   | 8.9   | 8.7   | 9.0   | 9.0   |
| Canada (Former Reg. Area)—             |           |          |          |       |       |       |       |       |       |       |       |
| Crude.....                             | 10.3      | 10.2     | 9.2      | 10.5  | 10.0  | 9.4   | 9.4   | 9.1   | 8.9   | 9.3   | 9.5   |
| Standardized....                       | 9.9       | 9.5      | 8.3      | 9.8   | 9.2   | 8.6   | 8.5   | 8.2   | 8.0   | 8.2   | 8.4   |

<sup>1</sup> Quebec was not included in the registration area prior to 1926.

**Causes of Death.**—Nearly 87 p.c. of deaths recorded in Canada in the years 1932 to 1936 were due to the 32 specific causes named in Tables 19 and 20. In these tables the groupings are in accordance with the revision of the International List in 1929, which was first applied to Canadian mortality statistics for the year 1931. In the chart which accompanies the tables, the main object has been to attain the greatest degree of comparability possible over the whole period 1926-36. For this purpose it has been necessary to depart somewhat from the grouping of Tables 19 and 20.

In any analysis of the relative importance of the causes of death it must be remembered that the Canadian population is an ageing one—that is, the average age is being advanced year by year due to the long-term influences of a falling birth rate, falling specific death rates, and very limited immigration. Since 1913 immigration has been very much curtailed and its effect on age distribution of population is illustrated by the movement of what may be termed the "immigration hump" (that increment of population due to extensive immigration before 1913). This is gradually passing up the age scale. Further, due to the improvements in sanitation and health conditions generally, the average age at which death takes place has been pushed gradually higher. All these factors tend to thrust those causes which are commonly associated with advancing years to the fore.

Some of the effects of the ageing of the population can be observed by the comparison of crude and standardized mortality rates for individual causes of death in 1921 and 1931, since standardized rates are calculated in order to eliminate the effects of changes in sex and age composition of the population. Cancer provides a pronounced example of the ageing effect. The crude rate for cancer was 75.3 in 1921 and in 1931 it was 95.8. The increase was thus 27 p.c. The standardized rate, however, was 72.7 in 1921 and 81.4 in 1931, an increase of only 12 p.c. It may be stated, therefore, that roughly more than half of the increase in the crude cancer death rate between 1921 and 1931 was accounted for by the ageing of the population. Nevertheless, cancer shows a persistent increase over the years in spite of all efforts to control its spread. Diseases of the heart and arteries are two other important causes which affect people of advancing years and which have shown substantial increases. In the case of diseases of the heart, the crude rate showed an increase of 25.5 p.c. between 1921 and 1931, but, again, the standardized rate increased by only 9 p.c. The crude rate for diseases of the arteries advanced by no less than 71 p.c. and the standardized by 50 p.c. over the decade. For nephritis, a disease which falls in the same general class, the increase in the crude rate was 28.5 p.c. and in the standardized, 12.5 p.c. Pneumonia is particularly fatal among those of advanced years and among infants; the same influences as have been mentioned have, no doubt, affected the figures for this disease.

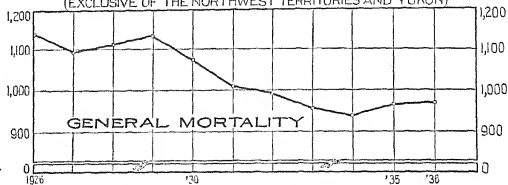
## 19.—Deaths in Canada, by Principal Causes, 1932-36.

| Int. List No. <sup>1</sup> | Cause of Death.                                  | 1932.   | 1933.   | 1934.   | 1935.   | 1936.   |
|----------------------------|--|---------|---------|---------|---------|---------|
| 1, 2                       | Typhoid fever.....                               | 339     | 291     | 293     | 273     | 256     |
| 7                          | Scabies.....                                     | 530     | 170     | 155     | 490     | 376     |
| 8                          | Scarlet fever.....                               | 197     | 157     | 226     | 242     | 244     |
| 9                          | Whooping-cough.....                              | 555     | 552     | 375     | 332     | 504     |
| 10                         | Diphtheria.....                                  | 308     | 239     | 232     | 224     | 253     |
| 11                         | Influenza.....                                   | 4,236   | 4,019   | 2,004   | 3,392   | 3,113   |
| 16                         | Poliomyelitis and polioencephalitis (acute)..... | 164     | 73      | 84      | 64      | 97      |
| 17                         | Lethargic or epidemic encephalitis.....          | 76      | 58      | 47      | 54      | 52      |
| 18                         | Epidemic cerebrospinal meningitis.....           | 139     | 109     | 84      | 112     | 103     |
| 23                         | Tuberculosis, respiratory system.....            | 5,370   | 5,064   | 5,290   | 5,406   | 5,528   |
| 24-32                      | Tuberculosis, other organs.....                  | 1,296   | 1,275   | 1,141   | 1,131   | 1,235   |
| 45-53                      | Cancer.....                                      | 10,024  | 10,653  | 10,551  | 11,156  | 11,694  |
| 59                         | Diabetes mellitus.....                           | 1,343   | 1,287   | 1,321   | 1,459   | 1,442   |
| 71                         | Anemia.....                                      | 728     | 736     | 612     | 650     | 646     |
| S2 a, b, c                 | Cerebral hæmorrhage, embolism or thrombosis..... | 2,543   | 2,639   | 2,577   | 2,105   | 1,890   |
| S2d                        | Paralysis without specified cause.....           | 654     | 559     | 547     | 415     | 358     |
| 86                         | Convulsions (under 5 years of age).....          | 304     | 263     | 261     | 234     | 200     |
| 90-95                      | Diseases of the heart.....                       | 15,328  | 15,485  | 16,352  | 16,099  | 16,424  |
| 96, 97, 99, 102            | Diseases of the arteries.....                    | 6,798   | 6,950   | 7,379   | 8,302   | 9,112   |
| 106                        | Bronchitis.....                                  | 437     | 367     | 350     | 303     | 342     |
| 107-109                    | Pneumonia.....                                   | 7,045   | 6,487   | 6,530   | 7,411   | 7,313   |
| 119, 120                   | Diarrhoea and enteritis.....                     | 3,735   | 3,395   | 3,730   | 2,707   | 2,378   |
| 121                        | Appendicitis.....                                | 1,454   | 1,455   | 1,578   | 1,451   | 1,428   |
| 122                        | Hæmorrhage, intestinal obstruction.....          | 947     | 1,029   | 1,074   | 1,121   | 1,050   |
| 130-132                    | Nephritis.....                                   | 5,635   | 5,516   | 5,643   | 6,176   | 6,402   |
| 137                        | Diseases of the prostate.....                    | 879     | 626     | 944     | 1,089   | 1,157   |
| 140-150                    | Puerperal causes.....                            | 1,181   | 1,111   | 1,107   | 1,093   | 1,233   |
| 157                        | Congenital malformations.....                    | 1,349   | 1,374   | 1,361   | 1,423   | 1,439   |
| 158-161                    | Diseases of early infancy.....                   | 7,032   | 7,337   | 6,936   | 6,880   | 6,605   |
| 162                        | Senility (old age).....                          | 2,192   | 2,037   | 1,882   | 1,932   | 1,691   |
| 163-171                    | Suicides.....                                    | 1,024   | 922     | 927     | 905     | 928     |
| 173-195                    | Violent deaths (suicides excepted).....          | 5,021   | 5,294   | 5,542   | 5,995   | 6,535   |
|                            | Other specified causes.....                      | 12,617  | 12,546  | 12,557  | 13,391  | 14,210  |
|                            | Totals, Specified Causes.....                    | 103,370 | 100,975 | 100,645 | 104,805 | 106,339 |
| 199, 200                   | Ill-defined diseases.....                        | 1,007   | 993     | 937     | 782     | 711     |
|                            | Totals.....                                      | 104,377 | 101,968 | 101,582 | 105,587 | 107,050 |

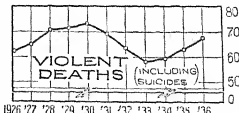
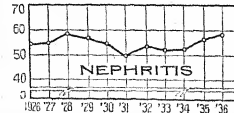
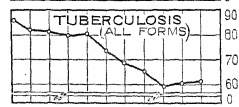
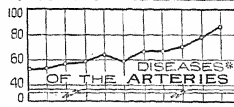
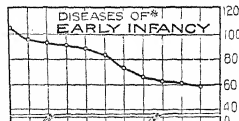
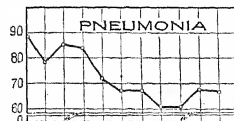
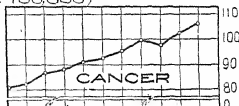
<sup>1</sup> The numbers given in this column refer to the International List of Causes of Death, as revised in 1929 by the International Commission on the Classification of Diseases and Causes of Death. This classification, in its detailed, intermediate, or abridged form, is accepted in almost all civilized countries.

## DEATH RATES PER 100,000 POPULATION IN CANADA 1926-1936

(EXCLUSIVE OF THE NORTHWEST TERRITORIES AND YUKON)



### EIGHT IMPORTANT CAUSES OF DEATH (RATES PER 100,000)



The rubrics (of the International List) included in the indicated groups have been selected to preserve the greatest degree of continuity possible. For this purpose it has been necessary to depart in these cases (indicated by the asterisks) from the groupings in Tables 19 and 20. In all other cases the classification is the same as shown in the tables.

20.—Death Rates per 100,000 Population in Canada, by Principal Causes, 1932-36.

| Int. List No. <sup>1</sup> | Cause of Death.                                  | 1932. | 1933. | 1934. | 1935. | 1936. |
|----------------------------|--|-------|-------|-------|-------|-------|
| 1, 2                       | Typhoid fever.....                               | 3.2   | 2.7   | 2.7   | 2.5   | 2.3   |
| 7                          | Measles.....                                     | 3.1   | 1.6   | 1.7   | 4.5   | 3.4   |
| 8                          | Scarlet fever.....                               | 1.9   | 1.5   | 2.1   | 2.2   | 2.2   |
| 9                          | Whooping-cough.....                              | 5.3   | 5.2   | 8.1   | 8.2   | 5.4   |
| 10                         | Diphtheria.....                                  | 3.8   | 2.2   | 2.1   | 2.4   | 2.3   |
| 11                         | Influenza.....                                   | 40.4  | 37.7  | 18.5  | 31.1  | 28.3  |
| 16                         | Poliomyelitis and polioencephalitis (acute)..... | 1.6   | 0.7   | 0.8   | 0.6   | 0.9   |
| 17                         | Lethargic or epidemic encephalitis.....          | 0.7   | 0.5   | 0.4   | 0.5   | 0.5   |
| 18                         | Epidemic cerebrospinal meningitis.....           | 1.3   | 1.0   | 0.8   | 1.0   | 1.0   |
| 23                         | Tuberculosis, respiratory system.....            | 55.9  | 53.1  | 48.9  | 50.1  | 50.2  |
| 24-32                      | Tuberculosis, other organs.....                  | 12.4  | 12.0  | 10.6  | 10.4  | 11.2  |
| 45-53                      | Cancer.....                                      | 95.5  | 99.9  | 97.9  | 102.2 | 106.2 |
| 59                         | Diabetes mellitus.....                           | 12.8  | 12.1  | 12.2  | 13.4  | 13.1  |
| 71                         | Anæmia.....                                      | 6.9   | 6.9   | 5.7   | 6.0   | 5.9   |
| 82 a, b, c                 | Cerebral hemorrhage, embolism or thrombosis..... | 24.2  | 24.7  | 23.8  | 19.3  | 17.2  |
| 82d                        | Paralysis without specified cause.....           | 6.2   | 5.2   | 5.1   | 3.8   | 3.3   |
| 86                         | Convulsions (under 5 years of age).....          | 2.9   | 2.6   | 2.4   | 2.1   | 1.8   |
| 90-95                      | Diseases of the heart.....                       | 140.1 | 145.2 | 151.3 | 147.1 | 140.1 |
| 96, 97                     | Diseases of the arteries.....                    | 64.8  | 65.2  | 68.3  | 76.0  | 82.7  |
| 99, 102                    | Bronchitis.....                                  | 4.2   | 3.4   | 3.5   | 3.3   | 3.1   |
| 107-109                    | Pneumonia.....                                   | 67.1  | 60.8  | 60.4  | 67.0  | 66.4  |
| 110, 120                   | Diarrhoea and enteritis.....                     | 35.6  | 31.8  | 34.5  | 25.3  | 21.6  |
| 121                        | Appendicitis.....                                | 13.9  | 13.6  | 14.6  | 13.7  | 13.0  |
| 122                        | Hernia, intestinal obstruction.....              | 9.0   | 9.6   | 9.9   | 10.3  | 9.5   |
| 130-132                    | Nephritis.....                                   | 53.7  | 51.7  | 52.2  | 56.6  | 58.1  |
| 137                        | Diseases of the prostate.....                    | 8.4   | 8.7   | 8.7   | 10.0  | 10.5  |
| 140-150                    | Puerperal causes.....                            | 11.3  | 10.4  | 10.8  | 10.0  | 11.2  |
| 157                        | Congenital malformations.....                    | 12.9  | 12.9  | 12.6  | 13.0  | 13.1  |
| 158-161                    | Diseases of early infancy.....                   | 75.6  | 68.3  | 64.2  | 63.0  | 60.0  |
| 162                        | Senility (old age).....                          | 20.9  | 19.1  | 17.4  | 17.7  | 15.4  |
| 163-171                    | Suicides.....                                    | 9.3   | 8.6   | 8.6   | 8.3   | 8.4   |
| 173-198                    | Violent deaths (suicides excepted).....          | 53.6  | 49.6  | 51.3  | 54.9  | 59.3  |
|                            | Other specified causes.....                      | 120.3 | 117.6 | 118.9 | 122.6 | 129.1 |
|                            | Totals, Specified Causes.....                    | 955.2 | 946.6 | 931.0 | 959.7 | 965.5 |
| 190, 200                   | Ill-defined diseases.....                        | 9.6   | 9.3   | 8.7   | 7.0   | 6.6   |
|                            | Totals, Death Rates per 100,000 Population.....  | 964.8 | 955.9 | 939.7 | 966.6 | 971.6 |

For footnote, see end of Table 19.

**Deaths in Canadian Cities.**—Table 21 gives the numbers of deaths in Canadian cities and towns of 10,000 population and over for the years 1932-36, together with averages, 1926-30 and 1931-35. Deaths in Canada as a whole declined steadily for the period 1931-34, but for 1935 and 1936 there were substantial increases. The figure for the latter year was 107,050, or almost 1,000 more than for 1931. The total deaths of the 67 cities listed in Table 21 show a slightly increased proportion to population for the five-year period 1931-35 as compared with 1926-30. For 1932, which marked the depth of the economic depression, the deaths in these cities increased, thus going against the general trend for Canada; for other years, however, the general trend was followed.

21.—Deaths in Cities and Towns of 10,000 Population and Over, 1932-36, with Averages, 1926-30 and 1931-35.

| Province and City or Town. | Census Population, 1931. | Averages. |          | 1932. | 1933. | 1934. | 1935. | 1936. |
|----------------------------|--------------------------|-----------|----------|-------|-------|-------|-------|-------|
|                            |                          | 1926-30.  | 1931-35. |       |       |       |       |       |
| <b>P. E. Island—</b>       |                          |           |          |       |       |       |       |       |
| Charlottetown.....         | 12,361                   | 264       | 262      | 285   | 252   | 268   | 248   | 277   |
| <b>Nova Scotia—</b>        |                          |           |          |       |       |       |       |       |
| Glace Bay.....             | 20,706                   | 294       | 258      | 267   | 235   | 255   | 260   | 273   |
| Halifax.....               | 59,275                   | 884       | 898      | 831   | 853   | 927   | 874   | 871   |
| Sydney.....                | 23,089                   | 241       | 213      | 204   | 213   | 228   | 235   | 177   |



21.—Deaths in Cities and Towns of 10,000 Population and Over, 1932-36, with Averages, 1926-30 and 1931-35—concluded.

| Province and City or Town. | Census Population, 1931. | Averages. |          | 1932.  | 1933. | 1934. | 1935. | 1936. |
|----------------------------|--------------------------|-----------|----------|--------|-------|-------|-------|-------|
|                            |                          | 1926-30.  | 1931-35. |        |       |       |       |       |
| <b>New Brunswick—</b>      |                          |           |          |        |       |       |       |       |
| Moncton.....               | 20,680                   | 252       | 245      | 259    | 266   | 240   | 247   | 227   |
| Saint John.....            | 47,514                   | 712       | 667      | 707    | 726   | 626   | 586   | 648   |
| <b>Quebec—</b>             |                          |           |          |        |       |       |       |       |
| Chicoutimi.....            | 11,877                   | 228       | 224      | 200    | 247   | 248   | 240   | 261   |
| Granby.....                | 10,587                   | 115       | 115      | 124    | 76    | 110   | 121   | 131   |
| Hull.....                  | 29,433                   | 354       | 360      | 362    | 343   | 335   | 363   | 305   |
| Joliette.....              | 10,765                   | 173       | 172      | 156    | 175   | 170   | 165   | 163   |
| Lachine.....               | 18,630                   | 214       | 186      | 177    | 179   | 182   | 193   | 182   |
| L'Ange.....                | 11,724                   | 223       | 219      | 228    | 204   | 201   | 209   | 187   |
| Montreal.....              | 818,577                  | 11,260    | 9,508    | 10,410 | 9,239 | 9,261 | 9,577 | 9,389 |
| Outremont.....             | 28,541                   | 105       | 161      | 152    | 166   | 179   | 178   | 167   |
| Quebec.....                | 130,594                  | 2,269     | 1,991    | 2,041  | 2,043 | 1,874 | 1,862 | 1,907 |
| St. Hyacinthe.....         | 13,448                   | 288       | 293      | 327    | 294   | 255   | 292   | 308   |
| St. Jean.....              | 11,256                   | 120       | 125      | 137    | 111   | 112   | 139   | 161   |
| Shawinigan Falls.....      | 15,345                   | 199       | 157      | 148    | 159   | 141   | 168   | 156   |
| Shawville.....             | 28,933                   | 450       | 443      | 438    | 410   | 429   | 463   | 445   |
| Sorel.....                 | 10,320                   | 167       | 141      | 130    | 129   | 127   | 161   | 129   |
| Theford Mines.....         | 10,701                   | 157       | 139      | 133    | 146   | 132   | 157   | 149   |
| Three Rivers.....          | 35,450                   | 556       | 610      | 528    | 598   | 676   | 616   | 655   |
| Valleyfield.....           | 11,411                   | 180       | 154      | 174    | 147   | 152   | 145   | 173   |
| Verdun.....                | 60,745                   | 398       | 460      | 459    | 409   | 493   | 518   | 453   |
| Westmount.....             | 24,235                   | 143       | 249      | 278    | 231   | 279   | 243   | 208   |
| <b>Ontario—</b>            |                          |           |          |        |       |       |       |       |
| Belleville.....            | 13,790                   | 220       | 227      | 244    | 208   | 209   | 245   | 259   |
| Brantford.....             | 30,107                   | 382       | 362      | 352    | 376   | 350   | 354   | 403   |
| Chatham.....               | 14,509                   | 300       | 303      | 311    | 285   | 265   | 336   | 325   |
| Cornwall.....              | 11,126                   | 238       | 234      | 250    | 209   | 240   | 239   | 260   |
| Port William.....          | 26,277                   | 215       | 203      | 201    | 198   | 186   | 216   | 219   |
| Qalt.....                  | 14,006                   | 172       | 187      | 191    | 201   | 196   | 197   | 199   |
| Guelph.....                | 21,075                   | 235       | 234      | 233    | 236   | 242   | 226   | 204   |
| Hamilton.....              | 155,547                  | 1,473     | 1,491    | 1,510  | 1,406 | 1,462 | 1,547 | 1,639 |
| Kingston.....              | 23,439                   | 476       | 470      | 501    | 445   | 452   | 532   | 488   |
| Kitchener.....             | 30,793                   | 303       | 347      | 385    | 354   | 310   | 396   | 384   |
| London.....                | 71,148                   | 1,089     | 1,020    | 1,066  | 1,019 | 1,065 | 1,049 | 1,104 |
| Niagara Falls.....         | 19,046                   | 215       | 200      | 192    | 208   | 202   | 187   | 202   |
| Norfolk Bay.....           | 15,528                   | 149       | 155      | 131    | 138   | 176   | 172   | 171   |
| Oshawa.....                | 23,439                   | 216       | 189      | 184    | 167   | 195   | 176   | 222   |
| Ottawa.....                | 129,872                  | 1,064     | 1,715    | 1,727  | 1,701 | 1,618 | 1,822 | 1,787 |
| Owen Sound.....            | 12,839                   | 163       | 181      | 197    | 179   | 164   | 187   | 183   |
| Peterborough.....          | 22,327                   | 308       | 324      | 329    | 290   | 353   | 323   | 374   |
| Port Arthur.....           | 19,818                   | 224       | 197      | 205    | 187   | 189   | 189   | 218   |
| St. Catharines.....        | 24,753                   | 317       | 283      | 288    | 281   | 271   | 301   | 311   |
| St. Thomas.....            | 15,430                   | 226       | 227      | 233    | 225   | 224   | 251   | 266   |
| Sarnia.....                | 18,191                   | 222       | 224      | 243    | 235   | 220   | 201   | 261   |
| Sault Ste. Marie.....      | 23,082                   | 218       | 214      | 217    | 187   | 214   | 229   | 238   |
| Stratford.....             | 17,742                   | 200       | 199      | 190    | 198   | 191   | 221   | 206   |
| Sudbury.....               | 18,518                   | 215       | 235      | 242    | 212   | 228   | 241   | 327   |
| Timmins.....               | 14,200                   | 146       | 171      | 157    | 163   | 170   | 132   | 160   |
| Toronto.....               | 631,207                  | 6,735     | 6,546    | 6,627  | 6,485 | 6,296 | 6,005 | 7,044 |
| Welland.....               | 10,709                   | 162       | 138      | 129    | 121   | 152   | 135   | 146   |
| Windsor.....               | 98,179                   | 965       | 838      | 822    | 795   | 862   | 853   | 882   |
| Woodstock.....             | 11,395                   | 173       | 177      | 173    | 181   | 195   | 178   | 193   |
| <b>Manitoba—</b>           |                          |           |          |        |       |       |       |       |
| Brandon.....               | 16,461 <sup>1</sup>      | 244       | 225      | 227    | 216   | 209   | 234   | 239   |
| St. Boniface.....          | 16,275 <sup>1</sup>      | 482       | 417      | 435    | 395   | 368   | 473   | 499   |
| Winnipeg.....              | 215,514 <sup>1</sup>     | 1,757     | 1,712    | 1,705  | 1,656 | 1,663 | 1,532 | 2,018 |
| <b>Saskatchewan—</b>       |                          |           |          |        |       |       |       |       |
| Moose Jaw.....             | 19,805 <sup>1</sup>      | 226       | 196      | 194    | 217   | 186   | 173   | 212   |
| Prince Albert.....         | 11,049 <sup>1</sup>      | 153       | 175      | 173    | 170   | 171   | 187   | 207   |
| Regina.....                | 53,354 <sup>1</sup>      | 481       | 468      | 479    | 457   | 448   | 511   | 535   |
| Saskatoon.....             | 41,734 <sup>1</sup>      | 485       | 450      | 467    | 429   | 453   | 467   | 484   |
| <b>Alberta—</b>            |                          |           |          |        |       |       |       |       |
| Calgary.....               | 83,407 <sup>1</sup>      | 756       | 730      | 748    | 708   | 723   | 774   | 887   |
| Edmonton.....              | 88,774 <sup>1</sup>      | 882       | 884      | 921    | 870   | 883   | 948   | 1,100 |
| Lethbridge.....            | 13,523 <sup>1</sup>      | 185       | 193      | 197    | 198   | 212   | 192   | 189   |
| <b>British Columbia—</b>   |                          |           |          |        |       |       |       |       |
| New Westminster.....       | 17,524                   | 273       | 287      | 278    | 286   | 277   | 304   | 355   |
| Vancouver.....             | 246,593                  | 2,175     | 2,303    | 2,301  | 2,239 | 2,211 | 2,466 | 2,707 |
| Victoria.....              | 39,082                   | 552       | 561      | 541    | 543   | 589   | 608   | 678   |

<sup>1</sup> Includes East Windsor, Sandwich, and Walkerville.

<sup>†</sup> Census of 1930.

**Comparative Crude Death Rates of Different Countries.**—In Table 22 will be found a comparative statement of the crude death rates of various countries for the latest available year. Those of the provinces of Canada are also given for comparison. The Netherlands, New Zealand, Australia, and Canada, are the only countries with death rates under 10.0 per 1,000 of population. The low death rates in the Prairie Provinces are in all three cases due in part to a favourable age distribution of population.

**22.—Crude Death Rates of Various Countries and of the Provinces of Canada in Recent Years.**

| Country.                            | Year. | Crude Death Rate. | Country or Province.       | Year. | Crude Death Rate. |
|-------------------------------------|-------|-------------------|----------------------------|-------|-------------------|
| <b>Country—</b>                     |       |                   | <b>Country—concluded.</b>  |       |                   |
| New Zealand.....                    | 1935  | 8.2               | Bulgaria.....              | 1935  | 14.5              |
| Netherlands.....                    | 1935  | 8.7               | Estonia.....               | 1935  | 14.9              |
| Australia.....                      | 1935  | 9.5               | Greece.....                | 1935  | 14.9              |
| Canada.....                         | 1936  | 9.7               | Hungary.....               | 1935  | 15.3              |
| Norway.....                         | 1935  | 10.0              | Spain.....                 | 1935  | 15.6              |
| Union of South Africa (whites)..... | 1935  | 10.5              | France.....                | 1935  | 15.7              |
| Uruguay.....                        | 1935  | 10.6              | Japan.....                 | 1935  | 16.8              |
| United States (reg. area).....      | 1935  | 10.9              | Jamaica.....               | 1935  | 17.7              |
| Denmark.....                        | 1935  | 11.1              | Palestine.....             | 1935  | 18.6              |
| Sweden.....                         | 1935  | 11.7              | Romania.....               | 1935  | 21.1              |
| Fogland and Wales.....              | 1935  | 11.7              | Costa Rica.....            | 1935  | 21.8              |
| Germany.....                        | 1935  | 11.8              | British India.....         | 1935  | 23.6              |
| Panama.....                         | 1934  | 11.9              | Salvador.....              | 1934  | 24.3              |
| Finland.....                        | 1935  | 12.0              | Chile.....                 | 1935  | 25.0              |
| British Isles.....                  | 1935  | 12.1              | Straits Settlements.....   | 1935  | 25.1              |
| Switzerland.....                    | 1935  | 12.1              | Egypt.....                 | 1935  | 26.7              |
| Iceland.....                        | 1935  | 12.2              | Ceylon.....                | 1935  | 30.6              |
| Belgium.....                        | 1935  | 12.9              |                            |       |                   |
| Scotland.....                       | 1935  | 13.2              | <b>Province of Canada—</b> |       |                   |
| Newfoundland.....                   | 1935  | 13.4              | Saskatchewan.....          | 1936  | 6.8               |
| Czechoslovakia.....                 | 1935  | 13.5              | Alberta.....               | 1936  | 8.0               |
| Austria.....                        | 1935  | 13.6              | Manitoba.....              | 1936  | 8.7               |
| Italy.....                          | 1935  | 13.9              | British Columbia.....      | 1936  | 9.6               |
| Irish Free State.....               | 1935  | 14.0              | Ontario.....               | 1936  | 10.2              |
| Lithuania.....                      | 1935  | 14.0              | Quebec.....                | 1936  | 10.3              |
| Poland.....                         | 1935  | 14.0              | New Brunswick.....         | 1936  | 11.0              |
| Latvia.....                         | 1935  | 14.2              | Nova Scotia.....           | 1936  | 11.0              |
| Northern Ireland.....               | 1935  | 14.4              | Prince Edward Island.....  | 1936  | 11.1              |

### Subsection 2.—Infantile and Maternal Mortality.

In recent years a great part of the energy devoted by the medical profession and sanitarians to effect a decline in the death rate has gone to reduce infantile mortality, and in this field a large measure of success has been attained. In Canada, the Dominion, provincial, and municipal health authorities have all taken part in the struggle to reduce infantile mortality, and usually, in the absence of epidemics, each year is showing an improvement. In the sixteen years for which the figures are available there is evident a very considerable decline in infantile mortality. In 1921 the infant death rate for Canada (using figures from provincial sources for Quebec) was 102 per 1,000 live births. This rate had been reduced to 66 in 1936. Table 23 gives figures for the whole of Canada for the years 1931 to 1936 and averages for the five-year periods 1921-25, 1926-30, and 1931-35. The infantile mortality in Quebec still exceeds that in any other province, although a study of the rates shows that steady improvement has been made in the ten-year period during which the province has been included in the registration area. In Canada as a whole over 9,000 infant lives were preserved in 1936 which, under conditions prevailing in 1926, would probably have been lost.

**23.—Infantile Mortality, by Provinces, together with the Rates per 1,000 Live Births, 1931-36, with Averages for 1921-25, 1926-30, and 1931-35.**

| Year.                    | P.E.I. | N.S.  | N.B.  | Que.         | Ont.  | Man.  | Sask. | Alta. | B.C. | Canada. <sup>1</sup> |
|--------------------------|--------|-------|-------|--------------|-------|-------|-------|-------|------|----------------------|
| <b>A.—INFANT DEATHS.</b> |        |       |       |              |       |       |       |       |      |                      |
| Averages, 1921-25.....   | 151    | 1,139 | 1,165 | <sup>2</sup> | 5,916 | 1,394 | 1,789 | 1,327 | 621  | <sup>2</sup>         |
| Averages, 1926-30.....   | 122    | 934   | 1,039 | 10,518       | 5,091 | 1,031 | 1,559 | 1,195 | 571  | 22,060               |
| Averages, 1931-35.....   | 131    | 840   | 857   | 7,756        | 3,962 | 835   | 1,261 | 998   | 464  | 17,104               |
| 1931.....                | 128    | 914   | 944   | 9,443        | 4,833 | 924   | 1,463 | 1,197 | 514  | 20,360               |
| 1932.....                | 132    | 849   | 774   | 7,744        | 4,133 | 836   | 1,321 | 997   | 477  | 17,263               |
| 1933.....                | 118    | 791   | 821   | 7,270        | 3,804 | 844   | 1,231 | 966   | 439  | 16,284               |
| 1934.....                | 130    | 807   | 878   | 7,388        | 3,523 | 734   | 1,093 | 891   | 426  | 15,870               |
| 1935.....                | 145    | 838   | 866   | 6,939        | 3,515 | 837   | 1,194 | 936   | 460  | 15,730               |
| 1936.....                | 137    | 781   | 806   | 6,220        | 3,416 | 770   | 1,030 | 940   | 465  | 14,574               |

**B.—INFANT DEATH RATES PER 1,000 LIVE BIRTHS.**

|                        |    |    |     |              |    |    |    |    |    |              |
|------------------------|----|----|-----|--------------|----|----|----|----|----|--------------|
| Averages, 1921-25..... | 77 | 94 | 105 | <sup>2</sup> | 83 | 84 | 83 | 86 | 61 | <sup>2</sup> |
| Averages, 1926-30..... | 71 | 85 | 101 | 127          | 74 | 72 | 73 | 75 | 55 | 93           |
| Averages, 1931-35..... | 67 | 75 | 82  | 96           | 61 | 61 | 62 | 60 | 46 | 75           |
| 1931.....              | 68 | 70 | 87  | 113          | 70 | 64 | 69 | 69 | 49 | 85           |
| 1932.....              | 65 | 72 | 72  | 94           | 62 | 50 | 63 | 59 | 47 | 73           |
| 1933.....              | 61 | 71 | 82  | 95           | 60 | 63 | 61 | 60 | 46 | 73           |
| 1934.....              | 67 | 71 | 86  | 97           | 57 | 55 | 55 | 55 | 43 | 72           |
| 1935.....              | 72 | 72 | 83  | 92           | 56 | 63 | 61 | 58 | 46 | 71           |
| 1936.....              | 69 | 66 | 77  | 83           | 55 | 61 | 54 | 60 | 44 | 66           |

<sup>1</sup> Exclusive of the Territories.

<sup>2</sup> Quebec was not included in the registration area prior to 1926.

**Infantile Mortality by Causes of Death.**—Twenty-one principal causes of death accounted in the years 1926 to 1936 for between 91 and 92 p.c. of the infantile mortality experienced in the Dominion, as is shown in Table 24. It is noteworthy that four causes present at birth, *viz.*, premature birth, injury at birth, congenital debility and congenital malformations, accounted for over 46 p.c. of the infant deaths of 1936. This percentage shows a definite increase in the years covered. In 1926 it was 41.4 and in 1930 42.3, and since the decline in rate of infant deaths has decreased by nearly 39 p.c. in the interval since 1926, great improvement in the post-natal care of infants is indicated. In the years 1935 and 1936, 49.2 p.c. and 50.7 p.c., respectively, of all infants who died were less than one month old, and 35.3 p.c., and 37.2 p.c., respectively, were less than one week old, as is shown in Table 25.

**24.—Infantile Mortality in Canada by Principal Causes of Death, 1926, 1935-36.**

**NOTE.**—Figures for the former registration area for the single years 1921 to 1924 will be found at pp. 182-183 of the 1927-28 Year Book, and for 1925 to 1927 at pp. 177-178 of the 1929 Year Book. Figures for the whole of Canada for the years 1927 and 1928 will be found at pp. 138-140 of the 1932 Year Book, for 1929 and 1930 at pp. 177-178 of the 1933 Year Book, for 1931, 1932, and 1933 at pp. 202-203 of the 1934-35 Year Book, and for 1934 at pp. 176-177 of the 1935 Year Book.

| International List No. | Cause of Death.     | Year. | Numbers. |          |       | Rates per 100,000 Live Births. |          |       | Percentage Distribution by Cause of Death. |
|------------------------|---------------------|-------|----------|----------|-------|--------------------------------|----------|-------|--|
|                        |                     |       | Males.   | Females. | Both. | Males.                         | Females. | Both. |  |
| 7                      | Measles.....        | 1926  | 141      | 122      | 263   | 118                            | 103      | 113   | 1-1  |
|                        |                     | 1935  | 104      | 77       | 181   | 92                             | 71       | 82    | 1-2  |
|                        |                     | 1936  | 66       | 49       | 115   | 58                             | 46       | 52    | 0-6  |
|                        |                     | 1936  | 13       | 12       | 25    | 11                             | 11       | 11    | 0-1  |
| 8                      | Scarlet Fever.....  | 1926  | 8        | 7        | 15    | 7                              | 6        | 7     | 0-1  |
|                        |                     | 1935  | 7        | 4        | 11    | 6                              | 4        | 5     | 0-1  |
|                        |                     | 1936  | 358      | 415      | 773   | 290                            | 368      | 332   | 3-3  |
|                        |                     | 1936  | 318      | 281      | 599   | 281                            | 260      | 270   | 3-8  |
| 9                      | Whooping-cough..... | 1926  | 203      | 189      | 392   | 179                            | 177      | 178   | 2-7  |
|                        |                     | 1935  |          |          |       |                                |          |       |  |
|                        |                     | 1936  |          |          |       |                                |          |       |  |
|                        |                     | 1936  |          |          |       |                                |          |       |  |

24.—Infantile Mortality in Canada by Principal Causes of Death, 1926, 1935-36  
—concluded.

| Inter-<br>national<br>List No. | Cause of Death.  | Year. | Numbers. |               |        | Rates per 100,000<br>Live Births. |               |        | Percent-<br>age<br>Distribu-<br>tion by<br>Cause of<br>Death. |
|--------------------------------|--|-------|----------|---------------|--------|-----------------------------------|---------------|--------|---|
|                                |  |       | Males.   | Fe-<br>males. | Both.  | Males.                            | Fe-<br>males. | Both.  |   |
| 10                             | Diphtheria.....  | 1926  | 24       | 23            | 47     | 20                                | 20            | 20     | 0.2   |
|                                |  | 1935  | 4        | 7             | 11     | 4                                 | 6             | 5      | 0.1   |
|                                |  | 1936  | 8        | 3             | 11     | 7                                 | 3             | 5      | 0.1   |
| 11                             | Influenza <sup>1</sup> .....                                   | 1926  | 576      | 374           | 950    | 481                               | 331           | 408    | 4.0   |
|                                |  | 1935  | 412      | 264           | 676    | 364                               | 244           | 305    | 4.3   |
|                                |  | 1936  | 344      | 232           | 576    | 304                               | 217           | 261    | 4.0   |
| 15                             | Erysipelas.....  | 1926  | 51       | 50            | 101    | 43                                | 44            | 43     | 0.4   |
|                                |  | 1935  | 21       | 32            | 53     | 19                                | 30            | 24     | 0.3   |
|                                |  | 1936  | 42       | 27            | 69     | 37                                | 25            | 31     | 0.5   |
| 16                             | Polio-myelitis and polio-<br>encephalitis (acute)....          | 1926  | 6        | 3             | 9      | 5                                 | 3             | 4      | 0.3   |
|                                |  | 1935  | 5        | 2             | 7      | 4                                 | 2             | 3      | 1   |
|                                |  | 1936  | 1        | 3             | 4      | 1                                 | 3             | 2      | 1   |
| 18                             | Epidemic cerebro-<br>spinal meningitis.....                    | 1926  | 33       | 24            | 57     | 28                                | 21            | 24     | 0.2   |
|                                |  | 1935  | 13       | 12            | 25     | 11                                | 11            | 11     | 0.2   |
|                                |  | 1936  | 11       | 4             | 15     | 10                                | 4             | 7      | 0.1   |
| 23-32                          | Tuberculosis <sup>1</sup> .....                                | 1926  | 131      | 102           | 233    | 109                               | 90            | 100    | 1.0   |
|                                |  | 1935  | 79       | 68            | 147    | 70                                | 63            | 66     | 0.9   |
|                                |  | 1936  | 93       | 65            | 158    | 82                                | 61            | 72     | 1.1   |
| 34                             | Syphilis.....  | 1926  | 68       | 60            | 128    | 57                                | 53            | 55     | 0.5   |
|                                |  | 1935  | 98       | 84            | 182    | 87                                | 78            | 82     | 1.2   |
|                                |  | 1936  | 118      | 89            | 207    | 104                               | 83            | 94     | 1.4   |
| 86                             | Convulsions.....   | 1926  | 263      | 177           | 440    | 219                               | 157           | 189    | 1.9   |
|                                |  | 1935  | 104      | 80            | 184    | 92                                | 74            | 83     | 1.2   |
|                                |  | 1936  | 107      | 55            | 162    | 94                                | 51            | 74     | 1.1   |
| 106                            | Bronchitis.....  | 1926  | 90       | 60            | 150    | 75                                | 53            | 64     | 0.6   |
|                                |  | 1935  | 51       | 32            | 83     | 45                                | 30            | 37     | 0.5   |
|                                |  | 1936  | 39       | 37            | 76     | 34                                | 35            | 34     | 0.5   |
| 107-109                        | Pneumonia.....   | 1926  | 1,410    | 1,077         | 2,487  | 1,176                             | 954           | 1,069  | 10.5  |
|                                |  | 1935  | 1,057    | 826           | 1,883  | 933                               | 764           | 850    | 12.0  |
|                                |  | 1936  | 967      | 783           | 1,750  | 854                               | 731           | 794    | 12.0  |
| 116-118                        | Diseases of the stomach  | 1926  | 156      | 126           | 282    | 130                               | 112           | 121    | 1.2   |
|                                |  | 1935  | 62       | 44            | 106    | 55                                | 41            | 48     | 0.7   |
|                                |  | 1936  | 70       | 40            | 110    | 62                                | 37            | 50     | 0.8   |
| 119                            | Diarrhoea and en-<br>teritis <sup>1</sup> .....                | 1926  | 2,451    | 1,867         | 4,318  | 2,045                             | 1,654         | 1,855  | 18.2  |
|                                |  | 1935  | 1,143    | 835           | 1,978  | 1,009                             | 732           | 893    | 12.6  |
|                                |  | 1936  | 932      | 702           | 1,634  | 823                               | 656           | 741    | 11.2  |
| 122                            | Hernia, intestinal ob-<br>struction.....                       | 1926  | 68       | 39            | 107    | 57                                | 35            | 46     | 0.5   |
|                                |  | 1935  | 62       | 18            | 80     | 55                                | 17            | 36     | 0.5   |
|                                |  | 1936  | 41       | 32            | 73     | 36                                | 30            | 33     | 0.5   |
| 157                            | Congenital malforma-<br>tions.....                             | 1926  | 777      | 635           | 1,412  | 648                               | 563           | 607    | 6.0   |
|                                |  | 1935  | 682      | 581           | 1,263  | 602                               | 537           | 570    | 8.0   |
|                                |  | 1936  | 690      | 569           | 1,259  | 608                               | 531           | 571    | 8.6   |
| 158                            | Congenital debility....  | 1926  | 1,353    | 1,000         | 2,353  | 1,129                             | 886           | 1,011  | 9.9   |
|                                |  | 1935  | 701      | 491           | 1,192  | 619                               | 454           | 538    | 7.6   |
|                                |  | 1936  | 686      | 479           | 1,165  | 606                               | 447           | 529    | 8.0   |
| 159                            | Premature birth.....   | 1926  | 2,936    | 2,147         | 5,083  | 2,449                             | 1,902         | 2,184  | 21.5  |
|                                |  | 1935  | 2,036    | 1,492         | 3,528  | 1,797                             | 1,379         | 1,593  | 22.4  |
|                                |  | 1936  | 1,951    | 1,515         | 3,466  | 1,722                             | 1,415         | 1,573  | 23.8  |
| 160                            | Injury at birth.....   | 1926  | 563      | 386           | 949    | 470                               | 342           | 408    | 4.0   |
|                                |  | 1935  | 587      | 349           | 936    | 518                               | 323           | 423    | 6.0   |
|                                |  | 1936  | 529      | 332           | 861    | 467                               | 310           | 391    | 5.9   |
| 161                            | Other diseases peculiar<br>to early infancy <sup>1</sup> ..... | 1926  | 885      | 622           | 1,507  | 738                               | 551           | 647    | 6.4   |
|                                |  | 1935  | 705      | 519           | 1,224  | 622                               | 480           | 553    | 7.8   |
|                                |  | 1936  | 613      | 500           | 1,113  | 541                               | 467           | 505    | 7.6   |
| 199, 200                       | Other specified causes <sup>1</sup> .                          | 1926  | 1,081    | 779           | 1,860  | 902                               | 690           | 799    | 7.9   |
|                                |  | 1935  | 725      | 487           | 1,212  | 640                               | 450           | 547    | 7.7   |
|                                |  | 1936  | 664      | 502           | 1,166  | 586                               | 469           | 529    | 8.0   |
| 199, 200                       | Ill-defined causes.....  | 1926  | 108      | 55            | 158    | 89                                | 49            | 68     | 0.7   |
|                                |  | 1935  | 92       | 73            | 165    | 81                                | 67            | 75     | 1.0   |
|                                |  | 1936  | 99       | 82            | 181    | 87                                | 77            | 82     | 1.2   |
|                                | All causes.....  | 1926  | 13,537   | 10,155        | 23,692 | 11,294                            | 8,996         | 10,179 | 100.0   |
|                                |  | 1935  | 9,069    | 6,661         | 15,730 | 8,065                             | 6,159         | 7,183  | 100.0   |
|                                |  | 1936  | 8,281    | 6,293         | 14,574 | 7,310                             | 5,877         | 6,613  | 100.0   |

<sup>1</sup> For these causes the comparability between the figures for the year 1926 and those for the years 1934-35 is not exact, owing to changes in classification.

<sup>2</sup> Less than one-tenth of one per cent.

25.—Proportion per 1,000 Deaths of Infants Under One Year of Age Occurring at each Age Period, 1935-36.

| Age at Death.                      | P.E.I. | N.S.  | N.B.  | Que.  | Ont.  | Man.  | Sask. | Alta. | B.C.  | Canada, <sup>1</sup> |
|------------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| 1935.                              |        |       |       |       |       |       |       |       |       |                      |
| Under 1 month.....                 | 497    | 494   | 438   | 427   | 604   | 501   | 513   | 549   | 539   | 492                  |
| Under 1 day.....                   | 131    | 165   | 149   | 122   | 249   | 204   | 179   | 215   | 220   | 171                  |
| 1 day and under 1 week.....        | 221    | 205   | 180   | 157   | 226   | 177   | 164   | 191   | 226   | 182                  |
| 1 week and under 2 weeks.....      | 69     | 61    | 50    | 66    | 55    | 41    | 70    | 53    | 35    | 60                   |
| 2 weeks and under 3 weeks.....     | 41     | 27    | 29    | 41    | 40    | 38    | 56    | 41    | 28    | 40                   |
| 3 weeks and under 1 month.....     | 34     | 36    | 30    | 41    | 34    | 41    | 44    | 49    | 30    | 39                   |
| 1 month and under 2 months.....    | 103    | 113   | 110   | 115   | 79    | 96    | 107   | 82    | 63    | 102                  |
| 2 months and under 3 months.....   | 110    | 93    | 85    | 94    | 60    | 67    | 80    | 85    | 72    | 82                   |
| 3 months and under 4 months.....   | 55     | 82    | 64    | 67    | 49    | 61    | 64    | 57    | 59    | 62                   |
| 4 months and under 5 months.....   | 41     | 50    | 51    | 51    | 37    | 45    | 40    | 49    | 52    | 47                   |
| 5 months and under 6 months.....   | 69     | 41    | 51    | 49    | 33    | 45    | 41    | 31    | 30    | 43                   |
| 6 months and under 7 months.....   | 28     | 29    | 52    | 41    | 27    | 48    | 24    | 25    | 54    | 36                   |
| 7 months and under 8 months.....   | 21     | 27    | 30    | 37    | 30    | 32    | 34    | 31    | 28    | 33                   |
| 8 months and under 9 months.....   | 14     | 26    | 25    | 32    | 21    | 30    | 27    | 26    | 35    | 28                   |
| 9 months and under 10 months.....  | 14     | 23    | 33    | 34    | 23    | 27    | 24    | 18    | 30    | 26                   |
| 10 months and under 11 months..... | 23     | 17    | 35    | 28    | 20    | 22    | 29    | 19    | 28    | 25                   |
| 11 months and under 1 year.....    | 21     | 5     | 22    | 23    | 18    | 26    | 14    | 28    | 9     | 20                   |
| Totals.....                        | 1,000  | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000                |
| 1936.                              |        |       |       |       |       |       |       |       |       |                      |
| Under 1 month.....                 | 540    | 472   | 511   | 480   | 566   | 480   | 527   | 496   | 484   | 507                  |
| Under 1 day.....                   | 204    | 150   | 165   | 142   | 239   | 198   | 189   | 186   | 200   | 178                  |
| 1 day and under 1 week.....        | 197    | 207   | 228   | 180   | 215   | 200   | 182   | 178   | 198   | 194                  |
| 1 week and under 2 weeks.....      | 66     | 51    | 53    | 73    | 50    | 45    | 68    | 48    | 41    | 61                   |
| 2 weeks and under 3 weeks.....     | 22     | 27    | 36    | 46    | 34    | 17    | 44    | 50    | 22    | 39                   |
| 3 weeks and under 1 month.....     | 51     | 37    | 29    | 40    | 28    | 30    | 45    | 34    | 24    | 35                   |
| 1 month and under 2 months.....    | 117    | 109   | 96    | 110   | 83    | 70    | 79    | 82    | 95    | 97                   |
| 2 months and under 3 months.....   | 95     | 104   | 98    | 86    | 69    | 62    | 87    | 84    | 60    | 82                   |
| 3 months and under 4 months.....   | 36     | 77    | 57    | 62    | 56    | 59    | 62    | 63    | 69    | 61                   |
| 4 months and under 5 months.....   | 58     | 63    | 40    | 50    | 46    | 59    | 45    | 54    | 56    | 50                   |
| 5 months and under 6 months.....   | 51     | 42    | 32    | 40    | 34    | 54    | 38    | 47    | 32    | 39                   |
| 6 months and under 7 months.....   | 7      | 32    | 38    | 42    | 20    | 35    | 32    | 35    | 37    | 36                   |
| 7 months and under 8 months.....   | 30     | 19    | 17    | 32    | 31    | 40    | 33    | 31    | 43    | 31                   |
| 8 months and under 9 months.....   | 15     | 17    | 36    | 27    | 28    | 37    | 28    | 34    | 26    | 28                   |
| 9 months and under 10 months.....  | 15     | 24    | 29    | 27    | 21    | 28    | 27    | 31    | 30    | 26                   |
| 10 months and under 11 months..... | 13     | 26    | 29    | 21    | 20    | 32    | 27    | 23    | 32    | 23                   |
| 11 months and under 1 year.....    | 15     | 15    | 17    | 21    | 17    | 30    | 15    | 20    | 37    | 20                   |
| Totals.....                        | 1,000  | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000                |

<sup>1</sup> Exclusive of the Territories.

**Infantile Mortality in Canadian Cities and Towns.**—Table 26 shows for the cities and towns of 10,000 population and over, the numbers of infant deaths and the death rates per 1,000 live births for the years 1934-36. But a very low rate for any particular year means little since wide fluctuations from year to year are the rule. Moreover, since maternity hospitals in many urban centres draw patients from surrounding districts, the rates based on place of occurrence, shown in Table 26, are often quite different from rates based on place of residence. This is illustrated particularly in the case of Westmount, where the number of infant deaths under one year by place of occurrence in 1936 was 29 compared with 9 by place of residence. Vancouver, B.C., has a splendid record among the large cities over the three years. Three Rivers, Westmount, Sorel, Glace Bay, Joliette, and Quebec city have all rates of over 100 for 1936, and most of them have high rates over the three-year period. Apart from Vancouver, already mentioned, among the large cities Montreal has recorded steady improvement over the period and Winnipeg and Toronto have very low rates and good records.

The infantile mortality in the cities of Canada has been greatly reduced in the years since the inauguration of Dominion vital statistics. Thus the rate for Toronto has fallen from 90 in 1921 to 51 in 1936, that for Winnipeg from 78 to 39, for Vancouver from 56 to 33, for Hamilton from 88 to 42, for Ottawa from 130 to 88, for London from 92 to 55, for Edmonton from 89 to 41, for Halifax from 135 to 59, for Saint John from 147 to 69. Altogether, in the 13 cities of 40,000 population and over in the former registration area of Canada, there were 41,923 live births in 1921

and 3,833 infant deaths, being a rate of 91 per 1,000 live births. In 1936 in these same cities there were 35,616 live births but only 1,795 infant deaths, or a rate of 50 per 1,000 live births.

**26.—Deaths and Death Rates of Children Under One Year of Age (Exclusive of Still-births) in Cities and Towns of 10,000 and Over, 1934-36, with Averages, 1926-30 and 1931-35.**

| City or Town.          | Infant Deaths.      |                     |       |       |       | Rates per 1,000 Live Births. |                     |       |       |       |
|------------------------|---------------------|---------------------|-------|-------|-------|------------------------------|---------------------|-------|-------|-------|
|                        | Average<br>1926-30. | Average<br>1931-35. | 1934. | 1935. | 1936. | Average<br>1926-30.          | Average<br>1931-35. | 1934. | 1935. | 1936. |
| Bellefleur, Ont.       | 27                  | 20                  | 17    | 25    | 31    | 72                           | 53                  | 46    | 66    | 72    |
| Brandon, Man.          | 26                  | 18                  | 12    | 15    | 20    | 67                           | 59                  | 44    | 57    | 80    |
| Brantford, Ont.        | 52                  | 34                  | 26    | 35    | 31    | 76                           | 54                  | 45    | 58    | 47    |
| Calgary, Alta.         | 113                 | 74                  | 66    | 73    | 86    | 62                           | 44                  | 41    | 45    | 53    |
| Charlottetown, P.E.I.  | 30                  | 26                  | 26    | 26    | 30    | 105                          | 72                  | 73    | 74    | 74    |
| Chatham, Ont.          | 33                  | 33                  | 26    | 35    | 28    | 78                           | 68                  | 51    | 66    | 45    |
| Chautauqui, Que.       | 72                  | 57                  | 56    | 45    | 43    | 129                          | 112                 | 115   | 99    | 85    |
| Cornwall, Ont.         | 48                  | 38                  | 53    | 52    | 50    | 102                          | 73                  | 122   | 83    | 89    |
| Edmonton, Ont.         | 140                 | 109                 | 101   | 75    | 94    | 66                           | 49                  | 47    | 33    | 41    |
| Fort William, Ont.     | 46                  | 32                  | 20    | 29    | 27    | 73                           | 57                  | 42    | 35    | 56    |
| Galt, Ont.             | 16                  | 15                  | 16    | 16    | 10    | 57                           | 51                  | 55    | 58    | 37    |
| Gloucester, N.S.       | 85                  | 69                  | 65    | 85    | 89    | 127                          | 98                  | 91    | 109   | 111   |
| Granby, Que.           | 29                  | 28                  | 29    | 32    | 30    | 96                           | 79                  | 83    | 104   | 100   |
| Guelp, Ont.            | 23                  | 20                  | 17    | 10    | 11    | 59                           | 57                  | 52    | 47    | 87    |
| Halifax, N.S.          | 127                 | 119                 | 118   | 106   | 104   | 87                           | 73                  | 73    | 63    | 69    |
| Hamilton, Ont.         | 200                 | 167                 | 148   | 135   | 115   | 65                           | 56                  | 54    | 49    | 42    |
| Hull, Que.             | 132                 | 102                 | 70    | 61    | 76    | 132                          | 117                 | 82    | 112   | 92    |
| Joliette, Que.         | 52                  | 35                  | 39    | 24    | 30    | 149                          | 106                 | 137   | 72    | 104   |
| Kingston, Ont.         | 59                  | 38                  | 37    | 29    | 46    | 99                           | 58                  | 61    | 42    | 68    |
| Kitchener, Ont.        | 43                  | 35                  | 36    | 34    | 34    | 58                           | 47                  | 50    | 45    | 46    |
| Lachine, Que.          | 49                  | 29                  | 24    | 20    | 22    | 111                          | 73                  | 65    | 67    | 62    |
| Leithbridge, Alta.     | 33                  | 34                  | 23    | 30    | 25    | 76                           | 64                  | 50    | 52    | 43    |
| Levis, Que.            | 37                  | 25                  | 19    | 15    | 18    | 120                          | 96                  | 79    | 65    | 85    |
| London, Ont.           | 91                  | 77                  | 64    | 70    | 77    | 66                           | 56                  | 48    | 49    | 55    |
| Moncton, N.B.          | 40                  | 24                  | 19    | 21    | 23    | 76                           | 49                  | 40    | 46    | 47    |
| Montreal, Que.         | 2,735               | 1,862               | 1,635 | 1,550 | 1,410 | 135                          | 98                  | 89    | 87    | 81    |
| Moose Jaw, Sask.       | 39                  | 24                  | 15    | 15    | 23    | 62                           | 52                  | 35    | 35    | 51    |
| New Westminster, B.C.  | 27                  | 24                  | 25    | 20    | 30    | 51                           | 43                  | 45    | 47    | 47    |
| Niagara Falls, Ont.    | 31                  | 21                  | 22    | 20    | 9     | 66                           | 50                  | 54    | 46    | 23    |
| North Bay, Ont.        | 35                  | 23                  | 24    | 18    | 28    | 85                           | 59                  | 65    | 46    | 71    |
| Oshawa, Ont.           | 53                  | 29                  | 34    | 22    | 31    | 83                           | 55                  | 67    | 42    | 59    |
| Ottawa, Ont.           | 927                 | 257                 | 200   | 286   | 207   | 111                          | 87                  | 71    | 64    | 88    |
| Ottumwa, Ont.          | 8                   | 5                   | 6     | 5     | 3     | 65                           | 53                  | 73    | 80    | 44    |
| Owen Sound, Ont.       | 15                  | 16                  | 15    | 11    | 12    | 46                           | 50                  | 46    | 34    | 37    |
| Peterborough, Ont.     | 39                  | 35                  | 28    | 36    | 45    | 67                           | 61                  | 42    | 63    | 72    |
| Port Arthur, Ont.      | 45                  | 24                  | 28    | 13    | 21    | 83                           | 47                  | 59    | 25    | 39    |
| Prince Albert, Sask.   | 34                  | 27                  | 25    | 33    | 22    | 102                          | 68                  | 57    | 70    | 51    |
| Quebec, Que.           | 727                 | 638                 | 497   | 390   | 389   | 166                          | 130                 | 124   | 101   | 101   |
| Regina, Sask.          | 92                  | 61                  | 54    | 59    | 61    | 67                           | 48                  | 44    | 50    | 53    |
| St. Boniface, Man.     | 59                  | 40                  | 31    | 46    | 36    | 70                           | 46                  | 30    | 42    | 32    |
| St. Catharines, Ont.   | 40                  | 27                  | 23    | 20    | 34    | 67                           | 46                  | 46    | 36    | 59    |
| St. Hyacinthe, Que.    | 55                  | 42                  | 30    | 35    | 29    | 166                          | 119                 | 91    | 98    | 77    |
| St. Jean, Que.         | 26                  | 19                  | 16    | 18    | 23    | 79                           | 64                  | 54    | 65    | 75    |
| St. Thomas, Ont.       | 20                  | 16                  | 17    | 18    | 17    | 60                           | 54                  | 53    | 61    | 58    |
| Saint John, N.B.       | 113                 | 91                  | 80    | 72    | 84    | 99                           | 76                  | 66    | 62    | 69    |
| Sarnia, Ont.           | 32                  | 22                  | 21    | 22    | 22    | 74                           | 53                  | 53    | 52    | 51    |
| Saskatoon, Sask.       | 86                  | 48                  | 47    | 27    | 34    | 81                           | 50                  | 55    | 21    | 38    |
| Sault Ste. Marie, Ont. | 42                  | 25                  | 27    | 30    | 40    | 69                           | 44                  | 55    | 35    | 72    |
| Shawinigan Falls, Que. | 108                 | 53                  | 35    | 45    | 45    | 123                          | 63                  | 66    | 82    | 85    |
| Sherbrooke, Que.       | 77                  | 61                  | 60    | 58    | 45    | 97                           | 81                  | 82    | 75    | 57    |
| Sorel, Que.            | 56                  | 36                  | 29    | 30    | 30    | 187                          | 136                 | 117   | 153   | 125   |
| Stratford, Ont.        | 21                  | 19                  | 13    | 23    | 9     | 55                           | 56                  | 41    | 66    | 26    |
| Sudbury, Ont.          | 54                  | 66                  | 45    | 55    | 73    | 108                          | 83                  | 59    | 63    | 75    |
| Sydney, N.S.           | 40                  | 26                  | 29    | 24    | 18    | 77                           | 44                  | 49    | 41    | 30    |
| Thetford Mines, Que.   | 52                  | 32                  | 31    | 32    | 24    | 113                          | 91                  | 85    | 109   | 82    |
| Three Rivers, Que.     | 228                 | 237                 | 343   | 251   | 272   | 171                          | 200                 | 287   | 222   | 243   |
| Timmins, Ont.          | 60                  | 57                  | 60    | 53    | 55    | 123                          | 101                 | 102   | 84    | 80    |
| Toronto, Ont.          | 914                 | 673                 | 517   | 538   | 527   | 75                           | 69                  | 49    | 51    | 51    |
| Valleyfield, Que.      | 40                  | 31                  | 28    | 31    | 20    | 126                          | 87                  | 76    | 87    | 58    |
| Vancouver, B.C.        | 173                 | 117                 | 80    | 93    | 113   | 46                           | 35                  | 25    | 29    | 33    |
| Verdun, Que.           | 91                  | 68                  | 57    | 58    | 48    | 86                           | 67                  | 62    | 68    | 54    |
| Victoria, B.C.         | 33                  | 23                  | 22    | 19    | 19    | 46                           | 33                  | 31    | 27    | 27    |
| Welland, Ont.          | 20                  | 19                  | 17    | 13    | 18    | 69                           | 66                  | 67    | 42    | 58    |
| Westmount, Que.        | 11                  | 33                  | 37    | 30    | 29    | 102                          | 105                 | 119   | 112   | 139   |
| Windsor, Ont.          | 203                 | 106                 | 89    | 99    | 93    | 73                           | 52                  | 47    | 49    | 44    |
| Winnipeg, Man.         | 277                 | 179                 | 156   | 155   | 140   | 61                           | 43                  | 42    | 42    | 39    |
| Woodstock, Ont.        | 14                  | 12                  | 10    | 10    | 8     | 88                           | 51                  | 47    | 45    | 34    |

<sup>1</sup> Includes East Windsor, Sandwich, and Walkerville, which were shown separately previous to the publication of the 1937 Year Book.

**Infantile Mortality in Various Countries.**—The rate of infantile mortality to live births has been greatly reduced in civilized countries by the recent advances in medical science and in sanitation. The low record is held at the present time by New Zealand, where in 1935 the rate of infantile mortality was only 32 per 1,000 live births as compared with 68 in 1905. The Netherlands, Norway, Sweden, and Switzerland, with rates of 40, 44, 47 and 48 in their latest available year (1935) are the lowest among European countries.

As showing the improvement in recent years, it may be stated that the rate of infantile mortality in England and Wales has been reduced from 128 per 1,000 live births in 1905 to 57 in 1935, while the rate in Germany has declined from 196 in 1904 to 69 in 1935. In the Netherlands, again, the rate has declined from 131 per 1,000 live births in 1905 to 40 in 1935. Statistics are given in Table 27 by leading countries and by provinces.

**27.—Infantile Mortality per 1,000 Live Births in Various Countries of the World and Provinces of Canada in Recent Years.**

| Country.                            | Year.       | Rate of Infantile Mortality. | Country or Province.       | Year. | Rate of Infantile Mortality. |
|-------------------------------------|-------------|------------------------------|----------------------------|-------|------------------------------|
| <b>Country—</b>                     |             |                              | <b>Country—concluded.</b>  |       |                              |
| New Zealand.....                    | 1935        | 32                           | Greece.....                | 1935  | 113                          |
| Netherlands.....                    | 1935        | 40                           | Newfoundland.....          | 1935  | 119                          |
| Australia.....                      | 1935        | 40                           | Czechoslovakia.....        | 1935  | 123                          |
| Norway.....                         | 1935        | 44                           | Lithuania.....             | 1935  | 123                          |
| Sweden.....                         | 1935        | 47                           | Palestine.....             | 1935  | 131                          |
| Switzerland.....                    | 1935        | 48                           | Salvador.....              | 1934  | 136                          |
| United States (reg. area).....      | 1935        | 56                           | Jamaica.....               | 1935  | 137                          |
| England and Wales.....              | 1935        | 57                           | Hungary.....               | 1935  | 152                          |
| British Isles.....                  | 1935        | 61                           | Bulgaria.....              | 1935  | 154                          |
| Union of South Africa (whites)..... | 1935        | 63                           | Costa Rica.....            | 1935  | 157                          |
| <b>Canada.....</b>                  | <b>1936</b> | <b>66</b>                    | Egypt.....                 | 1935  | 161                          |
| Finland.....                        | 1935        | 67                           | British India.....         | 1935  | 164                          |
| Iceland.....                        | 1935        | 68                           | Straits Settlements.....   | 1935  | 165                          |
| Irish Free State.....               | 1935        | 68                           | Romania.....               | 1935  | 193                          |
| France.....                         | 1935        | 69                           | Chile.....                 | 1935  | 251                          |
| Germany.....                        | 1935        | 69                           | Ceylon.....                | 1935  | 263                          |
| Denmark.....                        | 1935        | 71                           |                            |       |                              |
| Scotland.....                       | 1935        | 77                           | <b>Province of Canada—</b> |       |                              |
| Latvia.....                         | 1935        | 79                           | British Columbia.....      | 1936  | 44                           |
| Belgium.....                        | 1935        | 85                           | Saskatchewan.....          | 1935  | 54                           |
| Northern Ireland.....               | 1935        | 86                           | Ontario.....               | 1935  | 55                           |
| Estonia.....                        | 1935        | 89                           | Alberta.....               | 1936  | 60                           |
| Panama.....                         | 1934        | 95                           | Manitoba.....              | 1936  | 61                           |
| Uruguay.....                        | 1934        | 96                           | Nova Scotia.....           | 1936  | 66                           |
| Austria.....                        | 1935        | 99                           | Prince Edward Island.....  | 1936  | 69                           |
| Italy.....                          | 1935        | 101                          | New Brunswick.....         | 1936  | 77                           |
| Japan.....                          | 1935        | 107                          | Quebec.....                | 1936  | 83                           |
| Spain.....                          | 1935        | 109                          |                            |       |                              |

**Infantile Mortality in Certain Cities of the World.**—It is one of the greatest triumphs of our time that city life is in our day, if not as healthy, yet not necessarily more dangerous to human, especially to infant, life than the average living conditions in the country as a whole.

To give particular examples, the rate of infantile mortality in New York was 52 per 1,000 live births in 1934, as against a rate of 60 per 1,000 for the birth registration area of the United States. In 1935 Berlin had an infantile mortality rate of 63 per 1,000 live births, as compared with 69 for Germany. On the other hand, Paris had a rate of 76 in 1934, compared with a rate of 69 for France in the same year, and in 1935, London a rate of 58 compared with 57 for England and Wales.

In Canada, Montreal had, in 1935, an infantile mortality of 87 per 1,000 live births as compared with 92 for the province of Quebec. Toronto had, in 1935, an infantile mortality rate of 51 per 1,000 live births as against 56 for the province

of Ontario, while Winnipeg and Vancouver had much lower infantile mortality rates than their respective provinces. Over a number of years both Vancouver and Victoria have shown two of the lowest infantile mortality rates in the world.

## 28.—Infantile Mortality per 1,000 Live Births in Certain Cities of the World in 1935.

| City.                  | Country.           | Rate of Infantile Mortality. | City.             | Country.              | Rate of Infantile Mortality. |
|------------------------|--------------------|------------------------------|-------------------|-----------------------|------------------------------|
| Oslo.....              | Norway.....        | 26                           | Hamburg.....      | Germany.....          | 51                           |
| Victoria.....          | Canada.....        | 27                           | Sheffield.....    | England.....          | 52                           |
| Amsterdam.....         | Netherlands.....   | 28                           | Capetown.....     | U. of S. Africa.....  | 52                           |
| Vancouver.....         | Canada.....        | 29                           | Brandon.....      | Canada.....           | 57                           |
| Saskatoon.....         | Canada.....        | 31                           | London.....       | England.....          | 59                           |
| Wellington.....        | New Zealand.....   | 33                           | Washington.....   | United States.....    | 60                           |
| Edmonton.....          | Canada.....        | 33                           | Saint John.....   | Canada.....           | 62                           |
| Stockholm.....         | Sweden.....        | 35                           | Breslau.....      | Germany.....          | 62                           |
| Adelaide.....          | Australia.....     | 35                           | Berlin.....       | Germany.....          | 63                           |
| Sydney.....            | Australia.....     | 36                           | Halifax.....      | Canada.....           | 63                           |
| Chicago.....           | United States..... | 40                           | Munich.....       | Germany.....          | 63                           |
| Perth.....             | Australia.....     | 40                           | Birmingham.....   | England.....          | 65                           |
| Auckland.....          | New Zealand.....   | 41                           | Paris.....        | France.....           | 66                           |
| Antwerp.....           | Belgium.....       | 41                           | Leipzig.....      | Germany.....          | 66                           |
| Winnipeg.....          | Canada.....        | 42                           | Cologne.....      | Germany.....          | 67                           |
| Brisbane.....          | Australia.....     | 42                           | Verdun.....       | Canada.....           | 68                           |
| Melbourne.....         | Australia.....     | 43                           | Edinburgh.....    | Scotland.....         | 70                           |
| Calgary.....           | Canada.....        | 45                           | Manchester.....   | England.....          | 71                           |
| Moncton.....           | Canada.....        | 46                           | Hobart.....       | Tasmania.....         | 73                           |
| Copenhagen.....        | Denmark.....       | 47                           | Cork.....         | Irish Free State..... | 78                           |
| New York.....          | United States..... | 47                           | Johannesburg..... | U. of S. Africa.....  | 84                           |
| Dresden.....           | Germany.....       | 48                           | Liverpool.....    | England.....          | 84                           |
| Windsor.....           | Canada.....        | 48                           | Montreal.....     | Canada.....           | 84                           |
| Hamilton.....          | Canada.....        | 49                           | Ottawa.....       | Canada.....           | 84                           |
| London.....            | Canada.....        | 49                           | Glasgow.....      | Scotland.....         | 98                           |
| Regina.....            | Canada.....        | 50                           | Quebec.....       | Canada.....           | 101                          |
| Frankfort-on-Main..... | Germany.....       | 51                           | Madras.....       | British India.....    | 224                          |
| Toronto.....           | Canada.....        | 51                           | Bombay.....       | India.....            | 245                          |

**Maternal Mortality.**—Of cognate interest with infantile mortality is the maternal mortality arising out of pregnancy and child-birth. This maternal mortality is shown by Table 29 to be at its lowest among mothers under twenty-five years of age. The mortality among mothers of different ages per 1,000 live births is shown for the years 1934-36; averages are also shown for the years 1926-30 and 1931-35. The maternal mortality is shown by provinces and age groups in Table 30 and by causes of death in Table 31,

## 29.—Maternal Deaths in Canada, by Age Groups, with Rates per 1,000 Live Births, 1934-36, and Five-Year Averages for 1926-30 and 1931-35.

NOTE.—Comparable figures for 1926-32 will be found at p. 208 of the 1934-35 Year Book, and for 1933 at p. 186 of the 1937 Year Book.

| Age Group.       | Year.   | Living Births. | Maternal Deaths. |                               | Age Group.         | Year.   | Living Births. | Maternal Deaths. |                               |
|------------------|---------|----------------|------------------|-------------------------------|--------------------|---------|----------------|------------------|-------------------------------|
|                  |         |                | No.              | Rate per 1,000 Living Births. |                    |         |                | No.              | Rate per 1,000 Living Births. |
| Under 20 years.. | 1934    | 13,454         | 67               | 5.0                           | 40 years or over.. | 1934    | 13,610         | 155              | 11.3                          |
|                  | 1935    | 13,671         | 47               | 3.4                           |                    | 1935    | 13,217         | 119              | 8.7                           |
|                  | 1936    | 13,576         | 59               | 4.3                           |                    | 1936    | 12,588         | 187              | 12.2                          |
|                  | 1934-36 | 55,137         | 211              | 3.8                           | Averages.....      | 1926-30 | 236,520        | 1,339            | 5.7                           |
| 20-24 years..... | 1935    | 56,245         | 202              | 3.6                           |                    | 1931-35 | 228,352        | 1,154            | 5.1                           |
|                  | 1936    | 56,627         | 230              | 4.1                           |                    | 1934    | 221,303        | 1,167            | 5.3                           |
|                  | 1934    | 61,911         | 236              | 3.8                           |                    | 1935    | 221,451        | 1,093            | 4.9                           |
| 25-29 years..... | 1935    | 62,296         | 261              | 4.2                           |                    | 1936    | 220,371        | 1,233            | 5.6                           |
|                  | 1936    | 61,909         | 272              | 4.4                           | Totals.....        |         |                |                  |                               |
|                  | 1934    | 77,186         | 498              | 6.5                           | Totals.....        |         |                |                  |                               |
|                  | 1935    | 76,022         | 467              | 6.1                           | Totals.....        |         |                |                  |                               |
| 30-39 years..... | 1936    | 75,311         | 515              | 6.8                           | Totals.....        |         |                |                  |                               |

<sup>1</sup> Includes "ages not stated".



### 30.—Maternal Deaths in each Province by Age Groups, 1936, with Totals and Rates per 1,000 Live Births for 1934-36, and Five-Year Averages for 1926-30 and 1931-35.

Note.—For totals 1926-30, see p. 183 of the Canada Year Book, 1933, and for totals 1931-33, p. 182 of the 1936 edition.

| Year and Age Group.                 | P.E.I. | N.S. | N.B. | Que. | Ont. | Man. | Sask. | Alta. | B.C. | Canada. <sup>1</sup> |
|-------------------------------------|--------|------|------|------|------|------|-------|-------|------|----------------------|
| <b>Maternal Deaths—</b>             |        |      |      |      |      |      |       |       |      |                      |
| Averages, 1926-30.....              | 8      | 61   | 64   | 433  | 398  | 81   | 126   | 105   | 63   | 1,339                |
| Averages, 1931-35.....              | 10     | 59   | 57   | 405  | 344  | 60   | 91    | 75    | 53   | 1,154                |
| Totals, 1934.....                   | 10     | 71   | 52   | 418  | 348  | 51   | 86    | 81    | 50   | 1,167                |
| Totals, 1935.....                   | 8      | 62   | 48   | 405  | 313  | 56   | 80    | 69    | 52   | 1,093                |
| Totals, 1936.....                   | 11     | 51   | 69   | 450  | 355  | 70   | 86    | 91    | 50   | 1,233                |
| 1936.                               |        |      |      |      |      |      |       |       |      |                      |
| Under 20 years.....                 | Nil    | 2    | 6    | 12   | 20   | 9    | 2     | 7     | 1    | 59                   |
| 20-24 years.....                    | 1      | 19   | 9    | 71   | 68   | 15   | 15    | 20    | 12   | 230                  |
| 25-29 years.....                    | 4      | 8    | 14   | 98   | 81   | 14   | 19    | 18    | 16   | 272                  |
| 30-39 years.....                    | 4      | 17   | 32   | 201  | 143  | 25   | 39    | 34    | 20   | 515                  |
| 40 years or over.....               | 2      | 5    | 8    | 68   | 43   | 7    | 11    | 12    | 1    | 157                  |
| Age not stated.....                 | —      | —    | —    | —    | —    | —    | —     | —     | —    | Nil                  |
| <b>Rates per 1,000 Live Births—</b> |        |      |      |      |      |      |       |       |      |                      |
| Averages, 1926-30.....              | 4.6    | 5.5  | 6.2  | 5.2  | 5.8  | 5.6  | 5.9   | 6.6   | 6.1  | 5.7                  |
| Averages, 1931-35.....              | 5.1    | 5.1  | 5.5  | 5.1  | 5.3  | 4.4  | 4.5   | 4.5   | 5.3  | 5.1                  |
| Totals, 1934.....                   | 5.1    | 6.2  | 5.1  | 5.5  | 5.6  | 3.8  | 4.4   | 5.0   | 5.1  | 5.3                  |
| Totals, 1935.....                   | 4.0    | 5.3  | 4.6  | 5.4  | 5.0  | 4.2  | 4.1   | 4.3   | 5.2  | 4.9                  |
| Totals, 1936.....                   | 5.6    | 4.3  | 6.6  | 6.0  | 5.7  | 5.4  | 4.5   | 5.8   | 4.7  | 5.6                  |

<sup>1</sup> Exclusive of Yukon and the Northwest Territories.

### 31.—Maternal Deaths in each Province, by Causes of Death, 1936.

| Int. List No. | Cause of Death.   | P.E.I. | N.S. | N.B. | Que. | Ont. | Man. | Sask. | Alta. | B.C. | Canada. <sup>1</sup> |
|---------------|---|--------|------|------|------|------|------|-------|-------|------|----------------------|
| 140           | Abortion with septic conditions.....                                      | Nil    | 2    | 7    | 43   | 29   | 7    | 10    | 19    | 18   | 135                  |
|               | (a) Abortion.....   | Nil    | 2    | 5    | 36   | 21   | 5    | 9     | 13    | 13   | 104                  |
|               | (b) Self-induced abortion.....  | Nil    | Nil  | 2    | 7    | 8    | 2    | 1     | 6     | 5    | 81                   |
| 141           | Abortion without mention of septic conditions (haemorrhage included)..... | Nil    | 2    | 1    | 16   | 20   | 3    | 3     | 5     | 3    | 53                   |
|               | (a) Abortion.....   | Nil    | 2    | 1    | 13   | 15   | 2    | 3     | 4     | 2    | 42                   |
|               | (b) Self-induced abortion.....  | Nil    | Nil  | Nil  | 3    | 5    | 1    | Nil   | 1     | 1    | 11                   |
| 142           | Ectopic gestation.....  | Nil    | Nil  | Nil  | 9    | 16   | 4    | 5     | 4     | Nil  | 38                   |
|               | (a) With septic conditions.....   | Nil    | Nil  | Nil  | 3    | 1    | 1    | Nil   | 2     | Nil  | 7                    |
|               | (b) Without mention of septic conditions.....                             | Nil    | Nil  | Nil  | 6    | 15   | 3    | 5     | 2     | Nil  | 31                   |
| 143           | Other accidents of pregnancy (haemorrhage excluded).....                  | Nil    | Nil  | 1    | 2    | 2    | 1    | Nil   | Nil   | Nil  | 6                    |
| 144           | Puerperal haemorrhage.....  | 3      | 5    | 11   | 69   | 34   | 5    | 12    | 10    | 5    | 154                  |
|               | (a) Placenta praevia.....   | 2      | 3    | 2    | 36   | 18   | 3    | 6     | 4     | 2    | 76                   |
|               | (b) Other haemorrhages.....   | 1      | 2    | 9    | 33   | 16   | 2    | 6     | 6     | 3    | 78                   |
| 145           | Puerperal septicæmia (not specified as due to abortion).....              | 1      | 10   | 14   | 129  | 85   | 20   | 17    | 22    | 7    | 305                  |
|               | (a) Puerperal septicæmia and pyæmia.....                                  | 1      | 10   | 14   | 128  | 85   | 20   | 17    | 22    | 7    | 304                  |
|               | (b) Puerperal tetanus.....  | Nil    | Nil  | Nil  | 1    | Nil  | Nil  | Nil   | Nil   | Nil  | 1                    |
| 146           | Puerperal albuminuria and eclampsia.....                                  | 4      | 14   | 20   | 95   | 64   | 13   | 16    | 10    | 4    | 240                  |

<sup>1</sup> Exclusive of Yukon and the Northwest Territories.

31.—Maternal Deaths in each Province, by Causes of Death, 1936—concluded.

| Int. List No. | Cause of Death.   | P.E.I. | N.S. | N.B. | Que. | Ont. | Man. | Sask. | Alta. | B.C. | Canada. <sup>1</sup> |
|---------------|---|--------|------|------|------|------|------|-------|-------|------|----------------------|
| 147           | Other toxæmias of pregnancy.....  | Nil    | 5    | 4    | 18   | 21   | 4    | 2     | 10    | 3    | 67                   |
| 148           | Puerperal phlegmasia alba dolens, embolism or sudden death (not specified as septic)..... | 3      | 4    | 6    | 30   | 28   | 5    | 13    | 4     | 2    | 95                   |
|               | (a) Phlegmasia alba dolens and thrombosis..   | Nil    | Nil  | 2    | 5    | 8    | 2    | 5     | Nil   | 1    | 23                   |
|               | (b) Embolism.....   | 2      | 3    | 3    | 14   | 18   | 2    | 6     | 4     | Nil  | 52                   |
|               | (c) Sudden death.....   | 1      | 1    | 1    | 11   | 2    | 1    | 2     | Nil   | 1    | 20                   |
| 149           | Other accidents of childbirth.....  | Nil    | 9    | 5    | 37   | 50   | 7    | 7     | 6     | 8    | 129                  |
|               | (a) Cesarean operation..  | Nil    | 4    | 2    | 4    | 16   | 2    | Nil   | 1     | 1    | 30                   |
|               | (b) Other surgical operations and instrumental delivery....                               | Nil    | 2    | Nil  | 1    | 2    | 1    | 1     | 2     | 1    | 10                   |
|               | (c) Dystocia.....   | Nil    | 1    | Nil  | 13   | 19   | 2    | 4     | 3     | 2    | 44                   |
|               | (d) Rupture of uterus in parturition.....   | Nil    | 1    | Nil  | 4    | 4    | 1    | Nil   | Nil   | 1    | 11                   |
|               | (e) Others under this title.....  | Nil    | 1    | 3    | 15   | 9    | 1    | 2     | Nil   | 3    | 34                   |
| 150           | Other or unspecified conditions of the puerperal state.....                               | Nil    | Nil  | Nil  | 2    | 6    | 1    | 1     | 1     | Nil  | 11                   |
|               | (a) Puerperal diseases of the breast.....   | Nil    | Nil  | Nil  | Nil  | Nil  | Nil  | 1     | Nil   | Nil  | 1                    |
|               | (b) Others under this title.....  | Nil    | Nil  | Nil  | 2    | 6    | 1    | 1     | Nil   | 1    | 10                   |
|               | Totals.....   | 11     | 51   | 69   | 450  | 355  | 70   | 86    | 91    | 50   | 1,233                |

<sup>1</sup> Exclusive of Yukon and the Northwest Territories.

As compared with the previous year, the number of maternal deaths shows an increase of 140, or 13 p.c., but the decrease from 1930 is over 12 p.c. Decreases are shown for Nova Scotia and British Columbia, but elsewhere increases are recorded as compared with 1935. By far the most serious causes of maternal mortality are puerperal septicæmia, and puerperal albuminuria and eclampsia, and deaths from these causes increased from 605 in 1935 to 687 in 1936, or by 13.6 p.c.

### Section 4.—Natural Increase.

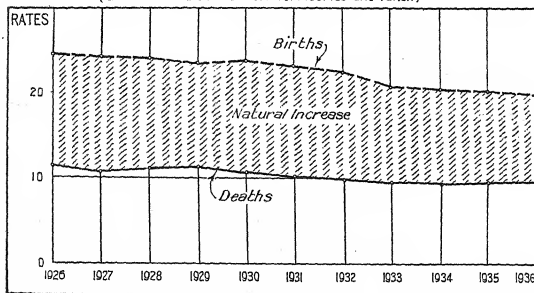
Natural increase is a resultant of births and deaths, and its treatment is felt to come, logically, at this place rather than at the beginning of the chapter, as in former editions of the Year Book.

Summary statistics of the births, deaths, and natural increase (births minus deaths) per 1,000 of population are given for the years 1921 to 1936, by provinces, in Table 32. Statistics of marriages are also included in this table for convenience. The province of Quebec is regarded as having one of the highest rates of natural increase per 1,000 population of any civilized area. The rate was 17.1 in 1931 and, while it has been appreciably reduced in line with common experience, it stood at 14.0 in 1936. Saskatchewan has usually approached Quebec in the matter of natural increase and for the years 1934 and 1935 the rates for this prairie province exceeded those for Quebec. New Brunswick and Alberta follow in the order given. In the case of the two western provinces the high rates of natural increase are due to their relatively younger populations and lower crude death rates, but in the case of New Brunswick the condition of an abnormally high birth rate combined with a

high death rate exists. The high rates for these provinces brought the averages for Canada up to 11.1 in 1934, 10.6 in 1935, and 10.3 in 1936, in spite of the fact that the rate for British Columbia, which has always been low, was only 4.5 in 1936. The rate of natural increase in 1935 was 13.7 per 1,000 in the Union of South Africa (whites), 7.9 in New Zealand, 7.1 in Australia, 5.6 in the Irish Free State, 4.8 in Northern Ireland, 4.6 in Scotland, and 3.0 in England and Wales, so that Canada compares quite favourably with most other British countries.

The rates of natural increase per 1,000 of the mean population for other countries in the latest years are as follows, the figures being for 1935: Netherlands, 11.5; Japan, 14.8; Spain, 9.9; Italy, 9.4; Denmark, 6.6; Germany, 7.1; United States, 6.0; Finland, 6.5; Switzerland, 3.9; Norway, 4.0; Belgium, 2.6; Sweden, 2.1; France, -0.5.

BIRTH RATES, DEATH RATES AND RATES OF NATURAL INCREASE  
IN CANADA  
1926-1936  
RATES PER 1000 POPULATION  
(Exclusive of the Northwest Territories and Yukon)



During recent years the rate of natural increase of the population of Canada has declined. In 1921 the rate was 17.8; it declined to 13.3 in 1926 and to 12.2 in 1929. After 1929 there was a temporary improvement but, as Table 32 shows, the rates for 1934, 1935, and 1936—11.1, 10.6 and 10.3, respectively—continued the downward trend. Among the provinces the trends generally follow that of Canada as a whole, except in the Maritime Provinces, for each of which the trend is not so regularly downward and has, in fact, been upward since 1934. Quebec shows the greatest improvement in death rate for the period since 1926. The birth rate is declining here as elsewhere and the rate of natural increase has shown a definitely downward trend, although not so markedly as that of Saskatchewan.

Statistics of natural increase in cities and towns of 10,000 population and over are given for the period 1926-36 in Table 33, but these are not worked out as rates per thousand of population, though the census populations in 1931, which are also given, furnish some guide to such rates.

33.—Summary of Births, Marriages, Deaths, and Natural Increase, by Provinces, for the calendar years 1931-35, with Averages for 1921-25, 1926-30, and 1931-35.

Note.—For other than census years birth, marriage, and death rates are calculated on estimated population (see p. 155). Figures for individual years 1921-25 will be found at p. 160 of the 1927-28 Year Book; for 1926-30 at p. 150 of the 1933 Year Book; for 1931-32 at p. 147 of the 1936 edition; and for 1933 at p. 190 of the 1937 Year Book.

| Province.   | Births.     | Birth Rate per 1,000 Population. | Marriages. | Marriage Rate per 1,000 Population. | Deaths. | Death Rate per 1,000 Population. | Excess of Births over Deaths. | Rate of Natural Increase per 1,000 Population. |      |
|---|-------------|----------------------------------|------------|-------------------------------------|---------|----------------------------------|-------------------------------|--|------|
| Prince Edward Island.                               | Av. 1921-25 | 1,966                            | 22.6       | 473                                 | 5.4     | 1,085                            | 12.5                          | 881  | 10.1 |
|   | Av. 1926-30 | 1,734                            | 19.7       | 473                                 | 5.4     | 969                              | 11.0                          | 765  | 8.7  |
|   | Av. 1931-35 | 1,961                            | 22.1       | 496                                 | 5.6     | 1,001                            | 11.3                          | 961  | 10.8 |
|   | 1934        | 1,943                            | 21.8       | 536                                 | 6.0     | 1,033                            | 11.6                          | 910  | 10.2 |
|   | 1935        | 2,010                            | 22.6       | 516                                 | 5.8     | 975                              | 11.0                          | 1,035  | 11.2 |
|   | 1936        | 1,977                            | 21.5       | 595                                 | 6.5     | 1,024                            | 11.1                          | 953  | 10.4 |
| Nova Scotia.  | Av. 1921-25 | 12,119                           | 23.4       | 3,186                               | 6.1     | 6,519                            | 12.6                          | 5,600  | 10.8 |
|   | Av. 1926-30 | 11,016                           | 21.4       | 3,324                               | 6.3     | 6,362                            | 12.4                          | 4,654  | 9.0  |
|   | Av. 1931-35 | 11,486                           | 22.0       | 3,522                               | 6.8     | 6,073                            | 11.7                          | 5,413  | 10.3 |
|   | 1934        | 11,407                           | 21.7       | 3,756                               | 7.2     | 6,028                            | 11.5                          | 5,379  | 10.2 |
|   | 1935        | 11,617                           | 22.0       | 3,946                               | 7.5     | 6,164                            | 11.7                          | 5,453  | 10.3 |
|   | 1936        | 11,808                           | 22.0       | 4,129                               | 7.7     | 5,897                            | 11.0                          | 5,911  | 11.0 |
| New Brunswick.                                      | Av. 1921-25 | 11,080                           | 28.4       | 2,953                               | 7.6     | 5,093                            | 13.1                          | 5,987  | 15.3 |
|   | Av. 1926-30 | 10,327                           | 25.8       | 2,970                               | 7.4     | 5,019                            | 12.5                          | 5,308  | 13.3 |
|   | Av. 1931-35 | 10,440                           | 24.9       | 2,737                               | 6.5     | 4,710                            | 11.2                          | 5,730  | 13.7 |
|   | 1934        | 10,164                           | 23.9       | 3,045                               | 7.2     | 4,665                            | 11.0                          | 5,499  | 12.9 |
|   | 1935        | 10,388                           | 24.2       | 3,200                               | 7.5     | 4,779                            | 11.1                          | 5,606  | 13.1 |
|   | 1936        | 10,513                           | 24.2       | 3,397                               | 7.8     | 4,803                            | 11.0                          | 5,710  | 13.2 |
| Quebec.   | Av. 1926-30 | 82,771                           | 30.5       | 18,731                              | 6.9     | 36,645                           | 13.5                          | 46,126   | 17.0 |
|   | Av. 1931-35 | 78,859                           | 29.6       | 17,059                              | 5.8     | 32,790                           | 11.1                          | 46,069   | 15.5 |
|   | 1934        | 76,432                           | 25.3       | 18,242                              | 6.0     | 31,929                           | 10.6                          | 44,503   | 14.7 |
|   | 1935        | 75,267                           | 24.6       | 19,967                              | 6.5     | 32,839                           | 10.7                          | 42,428   | 13.9 |
|   | 1936        | 75,285                           | 24.3       | 21,654                              | 7.0     | 31,853                           | 10.3                          | 43,432   | 14.0 |
| Ontario.  | Av. 1921-25 | 71,454                           | 23.7       | 24,037                              | 8.0     | 34,252                           | 11.3                          | 37,202   | 12.4 |
|   | Av. 1926-30 | 68,703                           | 21.0       | 25,449                              | 7.8     | 36,650                           | 11.2                          | 32,053   | 9.8  |
|   | Av. 1931-35 | 65,000                           | 18.3       | 24,260                              | 6.8     | 35,782                           | 10.1                          | 29,218   | 8.2  |
|   | 1934        | 62,234                           | 17.1       | 25,874                              | 7.1     | 35,119                           | 9.7                           | 27,115   | 7.4  |
|   | 1935        | 63,069                           | 17.2       | 26,843                              | 7.3     | 36,317                           | 9.9                           | 26,752   | 7.3  |
|   | 1936        | 62,461                           | 16.9       | 27,734                              | 7.5     | 37,571                           | 10.2                          | 24,880   | 6.7  |
| Manitoba.   | Av. 1921-25 | 16,590                           | 26.8       | 4,634                               | 7.5     | 5,348                            | 8.6                           | 11,242   | 18.2 |
|   | Av. 1926-30 | 14,391                           | 21.7       | 4,951                               | 7.5     | 5,507                            | 8.3                           | 8,884  | 13.4 |
|   | Av. 1931-35 | 13,615                           | 19.3       | 5,015                               | 7.1     | 5,413                            | 7.6                           | 8,202  | 11.7 |
|   | 1934        | 13,310                           | 18.7       | 5,296                               | 7.4     | 5,169                            | 7.3                           | 8,141  | 11.4 |
|   | 1935        | 13,335                           | 18.8       | 5,341                               | 7.5     | 5,781                            | 8.1                           | 7,554  | 10.7 |
|   | 1936        | 12,855                           | 18.1       | 5,756                               | 8.1     | 6,219                            | 8.7                           | 6,636  | 9.4  |
| Saskatchewan.                                       | Av. 1921-25 | 21,580                           | 27.7       | 4,983                               | 6.4     | 5,859                            | 7.5                           | 15,721   | 20.2 |
|   | Av. 1926-30 | 21,298                           | 24.7       | 6,036                               | 7.0     | 6,256                            | 7.8                           | 15,042   | 17.4 |
|   | Av. 1931-35 | 20,325                           | 21.9       | 5,680                               | 6.1     | 6,037                            | 6.5                           | 14,288   | 15.4 |
|   | 1934        | 19,764                           | 21.2       | 5,519                               | 5.9     | 5,924                            | 6.4                           | 13,840   | 14.8 |
|   | 1935        | 19,569                           | 21.0       | 6,036                               | 6.5     | 6,126                            | 6.6                           | 13,443   | 14.4 |
|   | 1936        | 19,125                           | 20.5       | 6,168                               | 6.6     | 6,314                            | 6.8                           | 12,811   | 13.7 |
| Alberta.  | Av. 1921-25 | 15,461                           | 26.0       | 4,313                               | 7.3     | 4,953                            | 8.3                           | 10,508   | 17.7 |
|   | Av. 1926-30 | 15,924                           | 24.2       | 5,265                               | 8.0     | 5,530                            | 8.4                           | 10,394   | 15.8 |
|   | Av. 1931-35 | 16,556                           | 22.1       | 5,530                               | 7.4     | 5,447                            | 7.3                           | 11,109   | 14.8 |
|   | 1934        | 16,236                           | 21.5       | 6,053                               | 8.0     | 5,337                            | 7.1                           | 10,899   | 14.4 |
|   | 1935        | 16,183                           | 21.2       | 6,010                               | 7.9     | 5,729                            | 7.5                           | 10,454   | 13.7 |
|   | 1936        | 15,786                           | 20.4       | 6,020                               | 7.8     | 6,147                            | 8.0                           | 9,639  | 12.4 |
| British Columbia.                                   | Av. 1921-25 | 10,256                           | 18.4       | 3,971                               | 7.1     | 4,812                            | 8.7                           | 5,444  | 9.7  |
|   | Av. 1926-30 | 10,356                           | 16.2       | 4,786                               | 7.5     | 5,986                            | 9.3                           | 4,370  | 6.9  |
|   | Av. 1931-35 | 10,005                           | 14.9       | 4,267                               | 6.0     | 6,344                            | 8.9                           | 3,661  | 5.1  |
|   | 1934        | 9,813                            | 13.5       | 4,771                               | 6.6     | 6,378                            | 8.8                           | 3,435  | 4.7  |
|   | 1935        | 10,013                           | 13.6       | 5,034                               | 6.8     | 6,837                            | 9.3                           | 3,150  | 4.3  |
|   | 1936        | 10,571                           | 14.1       | 5,451                               | 7.3     | 7,222                            | 9.6                           | 3,349  | 4.6  |
| Canada <sup>1</sup> (Exclusive of the Territories). | Av. 1926-30 | 236,520                          | 24.1       | 71,885                              | 7.3     | 108,924                          | 11.1                          | 127,596  | 13.0 |
|   | Av. 1931-35 | 228,352                          | 21.4       | 68,596                              | 6.4     | 103,693                          | 9.7                           | 124,759  | 11.7 |
|   | 1934        | 221,393                          | 20.5       | 72,092                              | 6.8     | 101,582                          | 9.4                           | 119,721  | 11.1 |
|   | 1935        | 221,451                          | 20.3       | 76,893                              | 7.0     | 105,567                          | 9.7                           | 115,884  | 10.6 |
|   | 1936        | 220,371                          | 20.6       | 80,904                              | 7.3     | 107,050                          | 9.7                           | 113,321  | 10.3 |

<sup>1</sup>Quebec was not included in the registration area prior to 1926.

### 33.—Natural Increase in Cities and Towns of 10,000 Population or Over, 1932-36, and Averages, 1926-30, and 1931-35.

| Province and City or Town.   | Census<br>Population,<br>1931. | Averages. |          | 1932. | 1933. | 1934. | 1935. | 1936. |
|------------------------------|--------------------------------|-----------|----------|-------|-------|-------|-------|-------|
|                              |                                | 1926-30.  | 1931-35. |       |       |       |       |       |
| <b>Prince Edward Island—</b> |                                |           |          |       |       |       |       |       |
| Charlottetown.....           | 12,361                         | 23        | 99       | 103   | 85    | 90    | 102   | 128   |
| <b>Nova Scotia—</b>          |                                |           |          |       |       |       |       |       |
| Glace Bay.....               | 20,706                         | 378       | 445      | 457   | 367   | 459   | 510   | 530   |
| Halifax.....                 | 59,275                         | 573       | 732      | 689   | 708   | 680   | 805   | 884   |
| Sydney.....                  | 23,089                         | 270       | 374      | 397   | 290   | 360   | 356   | 425   |
| <b>New Brunswick—</b>        |                                |           |          |       |       |       |       |       |
| Moncton.....                 | 20,689                         | 266       | 249      | 252   | 197   | 240   | 212   | 260   |
| Saint John.....              | 47,514                         | 432       | 536      | 590   | 401   | 585   | 578   | 575   |
| <b>Quebec—</b>               |                                |           |          |       |       |       |       |       |
| Chicoutimi.....              | 11,877                         | 325       | 284      | 358   | 252   | 238   | 268   | 243   |
| Granby.....                  | 10,687                         | 183       | 230      | 254   | 272   | 238   | 187   | 160   |
| Full.....                    | 29,433                         | 647       | 515      | 512   | 500   | 518   | 447   | 517   |
| Joliette.....                | 10,765                         | 174       | 157      | 196   | 159   | 115   | 166   | 126   |
| Lachine.....                 | 18,630                         | 228       | 212      | 234   | 194   | 186   | 155   | 173   |
| Lévis.....                   | 11,724                         | 84        | 42       | 55    | 57    | 41    | 23    | 25    |
| Montreal.....                | 818,577                        | 8,945     | 9,194    | 9,332 | 9,210 | 9,202 | 8,209 | 7,980 |
| Outremont.....               | 28,641                         | 19        | -66      | -37   | -72   | -97   | -94   | -69   |
| Quebec.....                  | 130,594                        | 2,110     | 2,146    | 2,244 | 2,006 | 2,143 | 2,009 | 1,927 |
| St. Hyacinthe.....           | 13,448                         | 45        | 59       | 36    | 45    | 76    | 64    | 71    |
| St. Jean.....                | 11,256                         | 204       | 170      | 173   | 167   | 184   | 136   | 144   |
| Shawinigan Falls.....        | 15,345                         | 459       | 413      | 476   | 400   | 389   | 353   | 373   |
| Sherbrooke.....              | 28,983                         | 336       | 310      | 331   | 314   | 299   | 257   | 338   |
| Sorel.....                   | 10,320                         | 130       | 124      | 149   | 117   | 121   | 75    | 111   |
| Thetford Mines.....          | 10,701                         | 308       | 212      | 243   | 159   | 232   | 136   | 145   |
| Three Rivers.....            | 35,450                         | 773       | 577      | 704   | 452   | 520   | 513   | 466   |
| Valleyfield.....             | 11,411                         | 137       | 204      | 213   | 179   | 215   | 212   | 171   |
| Verdun.....                  | 69,745                         | 659       | 561      | 707   | 594   | 462   | 333   | 438   |
| Westmount.....               | 24,235                         | -33       | 64       | 47    | 74    | 33    | 24    | -60   |
| <b>Ontario—</b>              |                                |           |          |       |       |       |       |       |
| Bellefleur.....              | 13,790                         | 140       | 149      | 121   | 141   | 158   | 132   | 171   |
| Brantford.....               | 30,107                         | 300       | 265      | 289   | 254   | 225   | 247   | 263   |
| Chatham.....                 | 14,569                         | 185       | 181      | 150   | 180   | 241   | 192   | 253   |
| Cornwall.....                | 11,126                         | 230       | 248      | 202   | 256   | 194   | 361   | 303   |
| Fort William.....            | 26,277                         | 420       | 355      | 392   | 337   | 288   | 314   | 266   |
| Galt.....                    | 14,006                         | 105       | 109      | 118   | 81    | 93    | 81    | 98    |
| Guelph.....                  | 21,075                         | 160       | 117      | 133   | 120   | 85    | 115   | 95    |
| Hamilton.....                | 155,547                        | 1,568     | 1,467    | 1,601 | 1,458 | 1,268 | 1,216 | 1,119 |
| Kinross.....                 | 23,439                         | 119       | 181      | 157   | 240   | 157   | 155   | 188   |
| Kitchener.....               | 30,793                         | 451       | 405      | 344   | 339   | 417   | 393   | 359   |
| London.....                  | 71,148                         | 292       | 359      | 331   | 262   | 332   | 377   | 306   |
| Niagara Falls.....           | 19,046                         | 251       | 221      | 210   | 192   | 203   | 250   | 182   |
| North Bay.....               | 15,528                         | 268       | 235      | 247   | 249   | 192   | 218   | 222   |
| Oshawa.....                  | 23,439                         | 429       | 339      | 332   | 302   | 315   | 347   | 302   |
| Ottawa.....                  | 126,872                        | 1,301     | 1,247    | 1,300 | 1,172 | 1,306 | 1,218 | 1,241 |
| Owen Sound.....              | 12,839                         | 171       | 138      | 99    | 137   | 159   | 133   | 144   |
| Peterborough.....            | 22,327                         | 271       | 253      | 263   | 277   | 192   | 248   | 247   |
| Port Arthur.....             | 19,818                         | 318       | 314      | 329   | 331   | 288   | 335   | 323   |
| St. Catharines.....          | 24,753                         | 279       | 306      | 303   | 292   | 334   | 247   | 266   |
| St. Thomas.....              | 15,430                         | 100       | 67       | 63    | 69    | 46    | 25    | 25    |
| Sarnia.....                  | 18,191                         | 209       | 189      | 155   | 143   | 180   | 223   | 172   |
| Sault Ste. Marie.....        | 23,082                         | 395       | 360      | 431   | 377   | 279   | 303   | 316   |
| Stratford.....               | 17,742                         | 184       | 141      | 140   | 109   | 129   | 129   | 148   |
| Sudbury.....                 | 18,518                         | 283       | 562      | 554   | 505   | 528   | 635   | 652   |
| Timmins.....                 | 14,200                         | 345       | 392      | 362   | 382   | 420   | 449   | 497   |
| Toronto.....                 | 631,207                        | 5,475     | 4,890    | 5,468 | 4,801 | 4,349 | 3,869 | 3,347 |
| Welland.....                 | 30,709                         | 126       | 148      | 146   | 171   | 102   | 173   | 167   |
| Windsor.....                 | 98,179                         | 1,826     | 1,200    | 1,155 | 1,128 | 1,039 | 1,179 | 1,229 |
| Woodstock.....               | 11,395                         | 73        | 60       | 69    | 65    | 19    | 46    | 43    |
| <b>Manitoba—</b>             |                                |           |          |       |       |       |       |       |
| Brandon.....                 | 16,461 <sup>2</sup>            | 146       | 78       | 87    | 81    | 61    | 30    | 11    |
| St. Boniface.....            | 16,275 <sup>2</sup>            | 361       | 647      | 722   | 633   | 656   | 631   | 630   |
| Winnipeg.....                | 215,814 <sup>2</sup>           | 2,770     | 2,232    | 2,352 | 2,130 | 2,065 | 1,836 | 1,541 |

<sup>1</sup> Includes East Windsor, Sandwich, and Walkerville.<sup>2</sup> Census of 1936.

### 33.—Natural Increase in Cities and Towns of 10,000 Population or Over, 1932-36, and Averages, 1926-30, and 1931-35—concluded.

| Province and City or Town. | Census Population, 1931. | Averages. |          | 1932. | 1933. | 1934. | 1935. | 1936. |
|----------------------------|--------------------------|-----------|----------|-------|-------|-------|-------|-------|
|                            |                          | 1926-30.  | 1931-35. |       |       |       |       |       |
| <b>Saskatchewan—</b>       |                          |           |          |       |       |       |       |       |
| Moose Jaw.....             | 19,805 <sup>1</sup>      | 397       | 268      | 298   | 246   | 240   | 254   | 233   |
| Prince Albert.....         | 11,049 <sup>1</sup>      | 181       | 223      | 180   | 193   | 267   | 282   | 228   |
| Regina.....                | 53,354 <sup>1</sup>      | 887       | 802      | 793   | 717   | 783   | 661   | 610   |
| Saskatoon.....             | 41,734 <sup>1</sup>      | 573       | 505      | 542   | 463   | 404   | 405   | 402   |
| <b>Alberta—</b>            |                          |           |          |       |       |       |       |       |
| Calgary.....               | 83,407 <sup>1</sup>      | 1,050     | 965      | 978   | 916   | 878   | 806   | 736   |
| Edmonton.....              | 85,774 <sup>1</sup>      | 1,260     | 1,362    | 1,399 | 1,215 | 1,265 | 1,530 | 1,217 |
| Lethbridge.....            | 13,533 <sup>1</sup>      | 261       | 338      | 329   | 319   | 246   | 390   | 391   |
| <b>British Columbia—</b>   |                          |           |          |       |       |       |       |       |
| New Westminster.....       | 17,524                   | 252       | 271      | 287   | 249   | 267   | 254   | 284   |
| Vancouver.....             | 246,593                  | 1,601     | 1,056    | 1,149 | 949   | 968   | 782   | 703   |
| Victoria.....              | 39,082                   | 165       | 136      | 159   | 131   | 125   | 101   | 32    |

<sup>1</sup> Census of 1936.

Natural Increase, by Sex.—In Table 34 the relationship of births to deaths is shown by sex from 1926 to 1936 for Canada and for 1936 by provinces. In spite of higher male births, the natural increase is shown to be lower for males than females due to the higher mortality among the former.

### 34.—Births, Deaths, and Natural Increase in Canada,<sup>1</sup> by Provinces and for each Sex, 1936, with Totals, 1931-36 and Averages, 1926-30, and 1931-35.

| Year and Province.            | Males.         |               |                               | Females.       |               |                               | Both Sexes.    |
|-------------------------------|----------------|---------------|-------------------------------|----------------|---------------|-------------------------------|----------------|
|                               | Births.        | Deaths.       | Excess of Births over Deaths. | Births.        | Deaths.       | Excess of Births over Deaths. |                |
| <b>1936.</b>                  |                |               |                               |                |               |                               |                |
| Prince Edward Island.         | 1,044          | 534           | 510                           | 933            | 490           | 443                           | 953            |
| Nova Scotia.....              | 6,127          | 3,157         | 2,970                         | 5,031          | 2,740         | 2,291                         | 5,611          |
| New Brunswick.....            | 5,963          | 2,568         | 2,300                         | 5,145          | 2,235         | 2,910                         | 5,710          |
| Quebec.....                   | 38,578         | 16,450        | 22,122                        | 36,707         | 15,397        | 21,310                        | 43,432         |
| Ontario.....                  | 32,124         | 19,916        | 12,208                        | 30,327         | 17,655        | 12,672                        | 24,880         |
| Manitoba.....                 | 6,670          | 3,436         | 3,232                         | 6,185          | 2,781         | 3,404                         | 6,636          |
| Saskatchewan.....             | 9,539          | 3,616         | 6,223                         | 9,286          | 2,696         | 6,588                         | 12,811         |
| Alberta.....                  | 8,081          | 3,610         | 4,471                         | 7,705          | 2,537         | 5,168                         | 9,639          |
| British Columbia.....         | 5,458          | 4,433         | 1,025                         | 5,113          | 2,789         | 2,324                         | 3,349          |
| <b>Canada: Av. 1926-30...</b> | <b>121,552</b> | <b>55,351</b> | <b>63,201</b>                 | <b>114,968</b> | <b>50,573</b> | <b>64,395</b>                 | <b>127,596</b> |
| <b>Av. 1931-35...</b>         | <b>117,142</b> | <b>55,967</b> | <b>61,175</b>                 | <b>111,210</b> | <b>47,635</b> | <b>63,575</b>                 | <b>124,750</b> |
| <b>Totals, 1931...</b>        | <b>123,632</b> | <b>56,529</b> | <b>67,093</b>                 | <b>116,851</b> | <b>47,988</b> | <b>68,863</b>                 | <b>135,956</b> |
| <b>Totals, 1932...</b>        | <b>121,082</b> | <b>56,153</b> | <b>64,929</b>                 | <b>114,584</b> | <b>48,224</b> | <b>66,360</b>                 | <b>131,289</b> |
| <b>Totals, 1933...</b>        | <b>114,388</b> | <b>54,725</b> | <b>59,663</b>                 | <b>108,480</b> | <b>47,243</b> | <b>61,237</b>                 | <b>120,960</b> |
| <b>Totals, 1934...</b>        | <b>113,323</b> | <b>55,224</b> | <b>58,099</b>                 | <b>107,980</b> | <b>46,365</b> | <b>61,622</b>                 | <b>119,721</b> |
| <b>Totals, 1935...</b>        | <b>113,293</b> | <b>57,206</b> | <b>56,087</b>                 | <b>108,158</b> | <b>49,861</b> | <b>59,797</b>                 | <b>116,584</b> |
| <b>Totals, 1936...</b>        | <b>113,289</b> | <b>57,728</b> | <b>55,561</b>                 | <b>107,082</b> | <b>49,322</b> | <b>57,760</b>                 | <b>113,321</b> |

<sup>1</sup> Exclusive of Yukon and the Northwest Territories.

## CHAPTER VI.—IMMIGRATION AND COLONIZATION.\*

While the great majority of French Canadians can trace their descent to ancestors who left the Old World 250 years ago or even longer, most English-speaking Canadians are comparative newcomers both to Canada and to this continent, though a considerable number of the United Empire Loyalist families had been resident in the old colonies for generations before they moved north to establish English-speaking settlements in what is now the Dominion of Canada. During the middle third of the nineteenth century, a great English-speaking migration entered the province of Ontario and made it for the first time more populous than the sister province of Quebec, thus bringing about the agitation for representation by population. Thereafter, immigration slackened until the dawn of the twentieth century brought another flood of settlers to the newly opened territories of the great Northwest, resulting in an increase of population between the censuses of 1901 and 1911 greater than the combined increase of the three decades from 1871 to 1901.

Immigration during the second decade of the twentieth century promised, at its commencement, to be even greater than during the first. In its first three years no fewer than 1,084,934 persons entered Canada for purposes of settlement, but the Great War, which commenced for Canada on Aug. 4, 1914, dried up the sources of our immigration in the United Kingdom and Continental Europe, where every able-bodied man was needed for the defence of his country. Immigrant arrivals from the United Kingdom in 1918 numbered only about 3,000, as compared with 150,000 in 1913; immigrant arrivals from Continental Europe numbered less than 3,000 in 1918, as compared with approximately 135,000 in 1914. Since the War, immigration to the Dominion has never approached that of the pre-war period.

### Section 1.—Statistics of Immigration.

Immigration to Canada, as to other new countries, is generally greatest in "boom" periods, when capital as well as labour is leaving the older countries for the newer in order to secure the more remunerative investments generally to be found in virgin territories where the natural resources are still unexploited. In periods of depression, however, the sending abroad of both capital and labour is diminished, both preferring at such times to endure the ills which they know at home rather than take the risks of a new adventure at a distance. Indeed the depression which began about the close of 1929, with its accompanying unemployment and unsold surplus of farm products, raised the question whether it was desirable that Canada should accept immigrants in any considerable number. Therefore, the Government, on Aug. 14, 1930, passed an Order in Council whereby immigrants, except Britishers coming from the Mother Country or self-governing Dominions, and United States citizens coming from the United States, were allowed to come in only if they belonged to one of two classes—(a) wives and unmarried children under eighteen years of age, joining family heads established in Canada and in a position to look after their dependants; (b) agriculturists with sufficient money to begin farming in Canada. This limitation applies to the whole continent of Europe as well as to many other countries. Regulations affecting immigration from the British Isles, the British Dominions or the United States have not been

\* Revised under the direction of F. C. Blair, Director of Immigration, Department of Mines and Resources, Ottawa.

changed but a policy of no solicitation has been rigidly adopted. In harmony with this policy the Department of Immigration and Colonization, during 1931, closed all its Canadian Government Information Bureaus in the United States and reduced its representation in the British Isles.

For many years the Immigration Regulations have contained a general provision that immigrants coming to Canada must have sufficient funds to look after themselves until employment is secured. Naturally, when employment is readily available a sum would be considered sufficient which would be insufficient in periods of unemployment, and the enforcement of this regulation is an important factor in reducing immigration at the present time. An Order in Council (Aug. 7, 1929), prohibiting the landing in Canada of any immigrant coming under contract or agreement, expressed or implied, to perform labour or service of any kind in Canada, is also in effect but this prohibition does not apply to farmers, farm labourers, or houseworkers. Under the Order, the Minister of Immigration and Colonization may admit any contract labourer if satisfied that his labour or service is required in Canada.

The number of immigrant settlers in Canada is shown by calendar years from 1852 to 1937 in Table 1, and the number of immigrant arrivals in Canada from the United Kingdom, the United States, and other countries, is given by years from 1908 in Table 2.

1.—Numbers of Immigrant Arrivals in Canada, calendar years 1852-1937.

| Year.     | Number. | Year.     | Number. | Year.     | Number. | Year.     | Number. |
|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
| 1852..... | 29,307  | 1873..... | 50,050  | 1895..... | 18,790  | 1917..... | 72,910  |
| 1853..... | 29,464  | 1874..... | 39,373  | 1896..... | 16,335  | 1918..... | 41,845  |
| 1854..... | 37,263  | 1875..... | 27,382  | 1897..... | 21,716  | 1919..... | 107,096 |
| 1855..... | 25,296  | 1876..... | 25,633  | 1898..... | 31,900  | 1920..... | 138,824 |
| 1856..... | 22,544  | 1877..... | 27,032  | 1899..... | 44,543  | 1921..... | 91,728  |
| 1857..... | 33,854  | 1878..... | 29,807  | 1900..... | 41,681  | 1922..... | 64,224  |
| 1858..... | 12,339  | 1879..... | 40,492  | 1901..... | 55,747  | 1923..... | 153,729 |
| 1859..... | 6,300   | 1880..... | 38,505  | 1902..... | 89,102  | 1924..... | 124,164 |
| 1860..... | 6,276   | 1881..... | 47,991  | 1903..... | 138,060 | 1925..... | 84,907  |
| 1861..... | 13,559  | 1882..... | 112,458 | 1904..... | 131,252 | 1926..... | 135,982 |
| 1862..... | 18,294  | 1883..... | 133,624 | 1905..... | 141,465 | 1927..... | 158,880 |
| 1863..... | 21,000  | 1884..... | 103,824 | 1906..... | 211,353 | 1928..... | 166,783 |
| 1864..... | 24,779  | 1885..... | 79,169  | 1907..... | 272,409 | 1929..... | 164,993 |
| 1865..... | 18,958  | 1886..... | 69,152  | 1908..... | 143,326 | 1930..... | 104,806 |
| 1866..... | 11,427  | 1887..... | 84,526  | 1909..... | 173,694 | 1931..... | 27,530  |
| 1867..... | 14,666  | 1888..... | 88,769  | 1910..... | 286,839 | 1932..... | 20,591  |
| 1868..... | 12,765  | 1889..... | 91,600  | 1911..... | 331,288 | 1933..... | 14,382  |
| 1869..... | 18,630  | 1890..... | 75,067  | 1912..... | 375,756 | 1934..... | 12,476  |
| 1870..... | 24,706  | 1891..... | 82,165  | 1913..... | 400,870 | 1935..... | 11,277  |
| 1871..... | 27,773  | 1892..... | 30,996  | 1914..... | 150,484 | 1936..... | 11,643  |
| 1872..... | 36,578  | 1893..... | 29,633  | 1915..... | 36,665  | 1937..... | 15,101  |
|           |         | 1894..... | 20,829  | 1916..... | 55,014  |           |         |

**Sex and Conjugal Condition of Immigrants.**—As shown by Table 3, the 11,643 immigrants who came to Canada in the calendar year 1936 included 4,818 males and 6,825 females, males constituting only 41.4 p.c. of the total, as compared with 41.3 p.c. in 1935. Prior to 1932 males normally exceeded females, as shown on p. 213 of the 1934-35 edition of the Year Book, where figures for the fiscal years 1911-34 will be found. Similar information for the calendar years 1929-36 is given in Table 4.



## 2.—Numbers of Immigrant Arrivals in Canada from the United Kingdom, the United States and Other Countries, calendar years 1908-37.

NOTE.—The 1936 edition of the Year Book showed, at p. 186, statistics of immigration on this basis, by calendar years from 1881 to 1900 and by fiscal years from 1901 to 1935.

| Year.     | Immigrant Arrivals from— |                |                  | Total.  | Year.     | Immigrant Arrivals from— |                |                  | Total.  |
|-----------|--------------------------|----------------|------------------|---------|-----------|--------------------------|----------------|------------------|---------|
|           | United Kingdom.          | United States. | Other Countries. |         |           | United Kingdom.          | United States. | Other Countries. |         |
| 1908..... | 55,727                   | 51,750         | 35,849           | 143,326 | 1923..... | 70,110                   | 16,710         | 46,903           | 133,729 |
| 1909..... | 62,344                   | 80,409         | 40,941           | 173,694 | 1924..... | 57,612                   | 16,042         | 50,510           | 124,164 |
| 1910..... | 112,633                  | 108,350        | 65,851           | 286,839 | 1925..... | 35,362                   | 17,717         | 31,828           | 84,907  |
| 1911..... | 144,076                  | 112,028        | 75,184           | 331,288 | 1926..... | 48,819                   | 20,944         | 66,219           | 135,982 |
| 1912..... | 145,859                  | 120,095        | 109,802          | 375,756 | 1927..... | 52,940                   | 23,818         | 82,128           | 158,886 |
| 1913..... | 156,984                  | 97,783         | 146,103          | 400,870 | 1928..... | 55,848                   | 29,033         | 81,002           | 166,783 |
| 1914..... | 49,879                   | 50,213         | 50,392           | 150,484 | 1929..... | 66,801                   | 31,552         | 66,340           | 164,693 |
| 1915..... | 9,606                    | 24,297         | 2,762            | 36,665  | 1930..... | 31,709                   | 25,632         | 47,665           | 104,906 |
| 1916..... | 8,506                    | 41,779         | 5,539            | 55,814  | 1931..... | 7,678                    | 15,195         | 4,557            | 27,530  |
| 1917..... | 2,632                    | 65,737         | 4,541            | 72,910  | 1932..... | 3,327                    | 13,709         | 3,555            | 20,591  |
| 1918..... | 4,484                    | 31,759         | 5,592            | 41,845  | 1933..... | 2,304                    | 8,500          | 3,578            | 14,382  |
| 1919..... | 57,251                   | 42,129         | 8,318            | 107,698 | 1934..... | 2,166                    | 6,071          | 4,239            | 12,476  |
| 1920..... | 75,804                   | 40,188         | 22,832           | 138,824 | 1935..... | 2,103                    | 5,291          | 3,883            | 11,277  |
| 1921..... | 43,772                   | 23,888         | 24,068           | 91,728  | 1936..... | 2,197                    | 4,870          | 4,570            | 11,643  |
| 1922..... | 31,005                   | 17,534         | 15,635           | 64,224  | 1937..... | 2,859                    | 5,555          | 6,887            | 15,101  |

## 3.—Sex and Conjugal Condition of Immigrants into Canada, by Age Groups, calendar years 1935 and 1936.

| Year and Age Group. | Males.  |          |          |           |        | Females. |          |          |           |        |
|---------------------|---------|----------|----------|-----------|--------|----------|----------|----------|-----------|--------|
|                     | Single. | Married. | Widowed. | Divorced. | Total. | Single.  | Married. | Widowed. | Divorced. | Total. |
| 1935.               |         |          |          |           |        |          |          |          |           |        |
| 0-14.....           | 1,886   | Nil      | Nil      | Nil       | 1,886  | 1,762    | Nil      | Nil      | Nil       | 1,762  |
| 15-19.....          | 338     | 2        | Nil      | Nil       | 340    | 414      | 79       | Nil      | Nil       | 493    |
| 20-24.....          | 299     | 41       | Nil      | Nil       | 340    | 352      | 382      | 2        | 1         | 737    |
| 25-29.....          | 259     | 134      | 1        | 1         | 395    | 205      | 653      | 8        | 11        | 877    |
| 30-39.....          | 180     | 470      | 7        | 7         | 664    | 203      | 1,125    | 44       | 27        | 1,399  |
| 40-49.....          | 76      | 396      | 13       | 12        | 497    | 112      | 395      | 54       | 18        | 579    |
| 50 or over.....     | 49      | 371      | 100      | 14        | 534    | 88       | 301      | 372      | 13        | 774    |
| Totals.....         | 3,087   | 1,414    | 121      | 34        | 4,656  | 3,136    | 2,935    | 480      | 70        | 6,621  |
| 1936.               |         |          |          |           |        |          |          |          |           |        |
| 0-14.....           | 1,846   | Nil      | Nil      | Nil       | 1,846  | 1,735    | Nil      | Nil      | Nil       | 1,735  |
| 15-19.....          | 383     | Nil      | Nil      | Nil       | 383    | 435      | 74       | 1        | Nil       | 510    |
| 20-24.....          | 291     | 45       | 2        | Nil       | 338    | 367      | 303      | 1        | 3         | 764    |
| 25-29.....          | 243     | 137      | 1        | 1         | 437    | 252      | 628      | 5        | 10        | 895    |
| 30-39.....          | 180     | 552      | 5        | 7         | 744    | 224      | 1,248    | 32       | 19        | 1,523  |
| 40-49.....          | 67      | 420      | 15       | 7         | 509    | 77       | 462      | 45       | 10        | 594    |
| 50 or over.....     | 70      | 395      | 92       | 4         | 561    | 98       | 352      | 345      | 9         | 804    |
| Totals.....         | 3,085   | 1,599    | 115      | 19        | 4,818  | 3,188    | 3,157    | 429      | 51        | 6,825  |

## 4.—Sex Distribution of Immigrants as Adult Males, Adult Females, and Children, calendar years 1929-36.

| Year.     | Adult Males. | Adult Females. | Children under 18. |          | Total.  |
|-----------|--------------|----------------|--------------------|----------|---------|
|           |              |                | Males.             | Females. |         |
| 1929..... | 75,814       | 47,425         | 23,213             | 18,541   | 164,993 |
| 1930..... | 44,078       | 32,882         | 15,521             | 12,325   | 104,806 |
| 1931..... | 7,280        | 9,728          | 5,045              | 4,877    | 27,530  |
| 1932..... | 5,429        | 7,259          | 4,238              | 3,665    | 20,591  |
| 1933..... | 3,691        | 5,749          | 2,500              | 2,442    | 14,382  |
| 1934..... | 2,998        | 5,107          | 2,151              | 2,210    | 12,476  |
| 1935..... | 2,550        | 4,593          | 2,106              | 2,028    | 11,277  |
| 1936..... | 2,691        | 4,830          | 2,127              | 1,995    | 11,643  |

**Racial Origins of Immigrants.**—Where there is any considerable immigration into a democratic country, the racial and linguistic composition of the immigrants is of great importance. Canadians prefer that settlers should be of a readily assimilable type, already identified by race or language with one or other of the two great races now inhabiting this country and prepared for the duties of Canadian citizenship. Since the French are not, to any great extent, an emigrating people, this means in practice that the great bulk of the preferable settlers are those who speak the English language—those coming from the United Kingdom or the United States. Next in order of readiness of assimilation are the Scandinavians, Dutch, and Germans, who readily learn English and are already acquainted with the working of democratic institutions. Settlers from Southern and Eastern Europe, however desirable from a purely economic point of view, are less readily assimilated, and the Canadianizing of the people who have come to Canada from these regions in the present century is a problem both in the agricultural Prairie Provinces and in the cities of the East. Less assimilable still, are those who come to Canada from the Orient. On the whole, the great bulk of Canadian immigration of the past generation has been drawn from the English-speaking countries and from those continental European countries where the population is ethnically closely related to the British, though for some years there was an increasing immigration of Slavs.

The racial origins of the immigrants who arrived in Canada in the calendar years 1926-36 are shown in Table 5. In the latest year the British races contributed 44 p.c. of the immigrants and the French 7 p.c.

5.—Racial Origins of Immigrants into Canada, calendar years 1926-36.

Note.—Dashes in this table indicate that no immigrants were reported under the corresponding stub items.

| Racial Origin.        | 1926.  | 1927.  | 1928.  | 1929.  | 1930.  | 1931.  | 1932.  | 1933. | 1934. | 1935. | 1936. |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| British—              |        |        |        |        |        |        |        |       |       |       |       |
| English.....          | 30,538 | 34,056 | 37,662 | 43,287 | 24,789 | 9,417  | 6,461  | 4,301 | 3,491 | 3,089 | 3,049 |
| Irish.....            | 11,428 | 11,857 | 13,323 | 14,478 | 7,876  | 2,748  | 1,886  | 1,310 | 1,021 | 895   | 858   |
| Scottish.....         | 10,539 | 17,509 | 18,532 | 23,207 | 11,996 | 3,825  | 2,612  | 1,700 | 1,198 | 1,204 | 1,133 |
| Welsh.....            | 1,568  | 2,204  | 3,316  | 3,686  | 1,116  | 371    | 184    | 126   | 115   | 88    | 105   |
| Totals, British.....  | 59,025 | 65,686 | 72,033 | 84,558 | 45,777 | 16,361 | 11,143 | 7,443 | 5,825 | 5,270 | 5,141 |
| Continental European— |        |        |        |        |        |        |        |       |       |       |       |
| Albanian.....         | 11     | 38     | 38     | 22     | 33     | 5      | —      | —     | 4     | 1     | 4     |
| Belgian.....          | 1,922  | 2,448  | 1,341  | 952    | 427    | 97     | 81     | 50    | 78    | 100   | 94    |
| Bohemian.....         | 112    | 80     | 90     | 104    | 76     | 22     | 24     | 12    | 10    | 7     | 13    |
| Bulgarian.....        | 88     | 243    | 267    | 311    | 353    | 17     | 16     | 15    | 5     | 13    | 23    |
| Croatian.....         | 1,138  | 963    | 1,108  | 751    | 604    | 118    | 95     | 107   | 152   | 158   | 232   |
| Czech.....            | 778    | 726    | 987    | 440    | 261    | 78     | 77     | 54    | 76    | 113   | 124   |
| Dalmatian.....        | —      | —      | 1      | 7      | —      | —      | —      | —     | —     | —     | 1     |
| Dutch.....            | 2,204  | 2,631  | 2,255  | 1,980  | 1,605  | 308    | 247    | 190   | 150   | 172   | 211   |
| Estonian.....         | 77     | 111    | 108    | 98     | 87     | 9      | 9      | 3     | 3     | 6     | 5     |
| Finnish.....          | 4,811  | 5,167  | 3,758  | 4,712  | 2,811  | 136    | 66     | 67    | 78    | 64    | 61    |
| French.....           | 2,882  | 3,334  | 4,605  | 5,187  | 5,084  | 2,038  | 2,332  | 1,337 | 903   | 840   | 833   |
| German.....           | 13,791 | 15,345 | 17,964 | 17,919 | 13,544 | 2,389  | 1,842  | 1,213 | 945   | 725   | 792   |
| Greek.....            | 319    | 610    | 770    | 741    | 575    | 66     | 71     | 53    | 58    | 67    | 92    |
| Herzegovinian.....    | 3      | 4      | —      | —      | —      | —      | —      | —     | —     | —     | —     |
| Italian.....          | 2,683  | 4,617  | 1,114  | 1,514  | 1,327  | 633    | 435    | 365   | 375   | 362   | 349   |
| Jewish.....           | 4,867  | 5,184  | 4,059  | 4,001  | 4,220  | 670    | 747    | 761   | 869   | 803   | 659   |
| Lithuanian.....       | 58     | 81     | 83     | 36     | 2      | 8      | —      | —     | —     | —     | —     |
| Lithuanian.....       | 792    | 893    | 1,799  | 959    | 624    | 65     | 49     | 44    | 45    | 25    | 51    |
| Magyar.....           | 5,262  | 5,875  | 6,366  | 5,484  | 3,360  | 530    | 333    | 506   | 442   | 344   | 334   |
| Maltese.....          | 35     | 38     | 26     | 41     | 22     | 5      | 6      | —     | —     | —     | 4     |
| Mexican.....          | 3      | 1      | —      | —      | 3      | 1      | —      | —     | —     | 1     | 6     |
| Montenegrin.....      | 1      | 4      | —      | 2      | 3      | —      | —      | —     | —     | —     | —     |
| Moravian.....         | 22     | 50     | 7      | 21     | 5      | 1      | 3      | —     | —     | —     | —     |
| Polish.....           | 5,552  | 8,481  | 8,583  | 6,424  | 5,207  | 680    | 474    | 410   | 436   | 447   | 414   |
| Portuguese.....       | 21     | 7      | 22     | 28     | 11     | 5      | 9      | 5     | 5     | 5     | 4     |
| Roumanian.....        | 358    | 248    | 336    | 400    | 300    | 48     | 38     | 38    | 44    | 43    | 61    |
| Russian.....          | 1,261  | 1,280  | 1,245  | 858    | 1,123  | 111    | 104    | 82    | 70    | 90    | 94    |
| Ruthenian.....        | 9,534  | 10,899 | 16,080 | 11,009 | 8,133  | 541    | 482    | 390   | 578   | 483   | 815   |
| Scandinavian—         |        |        |        |        |        |        |        |       |       |       |       |
| Danish.....           | 1,696  | 4,032  | 4,092  | 3,140  | 1,421  | 175    | 110    | 82    | 63    | 54    | 63    |
| Icelandic.....        | 57     | 50     | 49     | 35     | 40     | 10     | 12     | 10    | 12    | 11    | 4     |
| Norwegian.....        | 3,820  | 6,415  | 3,707  | 3,750  | 1,808  | 262    | 275    | 144   | 132   | 122   | 101   |
| Swedish.....          | 3,011  | 3,806  | 4,284  | 3,895  | 1,440  | 276    | 225    | 126   | 100   | 113   | 81    |

## 5.—Racial Origins of Immigrants into Canada, calendar years 1926-36—concluded.

| Racial Origin.                    | 1926.   | 1927.   | 1928.   | 1929.   | 1930.   | 1931.  | 1932.  | 1933.  | 1934.  | 1935.  | 1936.  |
|-----------------------------------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|
| Continental European—con.         |         |         |         |         |         |        |        |        |        |        |        |
| Serbian.....                      | 854     | 586     | 416     | 387     | 208     | 50     | 51     | 35     | 38     | 28     | 40     |
| Slovak.....                       | 4,024   | 4,256   | 4,466   | 2,617   | 2,645   | 344    | 262    | 408    | 594    | 415    | 571    |
| Spanish.....                      | 49      | 45      | 62      | 62      | 36      | 26     | 23     | 12     | 15     | 12     | 22     |
| Spanish American.....             | 6       | 2       | 6       | 5       | 2       | 1      | 2      | 4      | —      | —      | —      |
| Swiss.....                        | 588     | 818     | 621     | 652     | 340     | 72     | 57     | 46     | 43     | 55     | 60     |
| Turkish.....                      | 6       | 9       | 7       | 7       | 8       | 2      | —      | 2      | —      | —      | —      |
| Yugoslavia.....                   | 2,206   | 1,640   | 2,915   | 973     | 521     | 78     | 59     | 68     | 104    | 119    | 109    |
| Totals, Continental European..... | 74,901  | 92,077  | 93,632  | 79,571  | 58,300  | 10,771 | 9,118  | 6,662  | 6,429  | 5,836  | 6,333  |
| Non-European—                     |         |         |         |         |         |        |        |        |        |        |        |
| American Indian.....              | 13      | 26      | 21      | 25      | 8       | 29     | 24     | 10     | 6      | 2      | 2      |
| Arabian.....                      | 8       | 8       | 1       | 4       | 7       | 1      | 2      | —      | 1      | 2      | —      |
| Armenian.....                     | 79      | 66      | 20      | 33      | 28      | 6      | 5      | 10     | 3      | 5      | 6      |
| Chinese.....                      | —       | 2       | —       | 1       | —       | —      | 1      | 1      | —      | —      | —      |
| East Indian.....                  | 70      | 56      | 56      | 49      | 80      | 52     | 61     | 36     | 33     | 26     | 13     |
| Japanese.....                     | 443     | 511     | 559     | 180     | 218     | 174    | 119    | 106    | 126    | 70     | 103    |
| Korean.....                       | —       | —       | —       | —       | —       | —      | —      | —      | —      | —      | —      |
| Negro.....                        | 302     | 313     | 359     | 464     | 294     | 104    | 71     | 80     | 25     | 28     | 18     |
| Persian.....                      | 4       | 6       | 1       | 1       | 1       | 1      | 1      | —      | —      | —      | 1      |
| Syrian.....                       | 236     | 135     | 124     | 107     | 93      | 31     | 46     | 34     | 27     | 32     | 26     |
| Totals, Non-European.....         | 1,156   | 1,123   | 1,118   | 864     | 729     | 398    | 330    | 277    | 222    | 165    | 160    |
| Grand Totals.....                 | 135,982 | 158,886 | 166,783 | 164,993 | 164,806 | 27,530 | 20,591 | 14,332 | 12,476 | 11,277 | 11,613 |

Languages of Immigrants.—The languages of immigrants 10 years old or over, arriving *via* ocean ports and from the United States, are shown for the calendar years 1931-36, in Table 6. English-speaking immigrants constituted 58 p.c. of the total in 1936, and French-speaking immigrants 5 p.c.

## 6.—Languages of Immigrants, Ten Years of Age or Over, calendar years 1931-36.

NOTE.—See headnote to Table 5.

| Language.                 | 1931.  | 1932.  | 1933.  | 1934. | 1935. | 1936. |
|---------------------------|--------|--------|--------|-------|-------|-------|
| English.....              | 15,869 | 11,037 | 7,524  | 6,059 | 5,367 | 5,397 |
| French.....               | 1,028  | 922    | 563    | 487   | 507   | 485   |
| German.....               | 624    | 506    | 378    | 370   | 274   | 282   |
| Norwegian.....            | 68     | 74     | 34     | 33    | 29    | 36    |
| Swedish.....              | 72     | 65     | 21     | 23    | 18    | 15    |
| Danish.....               | 56     | 45     | 44     | 19    | 21    | 10    |
| Icelandic.....            | —      | 6      | 5      | 4     | 2     | —     |
| Flemish.....              | 36     | 36     | 23     | 45    | 53    | 43    |
| Dutch.....                | 39     | 38     | 21     | 36    | 26    | 53    |
| Finnish.....              | 71     | 34     | 36     | 44    | 37    | 30    |
| Estonian.....             | 5      | 3      | 1      | 1     | 3     | 3     |
| Lithuanian.....           | 3      | 2      | 4      | —     | —     | 3     |
| Lithuanian.....           | 36     | 30     | 29     | 24    | 22    | 38    |
| Russian.....              | 51     | 36     | 50     | 54    | 32    | 36    |
| Hebrew <sup>1</sup> ..... | 266    | 215    | 223    | 137   | 158   | 197   |
| Ruthenian.....            | —      | —      | —      | —     | —     | —     |
| Russian.....              | 211    | 164    | 149    | 205   | 184   | 206   |
| Ukrainian.....            | —      | —      | —      | —     | —     | —     |
| Polish.....               | 421    | 390    | 505    | 688   | 707   | 793   |
| Roumanian.....            | 39     | 32     | 29     | 45    | 64    | 65    |
| Slovenian.....            | 10     | —      | 3      | —     | —     | 3     |
| Czech (Bohemian).....     | 224    | 192    | 269    | 433   | 356   | 490   |
| Croatian (Serbian).....   | 111    | 120    | 114    | 189   | 214   | 305   |
| Hungarian (Magyar).....   | 300    | 211    | 314    | 290   | 234   | 265   |
| Italian.....              | 420    | 373    | 257    | 261   | 265   | 245   |
| Spanish.....              | 14     | 24     | 19     | 6     | 7     | 9     |
| Portuguese.....           | —      | 1      | 1      | —     | —     | —     |
| Greek.....                | 52     | 49     | 42     | 42    | 44    | 56    |
| Albanian.....             | 4      | —      | —      | 1     | 1     | 3     |
| Turkish.....              | 1      | —      | —      | —     | —     | 4     |
| Bulgarian.....            | 17     | 11     | 10     | 6     | 10    | 13    |
| Chinese.....              | 1      | 1      | —      | —     | —     | —     |
| Japanese.....             | 161    | 112    | 104    | 117   | 66    | 96    |
| East Indian.....          | 48     | 48     | 30     | 29    | 21    | 10    |
| Armenian (Aramaic).....   | 4      | 10     | 3      | 1     | 1     | 5     |
| Syrian (Arabic).....      | 15     | 20     | 18     | 10    | 13    | 15    |
| Totals.....               | 20,276 | 14,772 | 10,791 | 9,640 | 8,736 | 9,286 |

<sup>1</sup> Includes those speaking Yiddish.

**Nationalities of Immigrants.**—In the calendar year 1936 the percentage of British subjects immigrating to Canada was 27, while that of United States citizens was 35. In 1930, when total immigration was over eight times that of the latest year, the proportions were 34 p.c. and 21 p.c., respectively. The third largest group, comprising immigrants of Polish nationality, dropped from 16 p.c. in 1930 to 13 p.c. in 1936. Table 7 shows the nationalities of immigrants for the six latest years.

**7.—Nationalities of Immigrants, calendar years 1931-36.**

NOTE.—See headnote to Table 5.

| Nationality.                   | 1931.         | 1932.         | 1933.         | 1934.         | 1935.         | 1936.         |
|--------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Albanian.....                  | 4             | —             | 1             | 1             | 1             | 4             |
| Arabian.....                   | 1             | —             | 1             | —             | 8             | —             |
| Argentinian.....               | 3             | 1             | 5             | 1             | —             | —             |
| Armenian.....                  | —             | 1             | 1             | —             | —             | —             |
| Austrian.....                  | 67            | 45            | 46            | 30            | 20            | 40            |
| Belgian.....                   | 56            | 46            | 34            | 62            | 79            | 63            |
| Brazilian.....                 | 2             | 1             | 2             | 1             | 5             | —             |
| British.....                   | 9,794         | 15,163        | 3,630         | 3,151         | 3,062         | 3,171         |
| Bulgarian.....                 | 11            | 9             | 9             | 6             | 13            | 15            |
| Chilean.....                   | —             | 1             | —             | 1             | —             | —             |
| Chinese.....                   | —             | 1             | 1             | 1             | —             | —             |
| Colombian.....                 | —             | 6             | —             | —             | —             | —             |
| Costa Rican.....               | —             | 1             | 1             | —             | —             | —             |
| Cuban.....                     | 2             | 1             | 5             | 1             | —             | 7             |
| Czechoslovakian.....           | 544           | 450           | 581           | 857           | 647           | 771           |
| Danish.....                    | 78            | 52            | 50            | 24            | 24            | 18            |
| Danziger.....                  | 2             | —             | —             | 1             | —             | —             |
| Dominican.....                 | —             | —             | 1             | —             | —             | —             |
| Dutch.....                     | 36            | 32            | 29            | 42            | 31            | 60            |
| Ecuadorian.....                | —             | 2             | —             | —             | —             | 1             |
| Estonian.....                  | 10            | 3             | —             | 1             | 3             | 5             |
| Finnish.....                   | 111           | 42            | 45            | 62            | 39            | 49            |
| French.....                    | 77            | 75            | 55            | 53            | 68            | 96            |
| German.....                    | 408           | 312           | 185           | 110           | 98            | 72            |
| Greek.....                     | 29            | 36            | 26            | 39            | 43            | 77            |
| Guatemalan.....                | 1             | —             | —             | —             | —             | —             |
| Haitian.....                   | —             | 1             | —             | —             | —             | —             |
| Honduran.....                  | —             | —             | —             | —             | 1             | —             |
| Hungarian.....                 | 436           | 274           | 413           | 378           | 250           | 247           |
| Icelandic.....                 | 2             | 5             | 5             | 3             | 6             | 37            |
| Italian.....                   | 466           | 269           | 241           | 295           | 277           | 281           |
| Japanese.....                  | 112           | 98            | 98            | 110           | 55            | 78            |
| Korean.....                    | —             | —             | 1             | —             | —             | —             |
| Latvian.....                   | 6             | 7             | 10            | 1             | 10            | 2             |
| Lithuanian.....                | 90            | 79            | 51            | 50            | 25            | 73            |
| Luxemburger.....               | —             | —             | —             | —             | 2             | —             |
| Mexican.....                   | 3             | —             | 4             | 4             | 42            | 49            |
| Norwegian.....                 | 67            | 05            | 35            | 30            | 25            | —             |
| Panamanian.....                | 2             | 1             | 3             | 1             | —             | 1             |
| Paraguayan.....                | —             | —             | 1             | —             | —             | —             |
| Persian.....                   | —             | —             | 5             | —             | —             | —             |
| Peruvian.....                  | 3             | 2             | —             | —             | —             | —             |
| Polish.....                    | 1,244         | 1,070         | 1,042         | 1,337         | 1,336         | 1,552         |
| Romanian.....                  | 230           | 153           | 173           | 153           | 215           | 168           |
| Russian.....                   | 52            | 50            | 78            | 48            | 23            | 30            |
| South American.....            | —             | —             | 1             | —             | —             | —             |
| Spanish.....                   | 5             | 1             | —             | 3             | 5             | 10            |
| Swedish.....                   | 55            | 40            | 22            | 15            | 27            | 11            |
| Swiss.....                     | 50            | 30            | 31            | 29            | 40            | 65            |
| Syrian.....                    | 12            | 12            | 12            | 14            | 14            | 12            |
| Turkish.....                   | 3             | 1             | 4             | —             | 1             | 3             |
| Ukrainian.....                 | 3             | 5             | 3             | —             | —             | —             |
| United States.....             | 13,154        | 1,901         | 7,194         | 5,225         | 4,474         | 4,122         |
| Uruguayan.....                 | —             | 1             | 1             | —             | —             | —             |
| Venezuelan.....                | —             | 2             | —             | —             | 1             | —             |
| West Indian (not British)..... | 1             | —             | —             | —             | 1             | —             |
| Yugoslavian.....               | 298           | 234           | 241           | 292           | 305           | 423           |
| <b>Totals.....</b>             | <b>27,530</b> | <b>26,591</b> | <b>14,383</b> | <b>12,476</b> | <b>11,277</b> | <b>11,643</b> |

**Countries of Birth of Immigrants.**—In Table 8 will be found the countries of birth of the immigrants into Canada in the calendar years 1931-36. The figures show that the United States with 3,591 was the birthplace of more of our 1936 immigrants than any other single country. This has been the case since 1930. In 1936 Poland came second with 1,599, England third with 1,289, and Czechoslovakia fourth with 700.

### 8.—Countries of Birth of Immigrants, calendar years 1931-36.

NOTE.—See heading to Table 5.

| Country of Birth.                  | 1931.         | 1932.         | 1933.         | 1934.         | 1935.         | 1936.         |
|------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Africa (British).....              | 54            | 37            | 30            | 19            | 21            | 23            |
| Africa (not British).....          | 9             | 5             | 3             | 5             | 14            | 1             |
| Albania.....                       | 5             | -             | 1             | 2             | 1             | 4             |
| Argentina.....                     | 10            | 3             | 11            | 3             | 4             | -             |
| Armenia.....                       | 1             | 1             | -             | -             | -             | -             |
| Asia.....                          | 10            | 5             | 4             | 6             | 21            | 9             |
| Australia.....                     | 93            | 50            | 36            | 40            | 27            | 24            |
| Austria.....                       | 99            | 75            | 53            | 54            | 47            | 47            |
| Belgium.....                       | 82            | 67            | 45            | 71            | 97            | 101           |
| Brazil.....                        | 16            | 6             | 6             | 3             | 14            | 8             |
| Bulgaria.....                      | 11            | 9             | 14            | 5             | 12            | 18            |
| Canada.....                        | 1,106         | 1,139         | 779           | 550           | 543           | 553           |
| Central America.....               | 9             | 3             | 2             | -             | 2             | 4             |
| Chile.....                         | 4             | 2             | 1             | 3             | -             | 1             |
| China.....                         | 30            | 29            | 23            | 26            | 29            | 29            |
| Czechoslovakia.....                | 539           | 445           | 501           | 855           | 646           | 700           |
| Danaisg.....                       | 1             | 2             | -             | 7             | -             | -             |
| Denmark.....                       | 84            | 60            | 58            | 30            | 33            | 27            |
| East Indies.....                   | -             | -             | -             | -             | -             | -             |
| England.....                       | 4,938         | 2,802         | 1,720         | 1,405         | 1,320         | 1,289         |
| Estonia.....                       | 10            | 4             | 1             | 2             | 5             | 3             |
| Finland.....                       | 118           | 50            | 56            | 68            | 49            | 52            |
| France.....                        | 101           | 102           | 69            | 64            | 78            | 100           |
| Germany.....                       | 447           | 348           | 213           | 147           | 122           | 114           |
| Greece.....                        | 58            | 60            | 40            | 69            | 69            | 83            |
| Gt. Brit. (British).....           | 10            | 5             | 5             | 6             | 6             | 7             |
| Holland.....                       | 41            | 32            | 36            | 32            | 32            | 73            |
| Hungary.....                       | 456           | 232           | 429           | 387           | 260           | 262           |
| Iceland.....                       | 2             | 8             | 6             | 5             | 7             | 1             |
| India (British).....               | 134           | 107           | 81            | 63            | 61            | 42            |
| Ireland (Free State).....          | 363           | 193           | 144           | 135           | 120           | 127           |
| Ireland (Northern).....            | 647           | 269           | 181           | 208           | 147           | 130           |
| Italy.....                         | 516           | 331           | 260           | 333           | 316           | 314           |
| Japan.....                         | 183           | 125           | 113           | 129           | 75            | 104           |
| Korea.....                         | -             | 2             | 2             | 6             | 4             | 2             |
| Latvia.....                        | 9             | 17            | 12            | 6             | 10            | 6             |
| Lesser British Isles.....          | 37            | 18            | 17            | 5             | 4             | 8             |
| Lithuania.....                     | 89            | 88            | 50            | 54            | 29            | 72            |
| Malta.....                         | 6             | 3             | -             | -             | -             | -             |
| Mexico.....                        | 7             | 14            | 11            | 7             | 53            | 76            |
| Newfoundland.....                  | 416           | 310           | 287           | 308           | 325           | 393           |
| New Zealand.....                   | 36            | 20            | 29            | 13            | 17            | 12            |
| Norway.....                        | 101           | 94            | 47            | 39            | 44            | 46            |
| Persia.....                        | 2             | -             | -             | -             | 1             | 1             |
| Poland.....                        | 1,307         | 1,134         | 1,075         | 1,309         | 1,351         | 1,599         |
| Portugal.....                      | 2             | 1             | 1             | 4             | -             | -             |
| Roumania.....                      | 246           | 162           | 134           | 181           | 211           | 171           |
| Russia.....                        | 191           | 153           | 166           | 119           | 78            | 78            |
| St. Pierre and Miquelon.....       | 4             | 1             | 1             | 9             | 6             | 12            |
| Scotland.....                      | 2,391         | 1,182         | 778           | 538           | 547           | 569           |
| South America.....                 | 10            | 20            | 8             | 6             | 12            | 5             |
| Spain.....                         | 8             | 2             | 2             | 5             | 1             | 8             |
| Sweden.....                        | 97            | 63            | 37            | 28            | 42            | 22            |
| Switzerland.....                   | 55            | 32            | 41            | 28            | 48            | 67            |
| Syria.....                         | 23            | 26            | 21            | 20            | 18            | 23            |
| Turkey.....                        | 12            | 8             | 13            | 5             | 7             | 16            |
| Ukraine.....                       | 3             | 4             | 3             | -             | -             | 3             |
| United States.....                 | 11,582        | 10,140        | 6,180         | 4,519         | 3,859         | 3,591         |
| Wales.....                         | 294           | 106           | 80            | 78            | 45            | 64            |
| West Indies (British).....         | 63            | 51            | 37            | 48            | 31            | 27            |
| West Indies (not British).....     | 16            | 4             | 7             | 2             | -             | 6             |
| Yugoslavia.....                    | 306           | 244           | 251           | 299           | 313           | 446           |
| Other European countries.....      | 2             | -             | -             | 2             | 2             | -             |
| Other countries (British).....     | 16            | 9             | 5             | 15            | 3             | 6             |
| Other countries (not British)..... | 11            | 9             | 6             | 13            | 6             | 3             |
| Born at sea.....                   | 2             | 1             | 1             | 1             | -             | 4             |
| <b>Totals.....</b>                 | <b>27,530</b> | <b>20,591</b> | <b>14,382</b> | <b>12,476</b> | <b>11,277</b> | <b>11,643</b> |

**Ports of Arrival of Immigrants.**—Throughout the greater part of our history, Quebec has been the port at which the greatest number of our immigrants have landed. Of recent years there has been a tendency for a larger percentage of immigrants to arrive at the port of Halifax. This would appear to have been due to increasing immigration in the early spring months before the St. Lawrence is open for traffic. Figures for recent years are given in Table 9.

9.—Immigrants Arriving in Canada, by Chief Ports of Arrival, calendar years 1931-36.

| Port.                       | 1931.         | 1932.         | 1933.         | 1934.         | 1935.         | 1936.         |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Quebec.....                 | 6,940         | 3,558         | 3,063         | 2,889         | 2,901         | 3,478         |
| Saint John.....             | 1,162         | 46            | 30            | 25            | 20            | 21            |
| Halifax.....                | 2,389         | 1,950         | 1,440         | 1,965         | 1,494         | 1,654         |
| North Sydney.....           | 300           | 219           | 223           | 200           | 247           | 324           |
| Sydney.....                 | 18            | 3             | 2             | 1             | 7             | 4             |
| Montreal.....               | 131           | 69            | 58            | 64            | 54            | 55            |
| Vancouver.....              | 367           | 294           | 223           | 274           | 187           | 200           |
| Victoria.....               | 135           | 84            | 56            | 53            | 51            | 44            |
| New York.....               | 884           | 632           | 738           | 850           | 943           | 878           |
| Boston.....                 | 2             | Nil           | 9             | 1             | 10            | 5             |
| Charlottetown.....          | Nil           | Nil           | Nil           | 1             | Nil           | Nil           |
| Other ports.....            | 87            | 27            | 34            | 22            | 72            | 104           |
| From the United States..... | 15,185        | 13,709        | 8,500         | 6,071         | 5,291         | 4,879         |
| <b>Totals.....</b>          | <b>27,530</b> | <b>20,591</b> | <b>14,382</b> | <b>12,476</b> | <b>11,277</b> | <b>11,643</b> |

**Destinations of Immigrants.**—Table 10 shows that in the nine latest calendar years the province of Ontario continued to receive the largest number of immigrants, as has been the case since 1905. In 1929 and 1930 Manitoba was in second place, while in the seven latest years Quebec stood second as the immediate destination of new arrivals. The 1934-35 edition of the Year Book gives similar information, by fiscal years, from 1901 to 1934.

10.—Destinations of Immigrants into Canada, by Provinces, calendar years 1929-37.

| Calendar Year. | Maritime Provinces. | Quebec. | Ontario. | Manitoba. | Saskatchewan. | Alberta. | British Columbia and Yukon. | Not Shown. | Total.               |
|----------------|---------------------|---------|----------|-----------|---------------|----------|-----------------------------|------------|----------------------|
| 1929.....      | 4,061               | 23,052  | 61,684   | 38,340    | 11,336        | 15,300   | 9,417                       | 1          | 194,963 <sup>1</sup> |
| 1930.....      | 4,060               | 18,405  | 37,851   | 23,837    | 6,435         | 7,812    | 6,395                       | 2          | 104,806 <sup>1</sup> |
| 1931.....      | 2,547               | 5,452   | 12,316   | 1,056     | 1,352         | 2,213    | 2,583                       | Nil        | 27,530 <sup>1</sup>  |
| 1932.....      | 1,762               | 4,134   | 9,312    | 757       | 971           | 1,692    | 1,960                       | Nil        | 20,591 <sup>1</sup>  |
| 1933.....      | 1,281               | 2,755   | 6,210    | 558       | 727           | 1,296    | 1,552                       | 1          | 14,382 <sup>1</sup>  |
| 1934.....      | 1,027               | 2,456   | 5,582    | 390       | 519           | 1,098    | 1,402                       | Nil        | 12,476 <sup>1</sup>  |
| 1935.....      | 1,060               | 2,258   | 4,798    | 708       | 408           | 735      | 1,315                       | Nil        | 11,277 <sup>1</sup>  |
| 1936.....      | 931                 | 1,895   | 4,912    | 638       | 628           | 917      | 1,366                       | Nil        | 11,643 <sup>1</sup>  |
| 1937.....      | 1,136               | 2,611   | 6,463    | 1,430     | 616           | 1,175    | 1,697                       | Nil        | 15,101 <sup>1</sup>  |

<sup>1</sup> Includes immigrants destined for the Northwest Territories: 2 in 1929, 9 in 1930, 11 in 1931, 3 in 1932, 2 in 1933, 2 in 1934, 7 in 1935, 5 in 1936, and 3 in 1937.

**Occupations of Immigrant Arrivals.**—The immigrants most universally acceptable to Canadians are those who settle on the land or those females who enter domestic service. In Table 11 will be found statistics of the occupations and destinations of immigrants arriving in Canada during the calendar year 1936.

## 11.—Immigrants Arriving in Canada, Classified by Occupation and Sex, According to Destination, calendar year 1936.

NOTE.—See headnote to Table 5.

| Destination.                | Total. | Farming Class.   |     |               |     | Labouring Class. |    |               |    | Mechanics.       |     |               |    |
|-----------------------------|--------|------------------|-----|---------------|-----|------------------|----|---------------|----|------------------|-----|---------------|----|
|                             |        | 18 Yrs. or Over. |     | Under 18 Yrs. |     | 18 Yrs. or Over. |    | Under 18 Yrs. |    | 18 Yrs. or Over. |     | Under 18 Yrs. |    |
|                             |        | M.               | F.  | M.            | F.  | M.               | F. | M.            | F. | M.               | F.  | M.            | F. |
| Prince Edward Island.....   | 63     | 7                | 6   | 8             | 4   | -                | -  | -             | -  | -                | -   | -             | -  |
| Via ocean ports.....        | 7      | 1                | 1   | -             | -   | -                | -  | -             | -  | -                | -   | -             | -  |
| From the United States..... | 56     | 7                | 5   | 17            | 11  | -                | -  | -             | -  | -                | -   | -             | -  |
| Nova Scotia.....            | 608    | 45               | 20  | 17            | 4   | 40               | 4  | 4             | 4  | 13               | 2   | 13            | 7  |
| Via ocean ports.....        | 370    | 17               | 7   | 10            | 6   | 42               | 2  | -             | 1  | 9                | 1   | 9             | 4  |
| From the United States..... | 298    | 28               | 13  | 11            | 5   | 7                | 2  | 4             | 3  | 4                | 1   | 4             | 1  |
| New Brunswick.....          | 250    | 21               | 9   | 3             | 9   | 7                | -  | 1             | 1  | 5                | 1   | 1             | 1  |
| Via ocean ports.....        | 43     | 4                | 1   | -             | -   | -                | -  | -             | -  | -                | -   | -             | -  |
| From the United States..... | 207    | 17               | 8   | 3             | 5   | 6                | -  | 1             | 1  | 4                | 1   | 1             | 1  |
| Quebec.....                 | 1,995  | 61               | 26  | 23            | 19  | 81               | 14 | 17            | 6  | 100              | 36  | 16            | 13 |
| Via ocean ports.....        | 1,053  | 30               | 14  | 14            | 7   | 42               | 4  | 6             | 2  | 58               | 22  | 12            | 7  |
| From the United States..... | 942    | 31               | 12  | 9             | 9   | 39               | 10 | 11            | 4  | 48               | 14  | 4             | 6  |
| Ontario.....                | 4,913  | 219              | 129 | 113           | 65  | 65               | 18 | 13            | 7  | 225              | 94  | 30            | 31 |
| Via ocean ports.....        | 2,803  | 153              | 96  | 95            | 58  | 30               | 7  | 7             | 4  | 96               | 32  | 9             | 11 |
| From the United States..... | 2,110  | 166              | 33  | 18            | 7   | 35               | 11 | 6             | 3  | 129              | 62  | 21            | 20 |
| Manitoba.....               | 938    | 162              | 123 | 135           | 121 | 10               | 5  | 4             | 4  | 6                | 5   | 1             | 2  |
| Via ocean ports.....        | 793    | 148              | 122 | 131           | 116 | 3                | -  | 3             | -  | 2                | 2   | -             | -  |
| From the United States..... | 145    | 14               | 6   | 4             | 5   | 7                | 5  | 1             | 2  | 4                | 3   | 1             | 4  |
| Saskatchewan.....           | 528    | 72               | 34  | 26            | 27  | 1                | 3  | 1             | 2  | 2                | 3   | 1             | 4  |
| Via ocean ports.....        | 344    | 36               | 21  | 20            | 22  | 2                | 2  | -             | 2  | -                | -   | -             | -  |
| From the United States..... | 184    | 36               | 13  | 6             | 5   | 1                | 1  | -             | -  | 2                | 3   | -             | 4  |
| Alberta.....                | 917    | 137              | 81  | 72            | 53  | 7                | 2  | 1             | 1  | 9                | 2   | 1             | 1  |
| Via ocean ports.....        | 583    | 71               | 45  | 49            | 32  | 1                | -  | 1             | -  | 3                | 2   | 1             | 1  |
| From the United States..... | 334    | 66               | 36  | 23            | 21  | 6                | 2  | 3             | 2  | 6                | 2   | 7             | 5  |
| British Columbia.....       | 1,362  | 93               | 45  | 30            | 15  | 35               | 8  | 3             | 2  | 42               | 22  | 7             | 2  |
| Via ocean ports.....        | 1,766  | 49               | 18  | 16            | 3   | 19               | 6  | 3             | 1  | 20               | 7   | 2             | 3  |
| From the United States..... | 596    | 44               | 27  | 14            | 12  | 16               | 2  | -             | 1  | 22               | 15  | 5             | 3  |
| Yukon.....                  | 4      | 1                | -   | -             | -   | -                | -  | -             | -  | -                | -   | -             | -  |
| Via ocean ports.....        | -      | -                | -   | -             | -   | -                | -  | -             | -  | -                | -   | -             | -  |
| From the United States..... | 4      | 1                | -   | -             | -   | -                | -  | -             | -  | -                | -   | -             | -  |
| Northwest Territories.....  | 5      | -                | -   | -             | -   | -                | -  | -             | -  | -                | -   | -             | -  |
| Via ocean ports.....        | -      | -                | -   | -             | -   | -                | -  | -             | -  | -                | -   | -             | -  |
| From the United States..... | -      | -                | -   | -             | -   | -                | -  | -             | -  | -                | -   | -             | -  |
| Totals.....                 | 11,613 | 818              | 478 | 427           | 317 | 255              | 54 | 43            | 22 | 408              | 165 | 57            | 56 |
| Via Ocean Ports.....        | 6,767  | 598              | 325 | 331           | 240 | 138              | 21 | 20            | 10 | 189              | 65  | 24            | 20 |
| From the United States..... | 4,876  | 310              | 153 | 96            | 77  | 117              | 33 | 23            | 12 | 219              | 100 | 33            | 36 |

11.—Immigrants Arriving in Canada, Classified by Occupation and Sex, According to Destination, calendar year 1938—concluded.

| Destination.                | Trading and Clerical Classes. |     |               |    | Mining Class.    |    |               |    | Female Domestic. |    |               |       | Other Classes.   |       |               |       |
|-----------------------------|-------------------------------|-----|---------------|----|------------------|----|---------------|----|------------------|----|---------------|-------|------------------|-------|---------------|-------|
|                             | 18 Yrs. or Over.              |     | Under 18 Yrs. |    | 18 Yrs. or Over. |    | Under 18 Yrs. |    | 18 Yrs. or Over. |    | Under 18 Yrs. |       | 18 Yrs. or Over. |       | Under 18 Yrs. |       |
|                             | M.                            | F.  | M.            | F. | M.               | F. | M.            | F. | M.               | F. | M.            | F.    | M.               | F.    | M.            | F.    |
|                             |                               |     |               |    |                  |    |               |    |                  |    |               |       |                  |       |               |       |
| Prince Edward Island.....   | -                             | -   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | 2                | 19    | 8             | 8     |
| Via ocean ports.....        | -                             | -   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | -                | 2     | 1             | 1     |
| From the United States..... | -                             | -   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | -                | 1     | 1             | 1     |
| Nova Scotia.....            | 20                            | 11  | 1             | 2  | -                | -  | -             | -  | -                | -  | -             | -     | 31               | 135   | 69            | 71    |
| Via ocean ports.....        | 11                            | 6   | -             | 1  | 1                | -  | -             | -  | -                | -  | -             | -     | 12               | 51    | 21            | 26    |
| From the United States..... | 9                             | 5   | 1             | 1  | -                | -  | -             | -  | -                | -  | -             | -     | 19               | 54    | 48            | 45    |
| New Brunswick.....          | 2                             | 6   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | 2                | 8     | 4             | 4     |
| Via ocean ports.....        | 2                             | 4   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | 2                | 8     | 4             | 4     |
| From the United States..... | 5                             | 4   | 1             | -  | -                | -  | -             | -  | -                | -  | -             | -     | 7                | 12    | 4             | 4     |
| Quebec.....                 | 133                           | 46  | 24            | 19 | -                | 2  | -             | -  | -                | -  | -             | -     | 147              | 600   | 41            | 40    |
| Via ocean ports.....        | 85                            | 29  | 12            | 11 | -                | -  | -             | -  | -                | -  | -             | -     | 147              | 593   | 215           | 238   |
| From the United States..... | 48                            | 17  | 12            | 8  | -                | -  | -             | -  | -                | -  | -             | -     | 79               | 347   | 100           | 102   |
| Ontario.....                | 257                           | 121 | 43            | 33 | 20               | 6  | 3             | 3  | 1                | 1  | 1             | 1     | 265              | 1,506 | 753           | 692   |
| Via ocean ports.....        | 63                            | 25  | 6             | 6  | 9                | 3  | 3             | 1  | 1                | 1  | 1             | 1     | 95               | 854   | 493           | 460   |
| From the United States..... | 194                           | 96  | 37            | 27 | 11               | 3  | -             | -  | -                | -  | -             | -     | 170              | 650   | 260           | 232   |
| Manitoba.....               | 12                            | 9   | 1             | -  | -                | -  | -             | -  | -                | -  | -             | -     | 13               | 142   | 79            | 80    |
| Via ocean ports.....        | 7                             | 8   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | 5                | 19    | 107           | 57    |
| From the United States..... | 13                            | 8   | 3             | 2  | -                | -  | -             | -  | -                | -  | -             | -     | 13               | 40    | 15            | 15    |
| Saskatchewan.....           | 13                            | 8   | 3             | 2  | -                | -  | -             | -  | -                | -  | -             | -     | 29               | 132   | 66            | 73    |
| Via ocean ports.....        | 12                            | 7   | 3             | 2  | -                | -  | -             | -  | -                | -  | -             | -     | 29               | 132   | 66            | 73    |
| From the United States..... | 1                             | 1   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | 1                | 1     | 1             | 1     |
| Alberta.....                | 12                            | 9   | 9             | 7  | -                | -  | -             | -  | -                | -  | -             | -     | 30               | 249   | 90            | 105   |
| Via ocean ports.....        | 10                            | 5   | 7             | 3  | -                | -  | -             | -  | -                | -  | -             | -     | 30               | 249   | 90            | 105   |
| From the United States..... | 11                            | 4   | 2             | 4  | -                | -  | -             | -  | -                | -  | -             | -     | 14               | 168   | 72            | 76    |
| British Columbia.....       | 11                            | 22  | 6             | 3  | 5                | 1  | -             | -  | -                | -  | -             | -     | 13               | 138   | 83            | 89    |
| Via ocean ports.....        | 12                            | 12  | -             | -  | 3                | -  | -             | -  | -                | -  | -             | -     | 12               | 42    | 18            | 17    |
| From the United States..... | 39                            | 16  | 6             | 4  | 2                | 1  | -             | -  | -                | -  | -             | -     | 52               | 274   | 130           | 110   |
| Yukon.....                  | -                             | -   | -             | -  | 2                | 1  | -             | -  | -                | -  | -             | -     | 55               | 192   | 61            | 50    |
| Via ocean ports.....        | -                             | -   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | -                | -     | -             | -     |
| From the United States..... | -                             | -   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | -                | -     | -             | -     |
| Northwest Territories.....  | -                             | -   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | -                | -     | -             | -     |
| Via ocean ports.....        | -                             | -   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | -                | -     | -             | -     |
| From the United States..... | -                             | -   | -             | -  | -                | -  | -             | -  | -                | -  | -             | -     | -                | -     | -             | -     |
| Totals.....                 | 523                           | 237 | 83            | 65 | 31               | 10 | 3             | 1  | 499              | 76 | 657           | 3,387 | 1,509            | 8,287 | 1,509         | 1,455 |
| Via Ocean Ports.....        | 191                           | 70  | 26            | 21 | 14               | 6  | 3             | 1  | 256              | 75 | 286           | 1,362 | 951              | 928   | 951           | 928   |
| From the United States..... | 331                           | 167 | 63            | 47 | 17               | 4  | -             | -  | 371              | 1  | 371           | 1,525 | 558              | 558   | 558           | 558   |



**Prohibited Immigrants.**—The following is quoted from Section 3 of the Immigration Act.

**PROHIBITED CLASSES.**

"No immigrant, passenger or other person, unless he is a Canadian citizen, or has Canadian domicile, shall be permitted to enter or land in Canada, or in case of having landed in or entered Canada shall be permitted to remain therein, who belongs to any of the following classes, hereinafter called 'prohibited classes':—

- (a) Idiots, imbeciles, feeble-minded persons, epileptics, insane persons, and persons who have been insane at any time previously;
- (b) Persons afflicted with tuberculosis in any form, or with any loathsome disease, or with a disease which is contagious or infectious, or which may become dangerous to the public health, whether such persons intend to settle in Canada or only to pass through Canada in transit to some other country: Provided that if such disease is one which is curable within a reasonably short time, such persons may, subject to the regulations in that behalf, if any, be permitted to remain on board ship if hospital facilities do not exist on shore, or to leave ship for medical treatment;
- (c) Immigrants who are dumb, blind, or otherwise physically defective, unless, in the opinion of a Board of Inquiry or officer acting as such, they have sufficient money, or have such profession, occupation, trade, employment or other legitimate mode of earning a living that they are not liable to become a public charge or unless they belong to a family accompanying them or already in Canada and which gives security satisfactory to the Minister against such immigrants becoming a public charge;
- (d) Persons who have been convicted of, or admit having committed, any crime involving moral turpitude;
- (e) Prostitutes and women and girls coming to Canada for any immoral purpose and pimps or persons living on the avails of prostitution;
- (f) Persons who procure or attempt to bring into Canada prostitutes or women or girls for the purpose of prostitution or other immoral purpose;
- (g) Professional beggars or vagrants;
- (h) Immigrants to whom money has been given or loaned by any charitable organization for the purpose of enabling them to qualify for landing in Canada under this Act, or whose passage to Canada has been paid wholly or in part by any charitable organization, or out of public moneys, unless it is shown that the authority in writing of the Deputy Minister, or in case of persons coming from Europe, the authority in writing of the Assistant Superintendent of Immigration for Canada, in London, has been obtained for the landing in Canada of such persons, and that such authority has been acted upon within a period of sixty days thereafter;
- (i) Persons who do not fulfil, meet or comply with the conditions and requirements of any regulations which for the time being are in force and applicable to such persons under this Act;
- (j) Persons who in the opinion of the Board of Inquiry or the officer in charge at any port of entry are likely to become a public charge;
- (k) Persons of constitutional psychopathic inferiority;
- (l) Persons with chronic alcoholism;
- (m) Persons not included within any of the foregoing prohibited classes, who upon examination by a medical officer are certified as being mentally or physically defective to such a degree as to affect their ability to earn a living;
- (n) Persons who believe in or advocate the overthrow by force or violence of the Government of Canada, or of constituted law and authority, or who disbelieve in or are opposed to organized government, or who advocate the assassination of public officials, or who advocate or teach the unlawful destruction of property;
- (o) Persons who are members of or affiliated with any organization entertaining or teaching disbelief in or opposition to organized government, or advocating or teaching the duty, necessity, or propriety of the unlawful assaulting or killing of any officer or officers, either of specific individuals or of officers generally of the Government of Canada or of any other organized government, because of his or their official character, or advocating or teaching the unlawful destruction of property;
- (q) Persons guilty of espionage with respect to His Majesty or any of His Majesty's allies;
- (r) Persons who have been found guilty of high treason or treason or of conspiring against His Majesty, or of assisting His Majesty's enemies in time of war, or of any similar offence against any of His Majesty's allies;
- (s) Persons who at any time within a period of ten years from the first day of August, one thousand nine hundred and fourteen, were deported from any part of His Majesty's dominions or from any allied country on account of treason or of conspiring against His Majesty, or of any similar offence in connection with the war against any of the allies of His Majesty;
- (t) On and after the first day of July, one thousand nine hundred and nineteen, in addition to the foregoing 'prohibited classes', the following persons shall also be prohibited from entering or landing in Canada: Persons over fifteen years of age, physically capable of reading, who cannot read the English or French language or some other language or dialect: Provided that any admissible person or any person heretofore or hereafter legally admitted, or any citizen of Canada, may bring in or send for his father or grandfather, over fifty-five years of age, his wife, his mother, his grandmother or his unmarried or widowed daughter, if otherwise admissible, whether such relative can read or not, and such relative shall be permitted to enter; for the purpose of ascertaining whether aliens can read, the immigration officer shall use slips of uniform size prepared by direction of the Minister, each containing not less than thirty and not more than forty words in ordinary use printed in plainly legible type in the language or dialect the person may designate as the one in which he desires the examination to be made, and he shall be required to read the words printed on the slip in such language or dialect; but the provisions of this subsection shall not apply to Canadian citizens and persons who have Canadian domicile, to persons in transit through Canada, or to such persons or classes of persons as may from time to time be approved by the Minister;
- (u) Members of a family (including children over as well as under 18 years of age) accompanying a person who has been rejected, unless in the opinion of the Board of Inquiry no hardship would be involved by separation of the family."

The Immigration Act provides for the rejection and deportation of immigrants belonging to the prohibited classes, and also for the deportation of those who become undesirables within five years after legal entry.

Table 12 shows the number of immigrants rejected upon their arrival at Canadian ports, by causes and nationalities, for the calendar years 1931-36, while Table 13 shows the number of deportations after admission, for the fiscal years 1903-25 and by single years for the fiscal years 1926-37, also by causes and nationalities.

**12.—Rejections of Immigrants upon Arrival at Ocean Ports, by Principal Causes and by Nationalities, calendar years 1931-36.**

| Item.               | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. | Total,<br>1931-36. |
|---------------------|-------|-------|-------|-------|-------|-------|--------------------|
| By Causes—          |       |       |       |       |       |       |                    |
| Medical causes..... | 23    | 17    | 14    | 13    | 13    | 10    | 90                 |
| Civil causes.....   | 286   | 244   | 160   | 224   | 102   | 213   | 1,319              |
| Totals.....         | 309   | 261   | 174   | 237   | 205   | 223   | 1,469              |
| By Nationalities—   |       |       |       |       |       |       |                    |
| British.....        | 171   | 144   | 101   | 167   | 133   | 128   | 844                |
| United States.....  | 5     | 13    | 9     | 14    | 6     | 9     | 56                 |
| Other.....          | 133   | 104   | 64    | 56    | 66    | 86    | 509                |

**13.—Deportations of Immigrants after Admission, by Principal Causes and by Nationalities, fiscal years ended 1926-37, with Totals 1903-25 and 1903-37.**

| Item.                              | Total,<br>1903-25. | 1926. | 1927. | 1928. | 1929. | 1930. | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. | 1937. | Total,<br>1903-37. |
|------------------------------------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| By Causes—                         |                    |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Medical causes.....                | 5,578              | 410   | 470   | 519   | 650   | 600   | 789   | 697   | 476   | 301   | 144   | 81    | 47    | 10,752             |
| Public charges.....                | 8,683              | 506   | 354   | 430   | 444   | 2,106 | 2,245 | 4,507 | 4,916 | 2,991 | 464   | 125   | 110   | 27,886             |
| Criminality.....                   | 6,103              | 453   | 447   | 426   | 441   | 591   | 868   | 1,006 | 836   | 493   | 267   | 207   | 117   | 12,255             |
| Other civil causes.....            | 1,474              | 189   | 149   | 257   | 194   | 107   | 200   | 270   | 277   | 250   | 172   | 163   | 240   | 3,942              |
| Accompanying deported persons..... | 630                | 158   | 165   | 254   | 235   | 559   | 274   | 545   | 626   | 439   | 81    | 34    | 57    | 4,057              |
| Totals.....                        | 22,473             | 1,716 | 1,585 | 1,856 | 1,964 | 3,963 | 4,376 | 7,025 | 7,131 | 4,474 | 1,123 | 610   | 571   | 58,992             |
| By Nationalities—                  |                    |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| British.....                       | 11,946             | 899   | 808   | 1,047 | 1,033 | 2,933 | 3,099 | 4,248 | 4,251 | 2,718 | 355   | 157   | 202   | 33,826             |
| United States.....                 | 6,370              | 330   | 351   | 297   | 204   | 228   | 279   | 260   | 331   | 319   | 199   | 146   | 167   | 9,571              |
| Other.....                         | 4,157              | 487   | 426   | 542   | 587   | 752   | 998   | 2,517 | 2,549 | 1,437 | 544   | 307   | 202   | 15,505             |

**Juvenile Immigrants.**—Among the most generally acceptable immigrants of recent years were the juveniles of both sexes, many of whom had been trained by highly accredited British organizations for Canadian life before coming to Canada, the boys being taught the lighter branches of farm work, and the girls instructed in domestic occupations. On arrival in Canada the boys were placed on farms, while the girls were placed either in town or country, but the organizations remained the guardians of the children until they had reached maturity, and, in addition, the children were subject to efficient and recurrent government inspection until each reached the age of nineteen. This inspection was under the control of the Supervisor of Juvenile Immigration.

Under the British Empire Settlement Agreement the term "children" was applied to boys from 14 to 19 years of age and girls from 14 to 17 migrating to Canada under provincial or approved-society auspices. These organizations were assisted by the Oversea Settlement Agreement, which provided free transportation for the boys and girls from the British Isles migrating to Canada under their auspices. On Sept. 23, 1931, the societies concerned were notified that the Dominion Government had decided to discontinue any further assistance of that nature.

The number of such juvenile immigrants to Canada in each year since 1901 is given in Table 14.

#### 14.—British Juvenile Immigrants, fiscal years ended 1901-37.

NOTE.—Juvenile immigrants are, of course, included in the total number of immigrants, recorded elsewhere.

| Fiscal Year.         | Juvenile Immigrants. | Fiscal Year. | Juvenile Immigrants. | Fiscal Year. | Juvenile Immigrants. |
|----------------------|----------------------|--------------|----------------------|--------------|----------------------|
| 1901.....            | 977                  | 1914.....    | 2,318                | 1927.....    | 1,741                |
| 1902.....            | 1,540                | 1915.....    | 1,899                | 1928.....    | 2,070                |
| 1903.....            | 1,979                | 1916.....    | 821                  | 1929.....    | 3,036                |
| 1904.....            | 2,212                | 1917.....    | 251                  | 1930.....    | 4,281                |
| 1905.....            | 2,814                | 1918.....    | Nil                  | 1931.....    | 2,190                |
| 1906.....            | 3,258                | 1919.....    | Nil                  | 1932.....    | 478                  |
| 1907 (9 months)..... | 1,455                | 1920.....    | 155                  | 1933.....    | 172                  |
| 1908.....            | 2,375                | 1921.....    | 1,426                | 1934.....    | 6                    |
| 1909.....            | 2,424                | 1922.....    | 1,211                | 1935.....    | 6 <sup>1</sup>       |
| 1910.....            | 2,422                | 1923.....    | 1,184                | 1936.....    | 4 <sup>1</sup>       |
| 1911.....            | 2,524                | 1924.....    | 2,080                | 1937.....    | 10                   |
| 1912.....            | 2,689                | 1925.....    | 2,000                |              |                      |
| 1913.....            | 2,642                | 1926.....    | 1,862                |              |                      |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

**Oriental Immigration.**—The immigration to Canada of Orientals is fundamentally an economic rather than a racial problem, affecting most of all those parts of the country which are nearest to the Orient and the classes which feel their economic position threatened. A record of Oriental immigration, by fiscal years, since the commencement of the century is given in Table 15, while Table 15A gives the same information for the calendar years for which it has been possible to compile the figures, *viz.*, 1929 to 1936.

#### 15.—Record of Oriental Immigrants, fiscal years ended 1901-37.

| Fiscal Year.         | Chinese. | Japanese. | East Indians. | Total. | Fiscal Year. | Chinese.      | Japanese.     | East Indians. | Total.        |
|----------------------|----------|-----------|---------------|--------|--------------|---------------|---------------|---------------|---------------|
| 1901.....            | 2,544    | 6         | Nil           | 2,550  | 1920.....    | 544           | 711           | Nil           | 1,255         |
| 1902.....            | 3,587    | Nil       | Nil           | 3,587  | 1921.....    | 2,455         | 532           | 10            | 2,977         |
| 1903.....            | 5,329    | Nil       | Nil           | 5,329  | 1922.....    | 1,746         | 471           | 13            | 2,230         |
| 1904.....            | 4,847    | Nil       | Nil           | 4,847  | 1923.....    | 711           | 369           | 21            | 1,101         |
| 1905.....            | 77       | 354       | 45            | 476    | 1924.....    | 674           | 448           | 40            | 1,162         |
| 1906.....            | 168      | 1,922     | 387           | 2,477  | 1925.....    | Nil           | 501           | 46            | 547           |
| 1907 (9 months)..... | 291      | 2,042     | 2,124         | 4,457  | 1926.....    | Nil           | 421           | 62            | 483           |
| 1908.....            | 2,234    | 7,601     | 2,623         | 12,458 | 1927.....    | Nil           | 475           | 60            | 535           |
| 1909.....            | 2,106    | 495       | 6             | 2,607  | 1928.....    | 3             | 478           | 56            | 537           |
| 1910.....            | 2,302    | 271       | 10            | 2,583  | 1929.....    | 1             | 445           | 52            | 498           |
| 1911.....            | 5,320    | 437       | 5             | 5,762  | 1930.....    | Nil           | 194           | 58            | 252           |
| 1912.....            | 6,581    | 765       | 3             | 7,349  | 1931.....    | Nil           | 205           | 80            | 285           |
| 1913.....            | 7,445    | 724       | 5             | 8,174  | 1932.....    | Nil           | 195           | 47            | 242           |
| 1914.....            | 5,512    | 856       | 88            | 6,456  | 1933.....    | 1             | 115           | 63            | 179           |
| 1915.....            | 1,258    | 592       | Nil           | 1,850  | 1934.....    | 2             | 105           | 33            | 140           |
| 1916.....            | 89       | 401       | 1             | 491    | 1935.....    | Nil           | 93            | 33            | 126           |
| 1917.....            | 393      | 548       | Nil           | 1,041  | 1936.....    | Nil           | 83            | 21            | 104           |
| 1918.....            | 769      | 883       | Nil           | 1,652  | 1937.....    | 1             | 108           | 13            | 117           |
| 1919.....            | 4,333    | 1,178     | Nil           | 5,511  |              |               |               |               |               |
| <b>Totals.....</b>   |          |           |               |        |              | <b>61,303</b> | <b>25,119</b> | <b>6,005</b>  | <b>92,427</b> |

#### 15A.—Record of Oriental Immigrants, calendar years 1929-36.

| Calendar Year. | Chinese. | Japanese. | East Indians. | Total. |
|----------------|----------|-----------|---------------|--------|
| 1929.....      | 1        | 180       | 49            | 230    |
| 1930.....      | Nil      | 218       | 80            | 298    |
| 1931.....      | Nil      | 174       | 52            | 226    |
| 1932.....      | 1        | 119       | 61            | 181    |
| 1933.....      | 1        | 108       | 36            | 145    |
| 1934.....      | 1        | 128       | 33            | 160    |
| 1935.....      | Nil      | 70        | 29            | 99     |
| 1936.....      | Nil      | 103       | 13            | 116    |

*Chinese Immigrants.*—Oriental immigration to the Pacific Coast of North America appears to have commenced with the coming of Chinese immigrants about the time of the discovery of gold in California in 1849, and British Columbia is thought to have received its first Chinese immigrants some time before 1870. The original occupations of these immigrants were laundry workers and domestic servants. As early as 1873 Chinese were employed in the coal mines of the province and the Legislature was already considering the imposition of a poll tax on Chinese, the same proposition coming up later in the Dominion Parliament with the design of preventing the employment of Chinese labour in railway construction. A Royal Commission was appointed by the Dominion Government in 1884 to investigate Chinese immigration and this commission recommended the imposition of a head tax of \$10 upon Chinese entering Canada, together with registration and special legislation regulating the entry of Chinese domestic servants. This led to the passage of legislation in 1885 (48-49 Vict., c. 71), providing that thereafter Chinese of the labouring class should be required, as a condition of entering Canada, to pay a head tax of \$50 each. On Jan. 1, 1901 (63-64 Vict., c. 32), this tax was increased to \$100, and on Jan. 1, 1904 (3 Edw. VII, c. 8), after another Royal Commission had reported on this matter, the head tax was further increased to \$500. This tax was paid by all Chinese immigrants except consular officers, merchants, and clergymen and their families, tourists, men of science, students and teachers. In spite of this restrictive legislation, the number of Chinese enumerated at the decennial censuses rose from 4,833 in 1881 to 17,312 in 1901, to 27,774 in 1911, to 39,587 in 1921, and 46,519 in 1931. Of this latter number, 43,051 were males and only 3,468 females. Over 58 p.c. of all the Chinese in Canada, *viz.*, 27,139 were residents of British Columbia.

**16.—Record of Revenue Receipts and Registrations for Leave of Chinese Immigrants, fiscal years ended Mar. 31, 1912-37, with Totals 1886-1900 and 1901-11.**

| Fiscal Year.                          | Paying Tax. | Exempt from Tax. | Percentage of Total Arrivals Admitted, Exempt from Tax. | Registrations for Leave. | Total Revenue. |
|---------------------------------------|-------------|------------------|---|--------------------------|----------------|
|                                       | No.         | No.              | p.c.  | No.                      | \$             |
| Totals (1886 to 1900, inclusive)..... | 28,437      | 394              | 1.36  | 15,853                   | 1,454,239      |
| Totals (1901 to 1911, inclusive)..... | 25,180      | 3,655            | 12.89   | 29,409                   | 6,147,280      |
| 1912.....                             | 6,083       | 498              | 7.57  | 4,322                    | 3,049,722      |
| 1913.....                             | 7,078       | 367              | 4.93  | 3,742                    | 3,549,242      |
| 1914.....                             | 5,274       | 238              | 4.32  | 3,450                    | 2,644,593      |
| 1915.....                             | 1,155       | 103              | 8.19  | 4,373                    | 588,124        |
| 1916.....                             | 20          | 69               | 77.53   | 4,064                    | 19,349         |
| 1917.....                             | 272         | 121              | 30.78   | 3,313                    | 140,437        |
| 1918.....                             | 650         | 119              | 15.47   | 2,907                    | 330,757        |
| 1919.....                             | 4,066       | 267              | 6.16  | 3,244                    | 2,069,669      |
| 1920.....                             | 363         | 181              | 33.27   | 5,539                    | 538,479        |
| 1921.....                             | 885         | 1,550            | 63.66   | 6,307                    | 474,332        |
| 1922.....                             | 1,459       | 287              | 16.44   | 7,532                    | 743,032        |
| 1923.....                             | 652         | 59               | 8.30  | 6,682                    | 434,557        |
| 1924.....                             | 625         | 51               | 7.54  | 5,661                    | 334,039        |
| 1925.....                             | Nil         | Nil              | Nil   | 5,992                    | 308,659        |
| 1926.....                             | Nil         | Nil              | Nil   | 3,947                    | 25,999         |
| 1927.....                             | Nil         | Nil              | Nil   | 5,987                    | 14,844         |
| 1928.....                             | 2           | 1                | 33.33   | 5,087                    | 25,670         |
| 1929.....                             | Nil         | 1                | 100.00  | 5,480                    | 30,795         |
| 1930.....                             | Nil         | Nil              | Nil   | 5,682                    | 30,790         |
| 1931.....                             | Nil         | Nil              | Nil   | 5,783                    | 28,846         |
| 1932.....                             | Nil         | Nil              | Nil   | 4,387                    | 11,584         |
| 1933.....                             | Nil         | 1                | 100.00  | 3,626                    | 9,162          |
| 1934.....                             | Nil         | 2                | 100.00  | 2,156                    | 7,237          |
| 1935.....                             | Nil         | Nil              | Nil   | 2,103                    | 6,506          |
| 1936.....                             | Nil         | Nil              | Nil   | 2,138                    | 6,501          |
| 1937.....                             | Nil         | 1                | 100.00  | 2,059                    | 9,893          |

The Chinese Immigration Act of 1923 (13-14 Geo. V, c. 38),\* limits the entry to or landing in Canada of persons of Chinese origin or descent, irrespective of allegiance or citizenship, to the following classes:—

- (a) Members of the diplomatic corps or other government representatives, their suites and their servants, and consuls and consular agents;
- (b) Children born in Canada of parents of Chinese origin or descent, who have left Canada for educational or other purposes, on substantiating their identity to the satisfaction of the controller at the port or place where they seek to enter on their return;
- (c) Merchants as defined by such regulations as the Minister may prescribe; students coming to Canada for the purpose of attending, and while in actual attendance at, any Canadian university or college authorized by statute or charter to confer degrees.
- (d) Persons in transit through Canada.

Classes (c) and (d) are to possess passports issued by the Government of China and endorsed by a Canadian immigration officer. As a result of this legislation no Chinese were admitted to the country as immigrants in the fiscal years ended 1925, 1926, and 1927; three are shown by the above table to have been admitted in 1928, one in 1929, none in 1930, 1931 or 1932, one in 1933, two in 1934, none in 1935 or 1936, and one in 1937.

*Japanese Immigrants.*—Japanese immigration to Canada commenced about 1896, and a total of some 12,000 came in between then and 1900, but at the Census of 1901 the total number enumerated as domiciled in the Dominion was only 4,738; in 1911, 9,021; in 1921, 15,868; in 1931, 23,342—22,205 of these latter being domiciled in British Columbia. The immigration of Japanese was especially active in the fiscal years 1906 to 1908, in which three years a total of 11,565 entered the country. In 1908 an agreement was made with the Japanese Government, under which the latter undertook to limit the number of passports issued to Japanese immigrants to Canada. Japanese immigration has been very restricted since 1929, only 103 Japanese immigrants having entered Canada in the fiscal year 1937.

*East Indian Immigrants.*—East Indian immigration to Canada, like Japanese, is shown by Table 15 to have been negligible down to 1907, when no fewer than 2,124 East Indian immigrants arrived. However, as a consequence of the operation of the Immigration Regulations, East Indian immigration has for years been comparatively small. A resolution of the Imperial War Conference of 1918 declared that "it is the inherent function of the Governments of the several communities of the British Commonwealth that each should enjoy complete control of the composition of its own population by means of restriction on immigration from any of the other communities". However, it was recommended that East Indians, already permanently domiciled in other British countries, should be allowed to bring in their wives and minor children. In the ten fiscal years 1928-37 only 456 East Indians, many of them women and children, were admitted to Canada.

*Expenditures on Immigration.*—The sums expended by the Dominion Government on immigration in each of the fiscal years ended 1868 to 1937, inclusive, as stated in the Public Accounts issued annually by the Department of Finance, are shown in Table 17.

*Emigration from Canada.*—An important factor tending to offset the immigration activities of the past was a movement from Canada to the United States which attained considerable proportions at certain periods. The quota system of immigration regulation, applied by the United States Government against immigrants generally, but not against the Canadian born, had the effect of limiting immigration to the United States and thereby encouraging Canadians to enter

\* R.S.C., 1927, c. 95.

that country. No record of this movement had ever been kept by the Canadian Government, and, while its seriousness was recognized, its magnitude, as indicated by the United States returns, was questioned on the ground that these returns did not make allowance for Canadians returning to Canada after a more or less extended period of residence in the United States. The Canadian Department of Immigration and Colonization was convinced that a very considerable return movement was taking place, but, until 1924, no attempt was made to ascertain the exact magnitude of that movement. In that year immigration officers were instructed to take note of Canadians returning to Canada from the United States after having left Canada to reside in that country. The results are tabulated in Table 18.

Another circumstance which has in the past, occasioned a considerable movement from Canada to the United States has, no doubt, been the practice of Europeans to enter Canada and declare themselves *bona fide* immigrants, with the real intention of entering the United States as soon as the quota restrictions would permit them to do so. The tightening-up of the United States regulations re persons entering the United States from Canada, and the active co-operation of the Canadian Department of Immigration and Colonization in discouraging this traffic, seem to have effectually met this situation.

**17.—Expenditures on Immigration in the fiscal years ended June 30, 1868-1906, and Mar. 31, 1907-37.**

(Compiled from the Public Accounts.)

| Fiscal Year. | \$      | Fiscal Year. | \$      | Fiscal Year.            | \$        | Fiscal Year. | \$                     |
|--------------|---------|--------------|---------|-------------------------|-----------|--------------|------------------------|
| 1863.....    | 36,050  | 1886.....    | 257,355 | 1904.....               | 744,788   | 1922.....    | 2,052,371              |
| 1869.....    | 26,952  | 1887.....    | 341,236 | 1905.....               | 972,357   | 1923.....    | 1,987,745              |
| 1870.....    | 55,966  | 1888.....    | 244,789 | 1906.....               | 842,668   | 1924.....    | 2,417,374 <sup>2</sup> |
| 1871.....    | 54,004  | 1889.....    | 202,499 | 1907 <sup>1</sup> ..... | 611,201   | 1925.....    | 2,823,920 <sup>2</sup> |
| 1872.....    | 109,954 | 1890.....    | 110,092 | 1908.....               | 1,074,697 | 1926.....    | 2,328,931 <sup>2</sup> |
| 1873.....    | 205,718 | 1891.....    | 181,045 | 1909.....               | 979,326   | 1927.....    | 2,338,992              |
| 1874.....    | 291,297 | 1892.....    | 177,605 | 1910.....               | 960,676   | 1928.....    | 2,704,698              |
| 1875.....    | 278,777 | 1893.....    | 180,677 | 1911.....               | 1,079,130 | 1929.....    | 2,631,967              |
| 1876.....    | 338,179 | 1894.....    | 202,235 | 1912.....               | 1,365,000 | 1930.....    | 2,757,331              |
| 1877.....    | 309,353 | 1895.....    | 195,653 | 1913.....               | 1,427,112 | 1931.....    | 2,255,249              |
| 1878.....    | 154,351 | 1896.....    | 120,199 | 1914.....               | 1,893,298 | 1932.....    | 1,573,006              |
| 1879.....    | 180,403 | 1897.....    | 127,438 | 1915.....               | 1,658,182 | 1933.....    | 1,406,031              |
| 1880.....    | 161,213 | 1898.....    | 261,195 | 1916.....               | 1,307,480 | 1934.....    | 1,155,314              |
| 1881.....    | 214,251 | 1899.....    | 255,879 | 1917.....               | 1,151,901 | 1935.....    | 1,066,869              |
| 1882.....    | 215,339 | 1900.....    | 434,563 | 1918.....               | 1,211,954 | 1936.....    | 1,123,991              |
| 1883.....    | 373,958 | 1901.....    | 444,730 | 1919.....               | 1,112,079 | 1937.....    | 1,119,317              |
| 1884.....    | 511,209 | 1902.....    | 494,842 | 1920.....               | 1,388,185 | Total.....   | 62,423,972             |
| 1885.....    | 423,861 | 1903.....    | 642,914 | 1921.....               | 1,688,961 |              |                        |

<sup>1</sup> Nine months.  
\$599,797; 1926, \$70,661.

<sup>2</sup> Includes expenditures on British Empire Exhibition: 1924, \$649,882; 1925,

Table 18 shows the number of Canadians who had gone to the United States for purposes of permanent residence and who returned to Canada during the period from April 1, 1924, to Dec. 31, 1937.

## 18.—Canadians Returned from the United States, calendar years 1924-37.

| Calendar Year. | Canadian-Born Citizens. | British Born who had Acquired Canadian Domicile. | Naturalized Canadian Citizens. | Total. | Calendar Year. | Canadian-Born Citizens. | British Born who had Acquired Canadian Domicile. | Naturalized Canadian Citizens. | Total. |
|----------------|-------------------------|--|--------------------------------|--------|----------------|-------------------------|--|--------------------------------|--------|
| 1924.....      | 31,217                  | 3,736  | 2,364                          | 37,317 | 1931....       | 18,503                  | 1,135  | 714                            | 20,352 |
| 1925.....      | 33,774                  | 3,658  | 2,555                          | 39,987 | 1932....       | 16,801                  | 809  | 610                            | 18,220 |
| 1926.....      | 53,736                  | 5,792  | 2,765                          | 62,293 | 1933....       | 9,330                   | 457  | 422                            | 10,209 |
| 1927.....      | 36,838                  | 3,560  | 1,680                          | 42,078 | 1934....       | 5,926                   | 739  | 607                            | 7,272  |
| 1928.....      | 30,436                  | 2,674  | 1,010                          | 34,120 | 1935....       | 4,961                   | 632  | 785                            | 6,378  |
| 1929.....      | 27,323                  | 2,265  | 886                            | 30,479 | 1936....       | 4,649                   | 297  | 222                            | 5,168  |
| 1930.....      | 28,230                  | 2,176  | 1,202                          | 31,608 | 1937....       | 4,443                   | 377  | 347                            | 5,167  |

<sup>1</sup> Nine months.

The movement of population between the two countries now appears to be slightly towards the United States. In the U.S. fiscal year ended June 30, 1937, the total movement from Canada to that country was 17,224, made up as follows: immigrants, 11,799; U.S. citizens returning after residence in Canada, 5,211; and persons deported from Canada, 214. The movement towards Canada totalled 9,185, made up as follows: immigrants, 3,889 (of whom 2,862 were U.S. citizens); persons deported to Canada, 1,833; and persons permitted to depart voluntarily to Canada in lieu of deportation proceedings, 3,463. Canadian immigration figures for the same period show 5,347 immigrants admitted to Canada and 5,250 returning Canadians, a total of 10,597. The discrepancy between the two series is probably due to incomplete emigration statistics.

In the past five years there has also been considerable emigration from Canada to the British Isles. Table 19, taken from the *Statistical Abstract of the United Kingdom*, shows the movement of population between the United Kingdom and British North America from 1924 to 1936. Inasmuch as the movement between the British Isles and Newfoundland is negligible, the table may be taken as presenting a fair picture of immigrant and emigrant movement between Canada and the United Kingdom.

## 19.—Numbers of Passengers of British Nationality Changing Their Permanent Residence between the United Kingdom and British North America, calendar years 1924-36.

(From the *Statistical Abstract of the United Kingdom*.)

| Calendar Year. | Leaving U.K. for B.N.A. | Leaving B.N.A. for U.K. | Net Gain (+) or Loss (-) of Population to Canada. | Calendar Year. | Leaving U.K. for B.N.A. | Leaving B.N.A. for U.K. | Net Gain (+) or Loss (-) of Population to Canada. |
|----------------|-------------------------|-------------------------|---|----------------|-------------------------|-------------------------|---|
| 1924.....      | 63,016                  | 15,822                  | +47,194   | 1931.....      | 7,620                   | 17,864                  | -10,244   |
| 1925.....      | 38,662                  | 13,939                  | +24,723   | 1932.....      | 3,104                   | 21,187                  | -18,083   |
| 1926.....      | 49,632                  | 10,481                  | +39,151   | 1933.....      | 2,243                   | 16,371                  | -14,128   |
| 1927.....      | 52,916                  | 12,570                  | +40,346   | 1934.....      | 2,167                   | 12,128                  | -9,961  |
| 1928.....      | 54,709                  | 15,804                  | +38,905   | 1935.....      | 2,175                   | 9,712                   | -7,537  |
| 1929.....      | 65,558                  | 12,294                  | +53,264   | 1936.....      | 2,281                   | 10,107                  | -7,826  |
| 1930.....      | 31,074                  | 15,820                  | +15,254   | 1937.....      | 2,850                   | 8,970                   | -6,120  |

In Table 20 will be found the numbers of returning Canadians and other non-immigrant transoceanic passengers entering Canada during the calendar years 1935 and 1936, by class of travel, with totals for the years 1930 to 1934. Figures covering the fiscal years 1926 to 1934, will be found at p. 228 of the 1934-35 Year Book.

**20.—Returning Canadians and Other Non-Immigrants Entering Canada via Ocean Ports, by Class of Travel, calendar years 1935 and 1936, with Totals for calendar years 1930-34.**

NOTE.—Figures in this table cover transoceanic passengers only.

| Calendar Year and Item.             | Transoceanic Passengers. |               |               |               |
|-------------------------------------|--------------------------|---------------|---------------|---------------|
|                                     | Saloon.                  | Cabin Class.  | Third Class.  | Total.        |
| <b>Totals, 1930.....</b>            | <b>6,064</b>             | <b>14,458</b> | <b>30,479</b> | <b>51,001</b> |
| <b>Totals, 1931.....</b>            | <b>5,170</b>             | <b>10,281</b> | <b>26,741</b> | <b>42,192</b> |
| <b>Totals, 1932.....</b>            | <b>5,333</b>             | <b>9,314</b>  | <b>27,285</b> | <b>41,932</b> |
| <b>Totals, 1933.....</b>            | <b>4,965</b>             | <b>8,447</b>  | <b>23,644</b> | <b>37,056</b> |
| <b>Totals, 1934.....</b>            | <b>6,103</b>             | <b>9,119</b>  | <b>23,928</b> | <b>39,150</b> |
| <b>CALENDAR YEAR 1935.</b>          |                          |               |               |               |
| Canadian born, returning.....       | 2,281                    | 3,206         | 6,032         | 11,519        |
| British born, returning.....        | 473                      | 1,711         | 10,724        | 12,908        |
| British naturalized, returning..... | 256                      | 386           | 1,537         | 2,179         |
| Alien nationals, returning.....     | 44                       | 96            | 1,406         | 1,546         |
| Non-immigrant, tourist.....         | 1,256                    | 3,174         | 4,450         | 8,880         |
| " professional.....                 | Nil                      | Nil           | Nil           | Nil           |
| " student.....                      | Nil                      | Nil           | Nil           | Nil           |
| " theatrical.....                   | Nil                      | Nil           | Nil           | Nil           |
| " in transit.....                   | 1,404                    | 1,394         | 401           | 3,319         |
| " Diplomatic Corps.....             | 6                        | 14            | 8             | 28            |
| <b>Totals, 1935.....</b>            | <b>5,780</b>             | <b>9,981</b>  | <b>24,618</b> | <b>40,379</b> |
| <b>CALENDAR YEAR 1936.</b>          |                          |               |               |               |
| Canadian born, returning.....       | 1,740                    | 4,160         | 8,509         | 14,409        |
| British born, returning.....        | 321                      | 1,927         | 13,474        | 15,722        |
| British naturalized, returning..... | 173                      | 466           | 1,623         | 2,262         |
| Alien nationals, returning.....     | 32                       | 137           | 1,337         | 1,506         |
| Non-immigrant, tourist.....         | 714                      | 4,130         | 4,751         | 9,595         |
| " professional.....                 | Nil                      | Nil           | 9             | 9             |
| " student.....                      | 61                       | 7             | 7             | 75            |
| " theatrical.....                   | Nil                      | Nil           | Nil           | Nil           |
| " in transit.....                   | 1,348                    | 1,514         | 365           | 3,227         |
| " Diplomatic Corps.....             | 2                        | 15            | 1             | 18            |
| <b>Totals, 1936.....</b>            | <b>4,391</b>             | <b>12,356</b> | <b>30,076</b> | <b>46,823</b> |

## Section 2.—Colonization Activities.

Recent information on this subject was given at pp. 201-202 of the 1936 edition of the Year Book. To it the interested reader is referred.



## CHAPTER VII.—SURVEY OF PRODUCTION.\*

A gain of more than 7 p.c. in the net value of total production over the preceding year was indicated for 1935. The net value of commodities produced stood at \$2,395,000,000 against \$2,234,000,000 in the preceding year. As the level of commodity prices remained relatively steady during the interval, the gain represents considerable betterment in the volume of productive operations. The general nature of the improvement was shown by the fact that each of the nine main branches of production participated in the advance.

While the lowest point of the recent depression was reached in 1933, revival commenced in the latter part of the year and has been fairly continuous since that time. With regard to 1936, price and volume indexes indicate that a further gain in net production occurred. The index of wholesale prices averaged 3.5 p.c. higher than in 1935, while the gain in the index of industrial production was nearly 10.4 p.c., and the index of general employment recorded an advance of 4.3 p.c.

**The Definition of 'Production'.—**The term 'production' is used here in its popular acceptance, *i.e.*, as including such processes as the growing of crops, extraction of minerals, capture of fish, conversion of water power into electric current, manufacturing, etc.—in economic phrase, the creation of 'form utilities'. It does not include various activities which are no less productive in a broad and strictly economic sense, such as (a) transportation, refrigeration, merchandising, etc., which add the further utilities of 'place', 'time', and 'possession' to commodities already worked up into form, and (b) personal and professional services, such as those of the teacher and the doctor, which are not concerned with commodities at all, but are nevertheless essential to any civilized society—representing, in economic language, the creation of 'service utilities'.

As showing the importance of these latter activities, it may be pointed out, for comparison with the figures in the accompanying tables, that steam railway gross earnings in 1935, the latest year for which complete statistics of production are available, amounted to \$310,107,155, street railway gross earnings to \$40,442,320, and telephone and telegraph earnings to \$66,771,312, all of which, from a broad point of view, may be considered as production. Further, it may be noted that, according to the Census of 1931, out of 3,927,591 persons of ten years of age or over recorded as gainfully occupied, 306,273 were engaged in transportation activities, 387,315 in trade, 92,317 in finance, and 767,705 in service occupations. While 81,610 of the latter were engaged in custom and repair work, the value of which is included in the survey of production, the value of the production of the remaining 1,472,000 gainfully occupied persons in the four occupational groups just mentioned would not appear to be included to any extent in the survey of production. Then, on the assumption that 1,472,000 gainfully occupied persons whose production is not included in the survey were no less productive in the broad sense of the term than the remaining 2,455,591† gainfully occupied persons, about three-fifths should be added to our total net production to arrive at an estimate of the grand total value of the production of all gainfully occupied Canadians. Since the net value of

\* Revised by Sydney B. Smith, M.A., Dominion Bureau of Statistics.

† This figure includes 169,263 gainfully occupied persons whose industries were not specified but who were mainly general labourers and office clerks. The products of the labour of these persons were probably mainly included in the survey of production, but here it is assumed that they were all so included.

production of commodities as stated in this survey was \$2,394,720,688 in 1935, the grand total money value of the productive activities of the gainfully occupied population of Canada in the same year may be estimated at \$3,832,000,000 in round figures. (See the item "Income, national" in the index of this volume.)

**'Gross' and 'Net' Production.**—The values of products are shown under two headings, namely, "gross" and "net". Gross production represents the total value of all the individual commodities produced under a particular heading. Net production represents an attempt to eliminate the value of materials, fuel, and electricity consumed in the production process. The net figures, it will be seen, appear chiefly in the case of secondary production or manufactures, though eliminations were also made in certain cases in the primary or extractive industries, as, for example, seed in the case of field crops, and feed in the case of farm animals. On the other hand, such items as fertilizers in the case of field crops, and reforestation in the case of forestry, are disregarded as partaking of the nature of replacement. The cost of fuel and electricity is deducted in accordance with Resolution 23 of the Conference of British Commonwealth Statisticians, 1935, which states: "The term *net output or net value of production* should be used to denote the value added in each industry to the cost of the objects used in production, including all materials, whether transformed or not".

#### **Difficulties in Differentiating between the Branches of Production.**—

A survey of production must differentiate between the more important branches and at the same time give a purview of the whole which will be free from overlapping. This is somewhat difficult to present with clearness, in view of the varying definitions that attach to industrial groups from different points of view. For example, brick, tile, and cement are frequently included under "mineral production" as being the first finished products of commercial value resulting from the productive process; frequently, however, they are classified under "manufactures" in view of the nature of the productive process—either allocation being correct according to the point of view. In the summing up, production in such industries is regarded as primary production and also as secondary production, but the duplication is eliminated in the grand totals.

**Branches of Production.**—The primary industries of agriculture, fishing, forestry, mining, etc., are separated in this statement from the secondary or manufacturing processes. The close association between the two and the overlappings that are apt to occur have already been pointed out. As further explaining the procedure that has been followed in drawing up the tables, the following notes are appended:—

**Agriculture.**—Dairy factories are included under this heading; farm dairy products (gross) include the milk consumed whole and sold to dairy factories, and the butter, etc., made on the farm. The duplication is eliminated when obtaining the grand total values of gross and net production.

**Forestry.**—Forestry production is understood to consist of the operations in the woods as well as those of sawmills and pulp-mills, the latter being limited to the making of products such as pulp and paper, lumber, lath, shingles, and cooperage stock.

**Fur Production.**—The item of fur production is limited to wild-life production. To obtain a total of the pelts produced in Canada, it would be

necessary to add to the wild-life output the production of pelts on fur farms, which is included in the total for agriculture.

*Mineral Production.*—Under mineral production many items are included that are also allocated to manufactures. Considerable overlapping exists as between mineral production on the one hand and manufactures on the other. The Dominion Bureau of Statistics presents the detailed statistics of these groups (the chief of which are smelters, brick, cement, lime, etc.) in its reports on mineral production, since their product is the first to which a commercial value is ordinarily assigned.

*Construction.*—Due to the availability of the totals compiled by a new branch of the Dominion Bureau of Statistics, the treatment of construction data was altered beginning with 1934. The records prepared by the MacLean Building Reports, Limited, were used from 1920 to 1933, 35 p.c. being deducted from the gross totals to obtain the net value of production for the industry. An element of incomparability with previous figures was thus introduced, but the use of official records in this connection is desirable.

*Total Manufactures.*—The figure given for this heading is a comprehensive one including the several items listed with the extractive industries above, though also frequently regarded as manufactures, *viz.*, dairy factories, fish canning and curing, sawmills, pulp and paper mills, certain mineral industries, and electric power. This duplication is eliminated from the grand totals as shown in the tables. The figures given for total manufactures are inclusive of the value of the products of all manufacturing processes closely associated with the extractive industries that are frequently included under this heading; hence it is obvious that the grand total is equivalent to an amount obtained by adding the values for total manufactures and for the other eight divisions, and deducting the amount of duplication between manufactures and the primary industries.

## Section 1.—The Leading Branches of Production in 1935.

The net value of a nation's commodity production is usually an excellent criterion of the purchasing power of the people. Confining the analysis to the net production of commodities—net production signifying the value left in the producers' hands after the elimination of the value of materials consumed in the production process—it is observed that, after recording successive declines for five years, the net value of Canadian production turned upward in 1934 to register a substantial gain over the preceding year. This advance was continued in 1935 when the net value of commodities produced, estimated by the Dominion Bureau of Statistics on the basis of data compiled by its various branches, was \$2,395,000,000 compared with a revised estimate of \$2,234,000,000 in 1934. The gain of more than 7 p.c. represents a marked betterment over the preceding year in all productive operations. Each of the nine main branches of production participated in the advances of 1934 and 1935. The greatest absolute gains were recorded in manufacturing and agriculture, but the largest percentage increases were in mining and forestry. Primary production showed a better percentage gain than secondary, indicating a decided revival in the production of raw materials and a greater utilization of our natural resources. Certain changes in general method, occasioned by the Conference of British Commonwealth Statisticians of 1935, unfortunately

preclude exact comparability with years prior to 1934, given in earlier editions of the Year Book, and statistics in the tables given below are, therefore, limited to the years 1934 and 1935.

The net output of agriculture in 1935 was greater than in any other year since 1930. The increase over 1934 amounted to \$30,600,000 or 5.2 p.c., the total reaching \$623,000,000. Mining continued to be the most progressive of Canadian industries and has extended, year by year, the upturn inaugurated in 1933.

The percentage gain in the value of manufacturing stood on a par with that of agriculture, the net total advancing 5.7 p.c. or \$69,300,000 over the comparable figure for 1934.

### 1.—Gross and Net Values of Production in Canada, by Industries, 1934<sup>1</sup> and 1935.

| Division of Industry.                           | 1934. <sup>1</sup>         |                   | 1935.                      |                   | Percentage Increase in Net Value 1935 from 1934. | Percentage of Net Value by Industry to Total Net Production 1935. |
|---|----------------------------|-------------------|----------------------------|-------------------|--|---|
|   | Gross.                     | Net. <sup>2</sup> | Gross.                     | Net. <sup>2</sup> |  |   |
|   | \$                         | \$                | \$                         | \$                | p.c.   | p.c.  |
| Agriculture.....                                | 1,006,257,610 <sup>3</sup> | 592,195,000       | 1,019,366,009 <sup>3</sup> | 622,772,000       | 5.2  | 26.01   |
| Forestry.....                                   | 313,659,309                | 208,207,494       | 344,753,108                | 227,500,346       | 9.3  | 9.50  |
| Fisheries.....                                  | 45,661,143                 | 34,022,323        | 45,386,749                 | 34,427,834        | 1.2  | 1.44  |
| Trapping.....                                   | 8,636,885                  | 8,636,885         | 8,877,331                  | 8,877,331         | 2.8  | 0.37  |
| Mining.....                                     | 344,978,399 <sup>4</sup>   | 209,073,789       | 429,817,259 <sup>4</sup>   | 238,581,205       | 14.1   | 9.96  |
| Electric power.....                             | 124,463,613                | 123,461,093       | 127,177,954                | 125,123,078       | 2.2  | 5.22  |
| Totals, Primary Production.....                 | 1,843,657,625              | 1,174,597,474     | 1,975,833,500              | 1,257,281,877     | 7.0  | 52.50   |
| Construction.....                               | 186,198,890                | 115,406,755       | 215,548,873                | 120,815,289       | 4.7  | 5.05  |
| Custom and repair <sup>5</sup> .....            | 87,646,270                 | 62,444,353        | 97,109,740                 | 66,454,802        | 6.4  | 2.78  |
| Manufactures <sup>6</sup> .....                 | 2,533,758,054              | 1,222,943,890     | 2,797,400,424              | 1,292,242,142     | 5.7  | 53.90 <sup>7</sup>  |
| Totals, Secondary Production <sup>7</sup> ..... | 2,807,604,114              | 1,400,795,007     | 3,110,059,037              | 1,479,512,233     | 5.6  | 61.78 <sup>7</sup>  |
| Grand Totals.....                               | 4,631,421,085              | 2,233,697,618     | 4,395,333,710              | 2,394,720,638     | 7.2  | 100.00  |

<sup>1</sup> A number of items for 1934 have undergone revision since the publication of the 1937 Year Book.

<sup>2</sup> In conformance with Resolution 23 adopted by the Conference of British Commonwealth Statisticians of 1935, the cost of fuel and purchased electricity was deducted from the gross value of manufactures, mining, forestry, and electric power for 1934 and 1935 in arriving at the net figures. This is in addition to the usual deduction for cost of materials.

<sup>3</sup> The gross values of agricultural production here exceed those given in Chapter VIII, Agricultural Statistics, of this edition of the Year Book, by the amounts paid to patrons of dairy factories for milk and cream.

<sup>4</sup> Gross values comprise the mineral production, as shown in Chapter XII, Table 1, plus the value of ores and other raw materials of the smelting industry.

<sup>5</sup> Statistics of custom and repair shops, including custom clothing, dyeing and laundry work, boot, jewellery, automobile and bicycle repairing, and custom and repair work by foundries were not collected after 1921. The totals for 1934 and 1935 were estimated according to the percentage change in the data for manufacturing.

<sup>6</sup> The item "Manufactures" includes dairy factories, sawmills, pulp and paper mills, fish canning and curing, electric power production, shipbuilding, and certain mineral industries which are also included in other headings above. This duplication, amounting in 1934 to a gross of \$619,840,054 and a net of \$341,695,463 and in 1935 to a gross of \$687,608,827 and a net of \$342,073,422, is eliminated from the grand total.

<sup>7</sup> Secondary production includes the above-mentioned duplication. The percentage of the net manufactures, freed from all duplication, to the total net production in 1935 was 39.67, and, under like conditions, the proportion of all secondary production to the grand total of net production was 47.5 p.c.

2.—Detailed Itemized Statement of the Net Values of Production in Canada during 1934<sup>1</sup> and 1935.

| Classification.   | 1934. <sup>1</sup>   | 1935.                |
|---|----------------------|----------------------|
| <b>PRIMARY PRODUCTION.</b>                                  |                      |                      |
| Agricultural Production.....                                | 592,195,000          | 632,772,000          |
| Forestry—   |                      |                      |
| Logs and bolts.....   | 29,115,515           | 34,077,938           |
| Pulpwood.....   | 38,302,807           | 41,195,871           |
| Hewn railway ties.....                                      | 1,541,901            | 3,188,651            |
| Fuel.....   | 31,489,524           | 31,894,500           |
| All other forest products.....                              | 5,089,985            | 5,134,819            |
| Totals, Operations in the Woods.....                        | 105,539,732          | 115,461,779          |
| Sawmill products.....                                       | 24,971,159           | 29,513,090           |
| Pulp and paper mill products.....                           | 77,096,593           | 82,525,477           |
| Totals, Milling Operations.....                             | 102,067,752          | 112,038,567          |
| Totals, Forestry Production.....                            | 208,207,484          | 227,500,346          |
| Fisheries—  |                      |                      |
| Fish prepared domestically or sold fresh by fishermen.....  | 8,076,115            | 9,706,892            |
| Sales to canning and curing establishments.....             | 11,638,830           | 10,958,595           |
| Values added domestically.....                              | 1,839,251            | 1,172,606            |
| Fish-canning and -curing establishments (values added)..... | 12,418,107           | 12,499,461           |
| Totals, Fisheries Production.....                           | 24,022,232           | 24,427,554           |
| Trapping—   |                      |                      |
| Fur production (wild life).....                             | 8,636,885            | 8,877,331            |
| Mineral Production.....                                     | 209,073,759          | 238,581,268          |
| Electric Light and Power.....                               | 122,461,993          | 125,123,078          |
| TOTALS, PRIMARY PRODUCTION.....                             | 1,174,697,474        | 1,297,381,877        |
| <b>SECONDARY PRODUCTION.</b>                                |                      |                      |
| Construction.....   | 115,405,755          | 120,815,289          |
| Custom and Repair.....                                      | 62,444,353           | 66,454,802           |
| Manufactures—   |                      |                      |
| Vegetable products.....                                     | 210,899,307          | 217,051,454          |
| Animal products.....  | 94,998,316           | 99,033,595           |
| Textiles.....   | 160,723,494          | 166,228,633          |
| Wood and paper.....   | 223,240,884          | 239,357,227          |
| Iron and steel.....   | 143,369,504          | 173,034,965          |
| Non-ferrous metals.....                                     | 112,155,502          | 107,898,470          |
| Non-metallic minerals.....                                  | 71,357,352           | 75,849,415           |
| Chemicals.....  | 62,216,050           | 66,001,290           |
| Miscellaneous, including central electric stations.....     | 143,983,510          | 146,560,193          |
| Totals, Manufactures <sup>2</sup> .....                     | 1,222,943,899        | 1,292,242,142        |
| TOTALS, SECONDARY PRODUCTION.....                           | 1,400,798,067        | 1,479,518,233        |
| <b>Grand Totals<sup>2</sup>.....</b>                        | <b>2,333,697,018</b> | <b>2,394,720,688</b> |

<sup>1</sup> A number of items for 1934 have undergone revision since the publication of the 1937 Year Book.<sup>2</sup> The item "Totals, Manufactures" includes the following industries, which are also shown elsewhere, the amount of the duplication being deducted from the grand total:—

|  | 1934.       | 1935.       |
|--|-------------|-------------|
| Dairy factories.....                   | 29,912,319  | 30,332,166  |
| Sawmills and pulp and paper mills..... | 102,667,752 | 112,038,567 |
| Fish canning and curing.....           | 8,106,192   | 8,340,663   |
| Mineral industries.....                | 78,487,207  | 65,738,948* |
| Electric power.....                    | 122,461,993 | 125,123,078 |
| Totals.....                            | 341,695,463 | 342,073,422 |
| Manufactures.....                      | 881,248,436 | 950,168,720 |

\* The decrease in the duplication for mineral industries was due to a change in method of valuation of ores.

**Relative Importance of the Several Branches of Production.**—Owing to adverse weather conditions and low prices experienced by agriculture, the relative position of manufacturing has become more pronounced in recent years. Agricultural production in 1935 represented about 26 p.c. of the net output of all branches while the total value added by the manufacturing process was nearly 54 p.c. of the total net production. However, a number of industries listed under manufactures

are also included in the several extractive industries with which they are associated. Eliminating this duplication, the output of the manufacturing industries not elsewhere included, was 39.7 p.c. of the total net production. Mining held third place in 1935 with a percentage of nearly 10 p.c., followed closely by forestry with 9.5 p.c. The fifth and sixth places were held by electric power and construction, respectively, while custom and repair, fisheries, and trapping followed in the order named.

### Section 2.—The Provincial Distribution of Production.

Seven of the nine provinces showed gains in net production in 1935 over the preceding year. Due to increases of important proportions in each of the three provinces, the Maritimes showed a greater percentage gain than in any other economic area. Increases in Prince Edward Island, Nova Scotia, and New Brunswick were 8.6 p.c., 9.9 p.c., and 10.4 p.c., respectively.

Extending the gain of the preceding year, the net production of Ontario recorded an increase of 8.1 p.c. in 1935. The increase in Quebec at 6.1 p.c. was also substantial. The trend was uneven in the Prairie Provinces. Saskatchewan, due mainly to field crops, showed a gain of 27.5 p.c., but minor declines were recorded in Manitoba and Alberta. Recovery continued in British Columbia, an advance of 8.8 p.c. having been shown over the preceding year.

**Relative Production by Provinces, 1935.**—Ontario held first place among the nine provinces in the creation of new wealth, producing 43.7 p.c. of the Dominion total compared with 43.4 p.c. in 1934. Quebec followed with an output of 25.4 p.c. against 25.6 p.c. in the preceding year. British Columbia and Alberta were in third and fourth places, respectively, the contribution of the former in 1935 being 7.8 p.c. compared with 6.5 p.c. for Alberta. Saskatchewan and Manitoba were in fifth and sixth places, respectively. Nova Scotia, New Brunswick, and Prince Edward Island followed in the order named.

### 3.—Summary Analysis of the Value of Production in Canada, by Provinces, 1934<sup>1</sup> and 1935.

| Province.            | 1934. <sup>1</sup>       |                          |              |                          | 1935.                    |                          |              |                          |
|----------------------|--------------------------|--------------------------|--------------|--------------------------|--------------------------|--------------------------|--------------|--------------------------|
|                      | Gross Value.             | Net Value. <sup>2</sup>  |              |                          | Gross Value.             | Net Value. <sup>2</sup>  |              |                          |
|                      |                          | Amount.                  | Per-centage. | Per Capita. <sup>3</sup> |                          | Amount.                  | Per-centage. | Per Capita. <sup>3</sup> |
|                      |                          |                          |              |                          |                          |                          |              |                          |
| P. E. I. ....        | 17,864,849               | 10,181,232               | 0.5          | 114.40                   | 19,052,646               | 11,050,670               | 0.5          | 124.27                   |
| N. S. ....           | 131,399,711              | 76,628,789               | 3.4          | 145.96                   | 144,918,904              | 84,186,007               | 3.5          | 159.75                   |
| N. B. ....           | 98,679,310               | 55,404,590               | 2.5          | 130.30                   | 106,307,360              | 61,184,408               | 2.6          | 142.62                   |
| Que. ....            | 1,058,503,197            | 572,339,400              | 25.6         | 189.64                   | 1,137,261,900            | 607,222,088              | 25.4         | 198.31                   |
| Ont. ....            | 1,704,724,551            | 971,143,305              | 43.4         | 267.61                   | 1,984,461,443            | 1,050,064,179            | 43.7         | 285.89                   |
| Man. ....            | 195,670,750              | 106,321,772              | 4.8          | 149.54                   | 207,187,939              | 102,442,524              | 4.3          | 144.08                   |
| Sask. ....           | 191,335,124              | 100,960,920              | 4.8          | 114.76                   | 223,428,756              | 126,374,259              | 5.7          | 146.43                   |
| Alta. ....           | 255,549,707              | 162,784,883              | 7.3          | 215.32                   | 250,995,852              | 158,098,958              | 6.5          | 203.01                   |
| B.C. and Yukon. .... | 287,693,877 <sup>4</sup> | 171,932,118 <sup>4</sup> | 7.7          | 232.66                   | 324,718,910 <sup>4</sup> | 187,087,905 <sup>4</sup> | 7.8          | 249.78                   |
| Totals ....          | 4,631,421,083            | 2,233,697,015            | 100.0        | 206.37                   | 4,398,333,710            | 2,394,720,688            | 100.0        | 219.06                   |

<sup>1</sup> A number of items for 1934 have undergone revision since the publication of the 1937 Year Book.

<sup>2</sup> In conformance with Resolution 23 adopted by the Conference of British Commonwealth Statisticians of 1935, the cost of fuel and purchased electricity was deducted from the gross value of manufactures, mining, forestry, and electric power for 1934 and 1935. This is in addition to the usual deduction for cost of materials.

<sup>3</sup> Estimates of population on which these figures are based will be found on p. 155.

<sup>4</sup> The value of production in Yukon, mainly in the mining and trapping industries (including similar industries of the N.W.T.), was \$2,996,640 gross and \$2,515,988 net in 1934 and \$3,375,554 gross and \$3,110,950 net in 1935.

**Per Capita Production by Provinces.**—In the foregoing table the net commodity production is appraised on a per capita basis by provinces.

Owing to its preëminent industrial position, Ontario had a net commodity production of nearly \$286 per capita in 1935, an improvement of \$18 per capita over 1934, principally due to appreciable advances in manufacturing, agriculture, and mining. British Columbia ranked second with a per capita production of \$250, registering, largely because of forestry and manufacturing, an increase of \$17 per capita over 1934. Alberta held third place with \$203 per capita, a decline of \$12 from 1934 due mainly to reduction in agriculture. Quebec, with a per capita production of \$198, was fourth in rank, increasing its per capita figure by nearly \$9 over 1934. Nova Scotia with \$160, Saskatchewan \$146, Manitoba \$144, New Brunswick \$142, and Prince Edward Island \$124, produced in the order named. Of the nine provinces, Manitoba and Alberta alone showed recession which was limited in the former province to about \$5.50 per capita.

The Dominion figure of net commodity production at \$219 per capita was 6 p.c. or \$13 in advance of the figure for 1934. The estimated increase in population in 1935 over 1934 was only 1 p.c.

### Section 3.—Leading Branches of Production in each Province, 1935.

**Maritime Provinces.**—The net value of production in the Maritimes during 1935 rose 10 p.c. or \$14,216,000 over the preceding year. Agriculture contributed 23.3 p.c. while manufacturing, eliminating all duplication, accounted for 22 p.c. Construction was much more active than in 1934. Mining remained relatively the same with nearly 11 p.c. of the Maritime total attributable to this industry. Fisheries showed a recession of 8.1 p.c., although actual net value was up nearly \$400,000.

**Quebec.**—Manufacturing continued to be the leading industry in Quebec, contributing, without duplication, 46.4 p.c. of the net value of production during 1935. Agriculture accounted for over 18 p.c. of the net output while forestry, on the revised basis, rose in importance to nearly 14 p.c. of the net total.

**Ontario.**—The net value of manufacturing in Ontario during 1935, less duplication, was exactly 50 p.c. of the provincial total. Agriculture accounted for 20 p.c. or a net value of \$209,182,000. Mining advanced to 12.4 p.c. while forestry also showed betterment over the previous year at 5.5 p.c. of the provincial total.

**Prairie Provinces.**—Agriculture accounted for 61.0 p.c. of the value of net production of the Prairie Provinces in 1935, a drop of 1 p.c. from the preceding year. Manufacturing advanced slightly at 17.3 p.c. Mining showed a notable gain, the percentage increase being from 6.4 to 7.3 p.c. of the total for the Prairie-Provinces.

**British Columbia and Yukon.**—The net output from manufacturing in British Columbia and Yukon during 1935 was \$86,196,000 or 46.1 p.c. of the provincial net production, but over half of this amount was derived from manufacturing processes closely associated with the primary industries, such as logging, mining, and fishing. Eliminating this duplication, manufactures comprised 21.7 p.c. of the net provincial output, whereas forestry supplied 25.8 p.c., mining 15.7 p.c., agriculture 13.9 p.c., and fisheries 8.1 p.c.

Tables 4 and 4A give the details of gross and net production, by industries, for each province for the years 1934 and 1935, respectively. Only in Prince Edward Island, Saskatchewan and Alberta does agriculture now rank in first place, manufactures being more important than agriculture in each of the other six provinces.

Tables 5 and 5A offer some very interesting comparisons. For instance, on a provincial percentage basis mining is very much more important in Nova Scotia than it is in the premier mining province of Ontario. Again, the generation of electric power is relatively a more important industry in Nova Scotia, in New Brunswick, in Manitoba, and in British Columbia than it is in Ontario. While manufacturing is of first importance in Ontario and Quebec, it is also of major relative importance in Manitoba and Nova Scotia.

#### 4.—Gross and Net Values of Production, Classified for each Province, by Industries, 1934.

NOTE.—For Dominion totals, see Tables 1 and 2.

##### GROSS PRODUCTION.

| Industry.                       | Prince Edward Island. | Nova Scotia.       | New Brunswick.    | Quebec.              | Ontario.             |
|---------------------------------|-----------------------|--------------------|-------------------|----------------------|----------------------|
|                                 | \$                    | \$                 | \$                | \$                   | \$                   |
| Agriculture.....                | 13,366,889            | 27,918,977         | 25,653,127        | 199,357,806          | 332,574,824          |
| Forestry.....                   | 612,611               | 12,603,857         | 25,428,158        | 119,913,324          | 82,065,315           |
| Fisheries.....                  | 1,455,417             | 10,618,423         | 4,592,178         | 2,752,847            | 2,219,550            |
| Trapping.....                   | 1,546                 | 269,073            | 133,263           | 657,445              | 1,575,994            |
| Mining.....                     | Nil                   | 21,773,399         | 2,137,595         | 56,823,541           | 183,757,591          |
| Electric power.....             | 270,745               | 4,904,770          | 3,071,568         | 46,818,247           | 43,498,715           |
| Construction.....               | 297,918               | 9,868,541          | 6,163,183         | 42,825,745           | 96,488,265           |
| Custom and repair.....          | 192,806               | 2,376,604          | 1,501,625         | 16,401,885           | 38,049,543           |
| Manufactures <sup>1</sup> ..... | 2,302,580             | 60,844,581         | 54,057,847        | 706,498,000          | 1,255,325,701        |
| <b>Totals<sup>1</sup>.....</b>  | <b>17,864,819</b>     | <b>131,399,711</b> | <b>98,679,310</b> | <b>1,058,503,197</b> | <b>1,794,721,551</b> |

| Industry.                       | Manitoba.          | Saskatchewan.      | Alberta.           | British Columbia and Yukon. <sup>2</sup> |
|---------------------------------|--------------------|--------------------|--------------------|--|
|                                 | \$                 | \$                 | \$                 | \$                                       |
| Agriculture.....                | 75,675,073         | 135,838,027        | 155,707,765        | 39,665,168                               |
| Forestry.....                   | 2,455,205          | 2,376,082          | 3,785,723          | 64,419,094                               |
| Fisheries.....                  | 1,405,358          | 219,772            | 245,405            | 22,133,193                               |
| Trapping.....                   | 1,075,450          | 1,280,458          | 1,132,960          | 2,504,753 <sup>2</sup>                   |
| Mining.....                     | 10,447,132         | 3,239,328          | 19,056,775         | 47,732,198 <sup>2</sup>                  |
| Electric power.....             | 6,378,674          | 4,229,402          | 4,567,199          | 10,715,293                               |
| Construction.....               | 6,349,732          | 6,907,676          | 7,541,655          | 9,174,023                                |
| Custom and repair.....          | 7,758,807          | 6,190,733          | 6,870,614          | 8,297,553                                |
| Manufactures <sup>1</sup> ..... | 105,358,000        | 42,261,723         | 69,339,113         | 176,721,398                              |
| <b>Totals<sup>1</sup>.....</b>  | <b>195,670,759</b> | <b>191,335,124</b> | <b>255,519,707</b> | <b>287,693,877<sup>2</sup></b>           |

##### NET PRODUCTION.

| Industry.                       | Prince Edward Island. | Nova Scotia.      | New Brunswick.    | Quebec.            | Ontario.           |
|---------------------------------|-----------------------|-------------------|-------------------|--------------------|--------------------|
|                                 | \$                    | \$                | \$                | \$                 | \$                 |
| Agriculture.....                | 7,391,080             | 14,243,050        | 11,196,570        | 111,650,630        | 189,355,640        |
| Forestry.....                   | 550,165               | 9,096,551         | 16,988,174        | 77,670,128         | 52,343,833         |
| Fisheries.....                  | 963,926               | 7,073,855         | 3,079,970         | 2,306,517          | 2,218,550          |
| Trapping.....                   | 1,046                 | 269,073           | 133,263           | 657,445            | 1,575,994          |
| Mining.....                     | Nil                   | 14,067,797        | 1,863,477         | 26,078,617         | 117,104,023        |
| Electric power.....             | 240,509               | 4,170,751         | 2,910,473         | 46,814,407         | 43,477,976         |
| Construction.....               | 161,569               | 7,224,403         | 3,900,748         | 23,531,437         | 61,315,609         |
| Custom and repair.....          | 158,064               | 1,741,727         | 1,427,268         | 12,548,882         | 26,711,864         |
| Manufactures <sup>1</sup> ..... | 1,281,041             | 28,406,917        | 26,357,257        | 380,453,666        | 611,303,862        |
| <b>Totals<sup>1</sup>.....</b>  | <b>10,181,232</b>     | <b>76,623,789</b> | <b>55,404,590</b> | <b>572,339,469</b> | <b>971,143,305</b> |

For footnote, see end of table, p. 220.



#### 4.—Gross and Net Values of Production, Classified for each Province, by Industries, 1934—concluded.

##### NET PRODUCTION—concluded.

| Industry.                       | Manitoba.          | Saskatchewan.      | Alberta.           | British Columbia and Yukon. <sup>2</sup> |
|---------------------------------|--------------------|--------------------|--------------------|--|
|                                 | \$                 | \$                 | \$                 | \$                                       |
| Agriculture.....                | 45,490,020         | 78,547,390         | 109,009,230        | 25,310,790                               |
| Forestry.....                   | 2,152,357          | 2,218,120          | 3,410,820          | 43,777,336                               |
| Fisheries.....                  | 1,405,358          | 219,772            | 245,405            | 15,248,960                               |
| Trapping.....                   | 1,075,450          | 1,280,458          | 1,132,960          | 2,504,753 <sup>2</sup>                   |
| Mining.....                     | 6,857,321          | 2,340,189          | 14,703,214         | 26,059,142 <sup>2</sup>                  |
| Electric power.....             | 6,310,475          | 3,460,775          | 4,401,197          | 10,075,370                               |
| Construction.....               | 3,612,232          | 4,327,753          | 6,377,955          | 5,954,989                                |
| Custom and repair.....          | 5,917,631          | 4,409,227          | 4,815,839          | 5,813,851                                |
| Manufactures <sup>1</sup> ..... | 48,484,065         | 16,238,427         | 27,576,875         | 82,841,189                               |
| <b>Totals<sup>1</sup>.....</b>  | <b>106,321,772</b> | <b>106,960,920</b> | <b>162,784,583</b> | <b>171,932,118<sup>2</sup></b>           |

<sup>1</sup> The totals for manufactures involve duplicated amounts which were deducted in computing the total production for each province. The duplication arises from including in two places a number of industries which may be regarded as extractive or as manufacturing processes. The following are the amounts of the duplication by provinces: Prince Edward Island, gross \$1,644,839, net \$566,328; Nova Scotia, gross \$19,779,914, net \$10,206,305; New Brunswick, gross \$24,024,474, net \$13,057,609; Quebec, gross \$194,045,749, net \$109,372,323; Ontario, gross \$240,839,887, net \$134,263,996; Manitoba, gross \$21,292,322, net \$14,444,337; Saskatchewan, gross \$11,208,380, net \$6,081,191; Alberta, gross \$12,752,897, net \$7,388,012; British Columbia and Yukon, gross \$94,251,595, net \$46,254,262. Canada, gross \$619,840,054, net \$341,095,463. <sup>2</sup> The value of production in Yukon, mainly in the mining and trapping industries (including similar industries of the N.W.T.), was \$2,956,649 gross and \$2,515,938 net in 1934.

#### 4A.—Gross and Net Values of Production, Classified for each Province, by Industries 1935.

NOTE.—For Dominion totals, see Tables 1 and 2.

##### GROSS PRODUCTION.

| Industry.                       | Prince Edward Island. | Nova Scotia.       | New Brunswick.     | Quebec.              | Ontario.             |
|---------------------------------|-----------------------|--------------------|--------------------|----------------------|----------------------|
|                                 | \$                    | \$                 | \$                 | \$                   | \$                   |
| Agriculture.....                | 13,620,895            | 28,593,542         | 26,202,622         | 195,759,545          | 346,181,757          |
| Forestry.....                   | 637,664               | 12,625,924         | 27,931,167         | 129,904,542          | 89,945,747           |
| Fisheries.....                  | 1,301,848             | 10,753,244         | 4,768,162          | 2,304,071            | 2,852,007            |
| Trapping.....                   | 2,713                 | 455,086            | 30,080             | 1,050,591            | 1,804,537            |
| Mining.....                     | Nil                   | 21,965,963         | 2,798,654          | 77,500,047           | 220,799,576          |
| Electric power.....             | 278,727               | 5,096,453          | 3,184,329          | 47,808,550           | 43,667,455           |
| Construction.....               | 1,190,030             | 15,657,298         | 9,988,340          | 58,309,329           | 90,848,941           |
| Custom and repair.....          | 195,914               | 2,619,419          | 1,564,063          | 17,556,467           | 43,110,934           |
| Manufactures <sup>1</sup> ..... | 3,356,006             | 67,109,172         | 56,294,840         | 821,020,796          | 1,413,694,864        |
| <b>Totals<sup>1</sup>.....</b>  | <b>19,052,646</b>     | <b>144,918,904</b> | <b>106,207,360</b> | <b>1,137,261,900</b> | <b>1,984,461,443</b> |

| Industry.                       | Manitoba.          | Saskatchewan.      | Alberta.           | British Columbia and Yukon. <sup>2</sup> |
|---------------------------------|--------------------|--------------------|--------------------|--|
|                                 | \$                 | \$                 | \$                 | \$                                       |
| Agriculture.....                | 63,447,937         | 104,290,293        | 141,446,777        | 40,322,631                               |
| Forestry.....                   | 3,623,507          | 2,751,537          | 4,283,228          | 73,054,712                               |
| Fisheries.....                  | 1,258,335          | 252,069            | 225,741            | 21,666,282                               |
| Trapping.....                   | 968,003            | 1,080,780          | 1,054,968          | 2,600,593 <sup>2</sup>                   |
| Mining.....                     | 19,335,302         | 5,349,657          | 21,614,954         | 60,453,106 <sup>2</sup>                  |
| Electric power.....             | 6,729,818          | 4,377,205          | 4,750,955          | 11,278,402                               |
| Construction.....               | 10,473,633         | 10,193,322         | 10,193,322         | 13,836,120                               |
| Custom and repair.....          | 8,656,290          | 6,353,839          | 7,257,507          | 9,295,257                                |
| Manufactures <sup>1</sup> ..... | 117,784,292        | 48,821,302         | 73,202,610         | 198,126,826                              |
| <b>Totals<sup>1</sup>.....</b>  | <b>207,187,939</b> | <b>223,428,756</b> | <b>250,995,852</b> | <b>324,718,910<sup>2</sup></b>           |

For footnotes, see end of table, p. 221.

#### 4A.—Gross and Net Value of Production, Classified for each Province, by Industries 1935—concluded.

NOTE.—For Dominion totals, see Tables 1 and 2.

## NET PRODUCTION—concluded.

| Industry.                       | Prince<br>Edward<br>Island. | Nova<br>Scotia.   | New<br>Brunswick. | Quebec.            | Ontario.             |
|---------------------------------|-----------------------------|-------------------|-------------------|--------------------|----------------------|
|                                 | \$                          | \$                | \$                | \$                 | \$                   |
| Agriculture.....                | 7,704,944                   | 16,150,888        | 12,054,048        | 110,705,704        | 209,181,936          |
| Forestry.....                   | 563,574                     | 9,190,760         | 18,550,461        | 84,258,557         | 57,605,866           |
| Fisheries.....                  | 896,655                     | 7,352,899         | 3,949,615         | 1,947,259          | 2,852,007            |
| Trapping.....                   | 2,713                       | 425,089           | 80,080            | 1,050,591          | 1,604,537            |
| Mining.....                     | Nil                         | 14,207,064        | 2,467,339         | 33,679,150         | 130,220,051          |
| Electric power.....             | 238,354                     | 4,332,290         | 3,024,999         | 47,805,074         | 43,645,644           |
| Construction.....               | 666,790                     | 9,688,391         | 5,834,331         | 32,859,784         | 50,649,333           |
| Custom and repair.....          | 168,223                     | 1,917,479         | 1,500,228         | 13,024,339         | 29,326,139           |
| Manufactures <sup>1</sup> ..... | 1,362,405                   | 30,995,130        | 27,594,016        | 393,895,091        | 659,051,124          |
| <b>Totals<sup>1</sup>.....</b>  | <b>11,059,670</b>           | <b>84,186,607</b> | <b>61,184,408</b> | <b>607,222,088</b> | <b>1,050,064,179</b> |

| Industry.                       | Manitoba.          | Saskat-<br>chewan. | Alberta.           | British<br>Columbia<br>and<br>Yukon. <sup>2</sup> |
|---------------------------------|--------------------|--------------------|--------------------|---|
|                                 | \$                 | \$                 | \$                 | \$  |
| Agriculture.....                | 35,046,936         | 107,844,120        | 97,490,304         | 25,093,120  |
| Forestry.....                   | 2,774,148          | 2,465,864          | 3,798,133          | 48,294,950  |
| Fisheries.....                  | 1,258,335          | 252,059            | 225,741            | 15,100,254  |
| Trapping.....                   | 968,003            | 1,080,760          | 1,064,998          | 2,600,593   |
| Mining.....                     | 9,040,591          | 2,809,351          | 16,738,472         | 29,359,250 <sup>1</sup>                           |
| Electric power.....             | 6,657,035          | 3,616,251          | 4,572,180          | 11,230,661  |
| Construction.....               | 5,083,452          | 2,772,833          | 5,524,813          | 7,735,062   |
| Custom and repair.....          | 5,252,000          | 4,625,507          | 4,549,002          | 6,091,285   |
| Manufactures <sup>1</sup> ..... | 47,349,314         | 16,976,149         | 28,912,220         | 86,196,093  |
| <b>Totals<sup>1</sup>.....</b>  | <b>102,442,524</b> | <b>136,374,259</b> | <b>155,098,958</b> | <b>187,087,995<sup>3</sup></b>                    |

<sup>1</sup> The totals for manufactures involve duplicated amounts which were deducted in computing the total production for each province. The duplication arises from including in two places a number of industries which may be regarded as extractive or as manufacturing processes. The following statement gives the amounts of the duplication by provinces: Prince Edward Island, gross \$1,531,141, net \$347,018; Nova Scotia, gross \$10,932,197, net \$10,573,380; New Brunswick, gross \$20,504,897, net \$14,471,209; Quebec, gross \$213,952,538, net \$111,914,001; Ontario, gross \$268,244,405, net \$134,072,468; Manitoba, gross \$25,039,318, net \$10,987,883; Saskatchewan, gross \$13,400,300, net \$6,128,335; Alberta, gross \$13,100,240, net \$7,775,480; British Columbia and Yukon, gross \$105,894,791, net \$45,603,263; Canada, gross \$987,608,827, net \$42,073,422.

<sup>2</sup> The value of production in Yukon, mainly in the mining and trapping industries (including similar industries of the N.W.T.), was \$3,375,554 gross and \$3,110,950 net in 1935.

#### 5.—Percentage of the Value of the Net Production in each Industry to the Total Net Production for each of the Provinces in 1934.

| Industry.   | Prince<br>Edward<br>Island. | Nova<br>Scotia. | New<br>Brunswick. | Quebec.       | Ontario.      |
|---|-----------------------------|-----------------|-------------------|---------------|---------------|
|   | p.c.                        | p.c.            | p.c.              | p.c.          | p.c.          |
| Agriculture.....  | 72.60                       | 18.59           | 20.32             | 19.51         | 19.50         |
| Forestry.....   | 5.40                        | 11.87           | 30.66             | 13.57         | 5.39          |
| Fisheries.....  | 9.47                        | 10.01           | 6.64              | 0.40          | 0.23          |
| Trapping.....   | 0.02                        | 0.35            | 0.25              | 0.11          | 0.16          |
| Mining.....   | Nil                         | 18.36           | 3.36              | 4.56          | 12.06         |
| Electric power.....   | 2.36                        | 5.44            | 5.25              | 8.18          | 4.48          |
| Construction.....   | 1.59                        | 9.43            | 7.04              | 4.11          | 6.31          |
| Custom and repair.....  | 1.55                        | 2.27            | 2.58              | 2.19          | 2.75          |
| Manufactures, n.e.s.....  | 7.01                        | 23.68           | 24.00             | 47.37         | 49.12         |
| <b>Totals.....</b>  | <b>100.00</b>               | <b>100.00</b>   | <b>100.00</b>     | <b>100.00</b> | <b>100.00</b> |
| Totals, Manufactures (Percentages to Grand Totals of Net Production)... | 12.58                       | 37.07           | 47.57             | 66.47         | 62.95         |

**5.—Percentage of the Value of the Net Production in each Industry as the Total Net Production for each of the Provinces in 1934—concluded.**

| Industry.   | Manitoba.     | Saskatchewan. | Alberta.      | British Columbia and Yukon. <sup>1</sup> | Canada.       |
|---|---------------|---------------|---------------|--|---------------|
|   | p.c.          | p.c.          | p.c.          | p.c.                                     | p.c.          |
| Agriculture.....  | 42.78         | 73.42         | 66.07         | 14.72                                    | 26.51         |
| Forestry.....   | 2.02          | 2.07          | 2.10          | 25.46                                    | 9.32          |
| Fisheries.....  | 1.38          | 0.21          | 0.15          | 8.87                                     | 1.52          |
| Trapping.....   | 1.01          | 1.20          | 0.70          | 1.46 <sup>1</sup>                        | 0.39          |
| Mining.....   | 6.45          | 2.19          | 9.03          | 15.16 <sup>1</sup>                       | 9.36          |
| Electric power.....   | 5.94          | 3.24          | 2.70          | 6.21                                     | 5.48          |
| Construction.....   | 3.40          | 4.05          | 3.30          | 3.46                                     | 5.17          |
| Custom and repair.....  | 5.00          | 4.12          | 2.65          | 3.88                                     | 2.80          |
| Manufactures, n.e.s.....  | 32.02         | 9.50          | 12.40         | 21.28                                    | 39.45         |
| <b>Totals.....</b>  | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00<sup>1</sup></b>                | <b>100.00</b> |
| Totals, Manufactures (Percentages to Grand Totals of Net Production)... | 45.60         | 15.18         | 16.94         | 48.18                                    | 54.75         |

<sup>1</sup> Includes the trapping and mining industries of the Northwest Territories.

**5A.—Percentage of the Value of the Net Production in each Industry to the Total Net Production for each of the Provinces in 1935.**

| Industry.   | Prince Edward Island. | Nova Scotia.  | New Brunswick. | Quebec.       | Ontario.      |
|---|-----------------------|---------------|----------------|---------------|---------------|
|   | p.c.                  | p.c.          | p.c.           | p.c.          | p.c.          |
| Agriculture.....  | 69.67                 | 19.18         | 20.68          | 18.23         | 19.93         |
| Forestry.....   | 5.10                  | 10.92         | 30.81          | 13.88         | 5.49          |
| Fisheries.....  | 8.13                  | 9.33          | 6.46           | 0.32          | 0.27          |
| Trapping.....   | 0.02                  | 0.50          | 0.13           | 0.17          | 0.15          |
| Mining.....   | Nil                   | 16.88         | 4.03           | 5.55          | 12.40         |
| Electric power.....   | 2.16                  | 5.15          | 4.94           | 7.87          | 4.16          |
| Construction.....   | 6.03                  | 11.51         | 9.54           | 5.41          | 4.82          |
| Custom and repair.....  | 1.52                  | 2.28          | 2.45           | 2.14          | 2.79          |
| Manufactures, n.e.s.....  | 7.37                  | 24.25         | 21.46          | 46.43         | 40.99         |
| <b>Totals.....</b>  | <b>100.00</b>         | <b>100.00</b> | <b>100.00</b>  | <b>100.00</b> | <b>100.00</b> |
| Totals, Manufactures (Percentages to Grand Totals of Net Production)... | 12.32                 | 36.82         | 45.10          | 64.85         | 62.76         |

| Industry.   | Manitoba.     | Saskatchewan. | Alberta.      | British Columbia and Yukon. <sup>1</sup> | Canada.       |
|---|---------------|---------------|---------------|--|---------------|
|   | p.c.          | p.c.          | p.c.          | p.c.                                     | p.c.          |
| Agriculture.....  | 34.21         | 79.00         | 62.85         | 13.89                                    | 26.01         |
| Forestry.....   | 2.71          | 1.81          | 2.45          | 25.82                                    | 9.50          |
| Fisheries.....  | 1.23          | 0.18          | 0.15          | 8.11                                     | 1.44          |
| Trapping.....   | 0.94          | 0.79          | 0.69          | 1.391                                    | 0.37          |
| Mining.....   | 8.83          | 2.10          | 10.79         | 15.691                                   | 9.96          |
| Electric power.....   | 6.50          | 3.65          | 2.95          | 6.00                                     | 5.22          |
| Construction.....   | 4.06          | 2.03          | 3.56          | 4.13                                     | 5.05          |
| Custom and repair.....  | 5.13          | 3.39          | 2.93          | 3.26                                     | 2.73          |
| Manufactures, n.e.s.....  | 35.49         | 7.96          | 13.63         | 21.71                                    | 39.67         |
| <b>Totals.....</b>  | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00<sup>1</sup></b>                | <b>100.00</b> |
| Totals, Manufactures (Percentages to Grand Totals of Net Production)... | 46.22         | 12.45         | 18.64         | 46.07                                    | 53.96         |

<sup>1</sup> Includes the trapping and mining industries of the Northwest Territories.

## CHAPTER VIII.—AGRICULTURE.

Agriculture, including stock raising and horticulture, is the chief single industry of the Canadian people, employing, in 1931, 28.7 p.c. of the total gainfully occupied population and 33.9 p.c. or over one-third of the gainfully occupied males. In addition, it provides the raw material for many Canadian manufactures, and its products in raw or manufactured form constitute a very large percentage of Canadian exports. For a statement of the occupied and the available agricultural lands in Canada, see p. 60 of this volume.

This chapter treats of current governmental activities in connection with agriculture, including those of the Dominion and Provincial Experimental Stations. Statistics of agriculture follow, including agricultural revenue and wealth, field crops, farm live stock and poultry, dairying, fur farming, fruit, special crops, farm labour and wages, prices, miscellaneous, and, since Canadian exports of agricultural commodities are sold in the world market, a review of world statistics of agriculture, compiled from the publications of the International Institute of Agriculture.

### Section 1.—The Government in Relation to Agriculture.

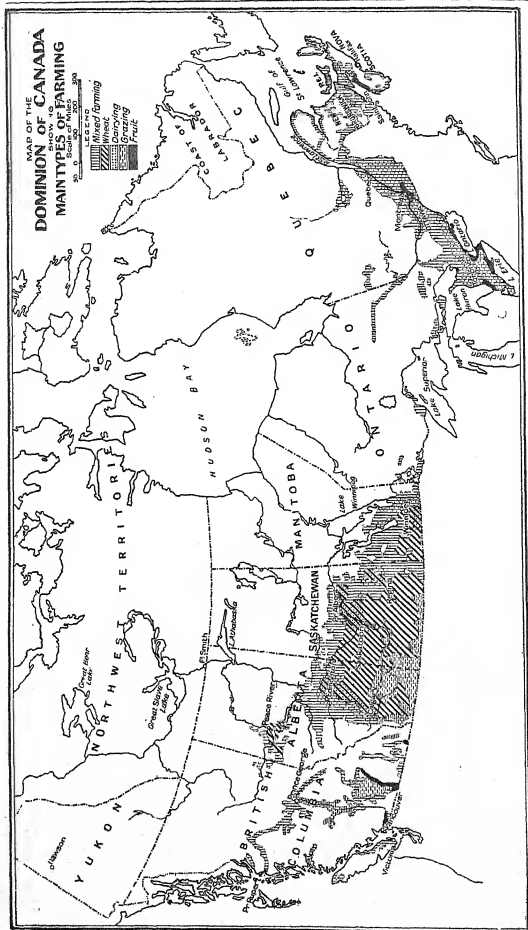
It is provided in Section 95 of the British North America Act that "in each province the Legislature may make laws in relation to agriculture in the province"; it is also "declared that the Parliament of Canada may from time to time make laws in relation to agriculture in all or any of the provinces; and any law of the Legislature of a province relative to agriculture . . . shall have effect in and for the province as long and as far only as it is not repugnant to any Act of the Parliament of Canada".

As a result of this provision, there exist at the present time Departments of Agriculture, with Ministers of Agriculture at their heads, both in the Dominion and in each of the nine provinces, though in two provinces the portfolio of agriculture is combined with one or more other portfolios in the hands of a single Minister. A short sketch of the functions of the Dominion Department was published at pp. 212-223 of the 1936 Year Book, and an outline of agricultural progress in Canada and the Dominion Experimental Farms System appeared at pp. 221-228 of the 1937 Year Book.

#### Subsection 1.—The Prairie Farm Rehabilitation Program.\*

The need for the Prairie Farm Rehabilitation Program arose from the severe conditions of drought and soil drifting which have been experienced almost continuously since 1929 in southwestern Manitoba and the southern parts of Saskatchewan and Alberta. These conditions have resulted in serious reductions in crop yields and repeated crop failures. As the type of farming in this area is limited by the semi-arid climate to grain production, principally grain for export, these reduced yields, coupled with the extremely low grain prices which prevailed from 1930 to 1935, have entailed enormous economic losses and considerable hardship to the agricultural population. Very large governmental expenditures have been necessary to relieve actual want, while the disparity between income and capital investment has resulted in drastic debt and tax adjustments and seriously interfered with credit facilities. The nation-wide repercussions of this agricultural

\* Prepared under the direction of Dr. E. S. Archibald, Director of the Dominion Experimental Farms, by William Dickson, Esq., Field Husbandry Division, Central Experimental Farm, Ottawa.



## MAIN TYPES OF FARMING IN CANADA.

crisis in the Prairie Provinces led to the inauguration by the Dominion Government of the rehabilitation program.

The Prairie Farm Rehabilitation Act was passed by the Parliament of Canada in 1935 to provide for the improvement of agricultural conditions in those parts of the Prairie Provinces which in recent years have suffered severely from drought and soil drifting. The principal object of the rehabilitation program inaugurated by this Act is to introduce measures in the affected areas to control these conditions and to establish agriculture on a sound economic basis. These measures include the improvement of cropping and cultural practices, the conservation of surface water supplies, and necessary adjustments in land utilization. Each of these is dealt with under the headings presented below. Active co-operation between the Government and the farmers, rather than the provision of relief, is an important feature of this program.

The Act is administered by the Dominion Minister of Agriculture, operating through the Dominion Experimental Farms and other branches of the Department of Agriculture. Co-operating agencies include the governments of the three Prairie Provinces and various services of the Dominion Government. Appropriations under the Act have amounted to \$1,250,000 for the fiscal year 1935-36, \$1,184,420 for 1936-37 and \$2,000,000 for 1937-38.

#### CULTURAL WORK.

Aside from the lack of precipitation which is beyond human control, and which greatly reduces crop yields, soil drifting is the most serious problem encountered in the Prairie Provinces during periods of drought. Fortunately, methods of controlling this menace are available, the success of which is enhanced by their widespread adoption throughout the affected area. For this reason a very considerable amount of the cultural work under the rehabilitation program is directed to the control of soil drifting.

**Soil Drifting.**—The prevalence of soil drifting during dry years in the Prairie Provinces is caused, in large measure, by the very extensive practice of summer-fallowing. Under the average climatic conditions which prevail in the southern parts of the Prairie Provinces, the amount of precipitation received is not sufficient to produce a profitable crop each year on the same land. This fact has led to the practice of summer-fallowing, whereby part of the land is kept bare of vegetation by cultivation during one year in order that any rainfall received may be stored to augment moisture supplies for crop production in the succeeding year. As this practice exposes a large proportion of the crop land in a pulverized condition to the erosive action of high winds, soil drifting is apt to occur on summer-fallow during dry years.

The attack on soil drifting under the rehabilitation program involves the introduction of improved methods of summer-fallowing. One of the most effective methods of soil-drifting control is strip farming, which consists of dividing large fields into alternate narrow strips of crop and summer-fallow. These strips, which may vary in width from 8 to 16 rods, are run at right angles to the direction of the prevailing strong winds. Drifting, which may start on the fallow strips, is prevented from spreading by the crop or stubble on the adjacent strips. In this manner the cumulative effect of drifting on large fields is avoided. Strip farming has been practised successfully for many years in parts of southern Alberta, and its use throughout the drought area is being widely adopted.

In the cultivation of fallow land it is desirable to leave as much stubble and other "trash" on the surface as possible, and to produce a rough cloddy tilth, in order to reduce susceptibility to drifting. Good trash cover may be secured by shallow cultivation; in this respect, the "ploughless fallow" in which the fallow and subsequent seed bed is cultivated without ploughing, is being advocated and is coming into wide use. Rough tilth is secured by the same method, and by avoiding the use of implements which produce extreme pulverization. A combination of surface cultivation and strip farming is proving useful in controlling soil drifting. In some cases cover crops of spring grain sown in the late summer are used to prevent drifting. However, considerable difficulty is experienced in getting stands of these crops, particularly in dry years or when grasshoppers are numerous. Various emergency methods are also used, such as spreading straw on small areas of incipient drifting and cultivating or ridging land at intervals across a field.

Where the control of soil drifting cannot be effected by any of the foregoing methods, as on some areas of sandy land, regrassing may become necessary. Owing to the difficulty of securing a stand of grass on land which is subject to periodical drifting, it is frequently necessary to provide some vegetative protection for the soil. Cover crops of grain, such as fall rye, are used for this purpose. Grass seed of the desired species, usually crested wheat or brome grass, is seeded when sufficient protection has developed to check drifting. Sometimes several attempts at regrassing are necessary in order to secure the desired result.

**Cultural Rehabilitation Work by the Experimental Farms in Association with Local Bodies.**—The development of cultural work under the rehabilitation program is supervised from the Dominion Experimental Farms located in the drought area. As such experimental farms have been in operation at Brandon, Man., and Indian Head, Sask., for over 50 years, and at Scott, Sask., Swift Current, Sask., and Lethbridge, Alta., for many years, they form ideal centres for the spread of rehabilitation work through the agencies described below.

**District Experiment Sub-Stations.**—These are essentially sub-stations of the Dominion Experimental Farms, established for the purpose of undertaking experimental work and illustrating methods of crop production, suitable for various districts. Comprising usually one section of land, these sub-stations are private farms operated under the supervision of the local experimental farm. In addition to field work with rotations and soil-drifting control practices, these sub-stations serve as experimental demonstrational points for farm gardens, shelterbelts, and various other farmstead improvement projects. Since the inauguration of the program, 47 sub-stations have been established at strategic points.

**Reclamation Stations.**—Investigations to determine the most economical methods of dealing with marginal land on which crop production has been abandoned due to soil drifting, are in progress at reclamation stations located at Melita, Man., Mortlach, Sask., Cadillac, Sask., and Woodrow, Sask. Smaller reclamation projects are in progress at many points where drifting has been severe including over 40 demonstrations of the best methods of establishing grass cover on light land.

**Agricultural Improvement Associations.**—In order to promote the widespread adoption of rehabilitation measures, some means of establishing contact with the farmers and of enlisting their co-operative support, is essential. This has been effected through the organization of farmers into agricultural improvement associations, the purpose of which is to secure united community action on drought

and soil-drifting problems. By the end of 1937 some 97 of these associations had been formed, with a total membership of over 12,000, or roughly about one-tenth of the farmers in the drought area. Each association receives some small financial assistance for operating expenses, and members may receive small supplies of grass seed, trees, and other materials.

Agricultural improvement associations have proved very effective in securing the widespread adoption of cultural practices, such as strip farming, which are useful in combating soil drifting. A noteworthy feature of this work has been the assistance given by officers of associations to the Dominion Experimental Farms in organizing large-scale emergency operations for the control of soil drifting in certain dangerous areas, over 15,000 acres having been covered in southwestern Saskatchewan alone during 1937.

*Tree Planting.*—The value of shelterbelts of trees and shrubs for the protection of farm buildings and gardens against high winds on the open prairie, is generally recognized, and free planting stock for this purpose has been supplied to prairie farmers by the Dominion Government since 1901. Under the rehabilitation program some special assistance is given to farmers in planting farm-home shelterbelts, and model plantations are being established on district experiment substitutions for demonstration purposes.

The difficulty of maintaining large plantations in a region which is naturally treeless by reason of insufficient rainfall, however, has prevented any widespread use of shelterbelts for field-crop protection. With the object of determining definitely the effect of large-scale shelterbelts on crop production, especially as regards the control of soil drifting and the conservation of moisture, field-crop shelterbelt associations have been organized among farmers at four different points in the drought area, namely: Lyleton, Man.; Conquest, Sask.; Aneroid, Sask.; and Ribstone, Alta. In each of these associations the members plant shelterbelts around their fields covering an area of approximately one township. A similar municipal project for bluff planting at Kindersley, Sask., is also being assisted. As every possible effort is being made to ensure the success of these projects, the results secured will have a decisive influence on future afforestation policies in the prairies.

Supervision of the foregoing activities and seedling supplies are furnished by the Forest Nursery Stations of the Dominion Experimental Farms, located at Indian Head, Sask., and Sutherland, Sask.

*Soil Surveys.*—With the object of determining the nature, location, and extent of different types of soil in the Prairie Provinces, soil surveys have been conducted by the provincial universities for a number of years, with financial assistance from the Dominion Experimental Farms. Since 1935 this work has been paid for from rehabilitation funds, in order to accelerate the mapping of the drought area. By the end of 1937 all of the drought area in Manitoba and Saskatchewan, and more than half of the area in Alberta, had been covered by a reconnaissance survey.

*Soil Research.*—Investigations into the fundamental principles of crop production under semi-arid conditions are in progress at the new Soil Research Laboratory, Dominion Experimental Station, Swift Current, Sask. Special attention is given in this work to soil moisture problems, soil-drifting control and soil fertility. A certain amount of soil research work is also being conducted in co-operation with the universities of each of the Prairie Provinces.



## WATER DEVELOPMENT.

The development of surface-water resources for agricultural use is a major rehabilitation activity which has already resulted in substantial benefits to farmers and ranchers in the drought area. The object of this work is to provide supplies of water throughout the year by storing spring run-off in dugouts and dams for domestic, stock-watering, and irrigation purposes. The principal value of this type of development is to enable live-stock production in areas where it would be otherwise impossible. This work is supervised by the Water Development Committee with headquarters at Regina, Sask. The personnel of this Committee includes representatives of the Dominion Department of Agriculture and of the water-rights branches of each of the Prairie Provinces.

Under the rehabilitation program, two types of projects are being constructed—small projects on private farms and large projects for community use. Small projects include excavations known as dugouts, dams on small streams, and irrigation works, in the construction of which farmers receive free engineering services, and financial assistance in proportion to the amount of work done. The basis of financial assistance is  $4\frac{1}{2}$  cents per cubic yard of earth moved, plus additional amounts for rock work and the purchase of materials. Maximum assistance for the different types of small projects are: \$75 per dugout, \$150 per stock-watering dam, and \$350 per irrigation project. Where two or more farmers co-operate in a project, the maximum may be increased to \$500. Government assistance for large projects is determined for each project on its merits, sometimes amounting to the full cost of construction.

Applications from the drought area for assistance with water development are received by the Water Development Committee. Small projects, when approved, are referred to the appropriate provincial member of the Committee for final authorization. Engineering and financial assistance for these projects are provided from rehabilitation funds. Large projects are passed through the Dominion Department of Agriculture for the Minister's approval.

**Progress with Small Water Development Projects.**—From the inauguration of the program in 1935 to Jan. 15, 1938, a total of 11,392 applications for assistance with small projects was received. During the same period 4,285 small projects were reported as completed, comprising 2,541 dugouts, 1,414 stock-watering dams, and 330 irrigation projects. The irrigable area represented by the 330 small irrigation projects is approximately 12,000 acres. Most of this area will be used in growing supplies of feed for live stock.

**Progress with Large Water Development Projects.**—Large projects include the construction of storage dams and irrigation works for incorporated bodies, such as rural municipalities and irrigation districts. In some cases assistance has been provided for repair and extension work on existing irrigation projects, where the discontinuance of water supplies would have caused serious hardship. The basic principle governing the selection of large projects is to secure a maximum of benefit with a minimum of cost.

In the development of large irrigation projects full advantage is taken of the experience gained in the irrigation districts of southern Alberta since the opening of the present century. The bulk of new irrigation is intended for the production of forage crops, to provide dependable supplies of feed to supplement grazing in range areas. The extensive production of grain on irrigated land is not contemplated.

Since the beginning of the program several large irrigation projects have been completed. These include works for the irrigation of 6,000 acres at Val Marie, Sask., 3,900 acres at Eastend, Sask., 900 acres at Middle Creek, Sask., and 1,500 acres at Adams Lake, Sask. The foregoing projects will eventually form units in a larger irrigation system on the southern watershed of the Cypress hills covering 20,000 acres of irrigable land, with a main reservoir of 70,000 acre-feet capacity now in construction on Cypress lake. On the northern watershed of the Cypress hills, the Downie Lake irrigation project, also in course of construction, will provide irrigation water for about 10,000 acres. It is important to note that the development of irrigation in the Cypress Hills district will materially stabilize live-stock production on over 3,000,000 acres of range land.

Construction of works have also been completed for the irrigation of 3,600 acres at Wildhorse, Alta., 3,600 acres at Mountain View, Alta., 6,000 acres at Moose Mountain Lake, Sask., and 3,500 acres along the Souris river north of Estevan, Sask. A large number of smaller community irrigation schemes have been completed or are in course of construction.

In the Eastern Irrigation District of Brooks, Alta., existing facilities have been extended to irrigate about 10,000 acres of land near Tilley and further extensions to about 25,000 acres in the Rolling Hills district are in progress.

Altogether, new irrigation works under the rehabilitation program, including large and small projects completed or in progress at the end of 1937, represent a total irrigable area of over 100,000 acres. In addition, extensive repairs have been made to the works of the Canada Land and Irrigation Project to ensure continuance of water supplies to some 45,000 acres of irrigated land near Vauxhall, Alta.

Construction of large community storage dams for stock-watering purposes has been completed or is in progress at many points in the drought area.

### LAND UTILIZATION.

During the period of agricultural settlement in the Prairie Provinces some areas of marginal and submarginal land were broken for crop production. Some of this land was subsequently abandoned, but a considerable acreage is still under cultivation with little prospect of producing profitable crops. To rectify this condition, adjustments in land utilization are being made on the basis of information gained through the Dominion Experimental Farms, soil surveys, and economic surveys. The most important development in this respect is the creation on submarginal land of community and reserve pastures.

**Community Pastures.**—These pastures, which vary in area from about 5,000 to nearly 50,000 acres each, are established on submarginal land in the vicinity of somewhat better farm land. Each pasture is being fenced, supplied with stock-watering facilities, and, where necessary, seeded to grass. Grazing privileges, under government supervision, will be accorded to operators of farms in the vicinity. In this manner the usefulness of certain areas will be increased, and their liability to soil drifting removed.

By Dec. 31, 1937, some 47 areas in Saskatchewan, totalling 503,710 acres, and 8 areas in Alberta, totalling 595,840 acres, had been tentatively selected as community pastures. By the same date, the organization of 16 pastures in Saskatchewan with a total of 175,900 acres was practically completed.

**Reserve Pasture.**—Another development in land utilization, somewhat similar to the foregoing, is the proposed establishment of large reserve pastures. One object of this phase of the program is to prevent uncontrolled agricultural resettlement. Another is to provide protected grazing areas into which stock might be moved in the event of future droughts. Three such areas totalling 3,064,320 acres have been tentatively selected in southwestern Saskatchewan in connection with irrigation developments south and north of the Cypress hills.

### SIGNIFICANCE OF THE REHABILITATION PROGRAM.

Certain significant facts in connection with the rehabilitation program described above are worthy of notice. Recent drought conditions have been unprecedented in so far as prairie agriculture is concerned, but there is evidence that similar dry periods have occurred at long intervals prior to the settlement of the great plains. The adoption of whatever cropping practices will best enable farmers to withstand periodic droughts is, therefore, a major phase of rehabilitation.

Periodic droughts are inevitable, but their adverse effects can be minimized by the application of measures based on experience and investigation.

### Subsection 2.—Provincial Departments of Agriculture.\*

**Prince Edward Island.**—The Department of Agriculture is presided over by a Minister, and the staff consists of a Deputy Minister and live-stock superintendent, a superintendent of women's institutes, a dairy superintendent, a field promoter, and a field man for the fox industry. Assistance is given in co-operative marketing, promoting the live-stock industry and encouraging exhibitions, the formation of boys' and girls' clubs and the welfare of agriculture generally.

**Nova Scotia.**—Agriculture in the province of Nova Scotia is administered by the Department of Agriculture, with the Head Office (Minister's Office) and those of the Director of Marketing and of the Land Settlement Board situated in Halifax. Many of the technical officials are situated at the Agricultural College and Farm, Truro, and other Divisions of the Department include: extension service; agricultural societies, associations, and exhibitions; dairying; poultry; live stock; entomology and botany; apiculture; and women's institutes.

**New Brunswick.**—The branches of the Department of Agriculture of New Brunswick are as follows: (1) live-stock and agricultural societies; (2) dairying; (3) herd improvement; (4) soils and crops; (5) poultry; (6) horticulture; (7) women's institutes; (8) agricultural representatives; (9) industry, immigration, and farm settlement; (10) elementary agricultural education; (11) beekeeping.

**Quebec.**—The administration of agricultural policies is entrusted to a number of services and sections as follows: extension work, which deals with all problems faced by the 98 agricultural county agents; rural economy; animal husbandry; health of animals; plant protection; agricultural education; domestic science; field husbandry; publicity; and administration. The Chief Technical Adviser is directly responsible to the Deputy Minister, who remains the main technical authority of the Department. Each service is divided into divisions dealing with minor problems. There are also many other activities such as the Quebec Farm Credit Bureau, agricultural merit competition, provincial dairy school, provincial handicraft school, etc. There is, therefore, for any kind of agricultural activity, a cor-

\* For publications of provincial Departments of Agriculture, see in the index the entry "Publications of Provincial Governments".

responding administrative service where accurate information may be obtained by interested persons.

**Ontario.**—The Ontario Department of Agriculture includes the following branches: statistics and publications; agricultural and horticultural societies; live stock; women's institutes; dairy; fruit; agricultural representatives; crops, seeds, and weeds; Commissioner of Marketing; Commissioner of Agricultural Loans; and the Milk Control Board. The Department is responsible for the administration of the Ontario Agricultural College, the Ontario Veterinary College, the Kenilworth Agricultural School, the experimental farms at Guelph, Ridgeway, and Vineland, and demonstration farms at New Liskeard and Hearst.

**Manitoba.**—The Manitoba Department of Agriculture includes the following services and branches: agricultural extension, dairying, publications, statistics and weeds, live stock, the Debt Adjustment Board, and the Registrar of Co-operative Associations.

The Agricultural Extension Branch aids field-crop production, horticulture, beekeeping, poultry raising, suppression of insect outbreaks, boys' and girls' club work, and various home-making projects. It also directs the activities of rural agricultural representatives and supervises the work of agricultural societies, horticultural societies, and women's organizations. The Dairy Branch grades all cream supplied to creameries, supervises the activities of creameries and cheese factories and gives general support to the dairy industry. The Live Stock Branch licenses stallions and conducts projects and administers policies through which encouragement is given to the production of better types of animals.

**Saskatchewan.**—The Department of Agriculture includes branches dealing with: the agricultural representative service, live stock, field crops, dairying, statistics, co-operation and markets, and land utilization. There is also a bee division. The Live Stock Branch provides the organization for examining and licensing stallions, purchasing and selling cattle, sheep, and hogs to farmers on cash and credit terms in the pure-bred sire areas (areas created under statutory authority in order to eliminate undesirable sires and improve the quality of live stock), and registering brands for live stock. The poultry industry is promoted through a flock-culling service, a turkey-grading service and an approved hatchery policy. The Field Crops Branch aids in promoting good cropping and tillage practices as well as encouraging the use of good quality seed of cereal and forage crops and provides control measures for suppressing insect and weed pests. The Dairy Branch directs the grading of cream at all the creameries, promotes herd improvement through cow testing and administers the provisions of the Dairy Products Act with respect to licensing creamery operators, cream graders and testers, and the bonding of creameries. The Statistics Branch, in co-operation with the Dominion Bureau of Statistics, maintains a crop-reporting service and gathers annual data respecting crops and live stock of the province. The Co-operation and Markets Branch grants charters to co-operative associations under the Co-operative Associations Act and to credit unions under the Credit Union Act, promotes co-operative activities including live-stock shipping and poultry marketing, licenses poultry dealers under the Live Stock and Live Stock Products Act, and publishes a fortnightly news letter dealing with co-operation and marketing. Under the Agricultural Representative Service, as established, the province is divided into districts where qualified men carry on promotional and educational work. The Apiary Division registers all beekeepers, and promotes better management and practices. Agricultural

societies are organized by, and grants paid through, the Department, but direction of the activities of societies is centred in the College of Agriculture of the University of Saskatchewan. The Land Utilization Board, composed of representatives of several interested departments of government, facilitates the withdrawal of lands unsuitable for such use from arable farming.

**Alberta.**—The main services of this Department are rendered through its various branches to the live-stock, grain-growing, dairy, and mixed-farming industries. Fairs and institutes are encouraged; rural women's organizations are assisted through the Women's Bureau; district agriculturists are located at 10 points; 2 schools of agriculture are maintained; crop reports and statistical information are prepared; short courses and field days are conducted. Some phases of agriculture receiving more recent and increased attention are: development of apiculture; encouragement of the poultry industry; more effective weed control; production and sale of registered seed; increase in forage crops and grasses; junior activities such as grain and stock clubs and school fairs; encouragement of beef-feeding associations.

**British Columbia.**—The Department of Agriculture deals with all matters of provincial concern connected with farming in its several phases. It consists of three main divisions, namely:—

(1) The General Administration Division is responsible for the general direction of agricultural policies; the administration of legislative measures affecting agriculture; the collection of agricultural statistics; the preparation of agricultural and horticultural displays for showing at provincial, national, and international exhibitions and assistance to fall fairs. It also distributes departmental publications; supervises soil-survey work; apiary inspection; junior club projects; farmers' and women's institutes. The Markets Branch is included in this Division.

(2) The Animal Industry Division has direct supervision over general live-stock work in the province, including live-stock promotion and improvement; brand inspection; nutritional studies; animal parasite control, and contagious diseases of animals control. This Division consists of live-stock, veterinary, dairy and poultry branches as well as the Brand Inspection Service. A pure-bred sire purchase policy is administered under which it is possible for farmers' institutes to purchase pure-bred sires under special financial arrangements with the Department. In the Dairy Branch there is a herd improvement service operating through Cow Testing Associations; official lists are maintained of pure-bred dairy sires which have five or more daughters with production records.

(3) The Plant Industry Division includes horticulture, plant pathology, entomology, and field-crop branches. Services of these branches include the general direction of fruit and vegetable production and various surveys dealing with orchards, small fruits and bulb acreages, as well as greenhouse areas; the suppression or control of insect pests and plant diseases; inspection and control of noxious weeds; supervision of Field Crop Union activities; local and provincial seed fairs and educational work connected with horticulture and field-crop production.

The Extension Service of the provincial Department of Agriculture maintains District Horticulturists, District Agriculturists, and District Field Inspectors at suitable points. These extension officials feature either animal industry or plant industry, depending upon the predominating type of farming carried on in the several districts. Junior Club projects are organized and supervised by extension officials in practically all areas of the province; there are now approximately one hundred clubs participating.

The detailed survey of orchard soils in the Okanagan valley which was started in 1931 as a joint undertaking between the Dominion Experimental Farms and the provincial Department of Agriculture, has been followed by reconnaissance surveys of lands adjacent to the areas formerly examined. Soil maps and soil reports covering more than half a million acres in the Lower Fraser valley and a similar area in the Okanagan valley are in the course of preparation.

Details of the work of the Feed Standards Board appointed by the provincial Minister of Agriculture and of the Pasture Committee were given on p. 226 of the 1936 Year Book.

### Subsection 3.—Provincial Agricultural Colleges and Experimental Stations.

Under the above heading, outlines of the work done at provincial agricultural colleges and experimental stations were given by provinces at pp. 198-203, inclusive, of the 1930 Year Book. The interested reader is referred to that volume, and to the following provincial publications, for information concerning courses and programs of work at these institutions:—

*Nova Scotia*.—Annual Report of the Department of Agriculture for Nova Scotia; Calendar of the College of Agriculture, Truro, N.S.

*Quebec*.—Announcement of Macdonald College, Macdonald College, Que., and the prospectuses and annual announcements of the College of Agriculture, Ste. Anne de la Pocatière, and the Oka Agricultural Institute and Veterinary School, La Trappe, Que.

*Ontario*.—Annual Report of the Ontario Agricultural College and Experimental Farm, Guelph, Ont.

*Manitoba*.—Annual Report of the Manitoba Agricultural College, Winnipeg, Man.

*Saskatchewan*.—Annual Report of the College of Agriculture, University of Saskatchewan, Saskatoon, Sask.

*Alberta*.—Annual Report of the College of Agriculture, University of Alberta, Edmonton, Alta.

*British Columbia*.—Annual Report of the Faculty of Agriculture, University of British Columbia, Vancouver, B.C.

## Section 2.—Statistics of Agriculture.\*

**Census Statistics.**—In addition to the statistics collected annually, which are the subject of this section, valuable information is published following each decennial census. The total number of farms, their tenure, acreage, value, mortgage debt, farm population, farm machinery and facilities, etc., were treated at pp. 295-301 of the 1934-35 Year Book. A summary presentation of agricultural development since 1871 was given in Subsection 9, pp. 270-273 of the 1936 Year Book.

**Crop-Reporting Service.**—The voluntary crop-reporting service of the Dominion Government, which has been in operation since 1908, has for its object the issue of accurate, timely, and independent reports on crop conditions throughout the

\* Revised under the direction of Dr. T. W. Grindley, Chief of the Agricultural Branch, Dominion Bureau of Statistics. This Branch is concerned with both primary and secondary statistics of agriculture, including statistics of the production and distribution of agricultural commodities. The primary statistics relate mainly to the reporting of crop conditions, crop and live-stock estimates, values of farm lands, wages of farm labour, and monthly and annual prices received by farmers for their products. The secondary statistics relate to the marketing of grain and live stock, and reports on the milling and sugar industries and cold-storage holdings. A list of the publications of this Branch is given in Chapter XXIX, Section I, under "Production".

Dominion; first, in the interests of the general body of Canadian farmers; secondly, for the information and guidance of other interests allied to and dependent upon agriculture (interests represented by statesmen, economists, bankers, grain dealers, transportation agents, and others); and thirdly, for reporting to the Institute of Agriculture at Rome (to which Canada is an adhering country) in return for reports on the production of other countries and of world totals which influence prices and consequently affect the interests of Canada. Supplementing the monthly reports from crop correspondents, the Bureau issues telegraphic crop reports utilizing the services of agriculturists throughout the Dominion. For the Prairie Provinces, these are issued every week from the latter part of May to the end of August, while the reports on a Dominion-wide basis are issued every two weeks during the same period. The program of reports for 1938-39 is given in the *Monthly Bulletin of Agricultural Statistics*, January, 1938, pp. 59-61, and is also issued as a special leaflet.

**Annual Statistics.**—In addition to the crop-reporting service, statistics of the areas under field crops and of the numbers of farm live stock are collected. These arrangements have been in force since 1918, and are carried out by the Dominion Bureau of Statistics in co-operation with the Provincial Governments. The statistics are secured by schedules which are at present returned by about one-fifth of the farmers of Canada. They form the basis of the estimates for the whole of Canada. The results for wheat, oats, barley, rye, and flaxseed in the three Prairie Provinces are ready for publication in August, while the results for the remaining crops and for the numbers of farm live stock are published in November and December. The areas, thus determined, when multiplied by the average yields per acre as reported by crop correspondents, form the basis of the total estimated production for each crop.

The June schedule covers the areas sown to field crops, the numbers of live stock and poultry on hand, and breeding and marketing intentions with regard to live stock and poultry. The December schedule contains practically the same items with the exception of field-crop areas.

The schedules are distributed and collected through the agency of the rural schools in New Brunswick, Quebec, Ontario, Manitoba, and Saskatchewan, while in Prince Edward Island, Nova Scotia, Alberta, and British Columbia the schedules are sent direct to the farmer through the mail.

**Monthly Bulletin of Agricultural Statistics.**—Originally established in 1908 as the "Census and Statistics Monthly", but changed to its present title in April, 1917, this publication is now in its thirty-first year. It is the official organ not only for the monthly crop reports and annual statistics previously described, but also for statistics of dairying, eggs, fruit, apiculture, hops, tobacco, maple products, sugar beets, beet sugar, flax fibre, clover and grass seeds, visible supplies, prices, values, foreign agriculture, and other subjects in considerable variety.

**Presentation of Agricultural Statistics.**—In the current edition of the Year Book, statistics of agriculture are presented under the following headings: (1) value of agricultural production and of farm capital; (2) acreages, yields, and values of principal field crops; (3) farm live stock and poultry; (4) dairying; (5) horticulture; (6) special agricultural crops; (7) farm labour and wages; (8) prices

of agricultural produce; (9) agricultural statistics of the census; (10) miscellaneous agricultural statistics; and (11) international agricultural statistics.

**Subsection 1.—Value of Agricultural Production and of Farm Capital.**

**Value of Agricultural Production.**—Table 1 shows, under principal headings, the gross agricultural revenue of Canada, by provinces, for the years 1932 to 1936. It is important to note that the figures represent gross values, as no distinction is made between crops used as materials for other kinds of production, such as the feeding of live stock, and no allowance is made for the costs of production. The total revenue for 1936 shows an increase of \$112,084,000 or nearly 12 p.c. as compared with 1935.

**1.—Estimated Gross Value of Agricultural Production in Canada, Itemized by Provinces, 1932-36.**

*Note.*—Preliminary figures for 1937 and revised figures for 1933-36 will be found in the Monthly Bulletin of Agricultural Statistics, March, 1938.

| Item.                        | 1932.          | 1933. <sup>1</sup> | 1934. <sup>1</sup> | 1935. <sup>1</sup> | 1936. <sup>1</sup> |
|------------------------------|----------------|--------------------|--------------------|--------------------|--------------------|
|                              | \$'000         | \$'000             | \$'000             | \$'000             | \$'000             |
| <b>Canada—</b>               |                |                    |                    |                    |                    |
| Field crops.....             | 452,527        | 453,598            | 549,080            | 511,873            | 599,421            |
| Farm animals.....            | 65,185         | 89,063             | 99,438             | 120,078            | 120,886            |
| Wool.....                    | 1,003          | 2,005              | 1,899              | 2,232              | 2,783              |
| Dairy products.....          | 159,074        | 170,829            | 183,791            | 192,410            | 208,238            |
| Fruits and vegetables.....   | 32,157         | 33,208             | 43,531             | 48,678             | 42,821             |
| Poultry and eggs.....        | 42,078         | 38,060             | 45,515             | 50,434             | 53,236             |
| Fur farming.....             | 3,254          | 4,062              | 4,534              | 5,616              | 6,390              |
| Maple products.....          | 2,790          | 2,059              | 3,040              | 3,522              | 3,714              |
| Tobacco.....                 | 6,083          | 0,531              | 7,232              | 10,753             | 9,185              |
| Flax fibre.....              | 170            | 159                | 250                | 321                | 298                |
| Clover and grass seed.....   | 962            | 1,362              | 2,010              | 1,686              | 2,257              |
| Honey.....                   | 1,470          | 2,010              | 2,245              | 2,027              | 2,380              |
| <b>Totals.....</b>           | <b>766,791</b> | <b>802,946</b>     | <b>912,565</b>     | <b>949,540</b>     | <b>1,061,624</b>   |
| <b>Prince Edward Island—</b> |                |                    |                    |                    |                    |
| Field crops.....             | 6,737          | 8,841              | 9,054              | 8,561              | 10,311             |
| Farm animals.....            | 715            | 945                | 917                | 1,369              | 1,429              |
| Wool.....                    | 24             | 42                 | 36                 | 33                 | 45                 |
| Dairy products.....          | 1,446          | 1,505              | 1,407              | 1,444              | 1,594              |
| Fruits and vegetables.....   | 98             | 79                 | 136                | 154                | 172                |
| Poultry and eggs.....        | 611            | 682                | 669                | 825                | 823                |
| Fur farming.....             | 521            | 623                | 762                | 863                | 1,000              |
| Clover and grass seed.....   | 9              | 13                 | 15                 | 10                 | 17                 |
| Honey.....                   | 1              | 1                  | 1                  | 1                  | 1                  |
| <b>Totals.....</b>           | <b>10,162</b>  | <b>12,731</b>      | <b>12,997</b>      | <b>13,260</b>      | <b>15,392</b>      |
| <b>Nova Scotia—</b>          |                |                    |                    |                    |                    |
| Field crops.....             | 9,064          | 12,151             | 12,995             | 11,748             | 13,516             |
| Farm animals.....            | 1,533          | 1,998              | 1,924              | 2,257              | 2,548              |
| Wool.....                    | 56             | 89                 | 96                 | 96                 | 112                |
| Dairy products.....          | 5,354          | 4,990              | 5,827              | 5,948              | 6,495              |
| Fruits and vegetables.....   | 2,440          | 4,386              | 4,259              | 5,536              | 4,067              |
| Poultry and eggs.....        | 878            | 965                | 1,058              | 1,184              | 1,216              |
| Fur farming.....             | 254            | 304                | 276                | 386                | 448                |
| Maple products.....          | 47             | 27                 | 63                 | 46                 | 25                 |
| Clover and grass seed.....   | 2              | 2                  | 2                  | 1                  | 1                  |
| Honey.....                   | 6              | 9                  | 8                  | 9                  | 9                  |
| <b>Totals.....</b>           | <b>19,932</b>  | <b>24,919</b>      | <b>26,506</b>      | <b>27,261</b>      | <b>28,437</b>      |

<sup>1</sup> Subject to revision.

<sup>2</sup> Less than \$500.



1.—Estimated Gross Value of Agricultural Production in Canada, Itemized by Provinces, 1932-36—continued.

| Item.                      | 1932.          | 1933. <sup>1</sup> | 1934. <sup>1</sup> | 1935. <sup>1</sup> | 1936. <sup>1</sup> |
|----------------------------|----------------|--------------------|--------------------|--------------------|--------------------|
|                            | \$'000         | \$'000             | \$'000             | \$'000             | \$'000             |
| <b>New Brunswick—</b>      |                |                    |                    |                    |                    |
| Field crops.....           | 12,629         | 12,044             | 14,061             | 14,542             | 17,784             |
| Farm animals.....          | 2,147          | 2,129              | 2,478              | 2,931              | 3,421              |
| Wool.....                  | 45             | 77                 | 74                 | 91                 | 116                |
| Dairy products.....        | 4,047          | 4,307              | 4,488              | 4,682              | 5,025              |
| Fruits and vegetables..... | 697            | 637                | 908                | 1,044              | 1,194              |
| Poultry and eggs.....      | 1,092          | 1,065              | 1,139              | 1,291              | 1,323              |
| Fur farming.....           | 523            | 560                | 764                | 753                | 873                |
| Maple products.....        | 44             | 44                 | 26                 | 48                 | 46                 |
| Clover and grass seed..... | 3              | 7                  | 14                 | 9                  | 9                  |
| Honey.....                 | 5              | 6                  | 9                  | 7                  | 6                  |
| <b>Totals.....</b>         | <b>21,202</b>  | <b>20,876</b>      | <b>24,861</b>      | <b>25,398</b>      | <b>29,767</b>      |
| <b>Quebec—</b>             |                |                    |                    |                    |                    |
| Field crops.....           | 70,382         | 67,512             | 98,309             | 83,616             | 91,288             |
| Farm animals.....          | 12,490         | 13,868             | 17,989             | 21,812             | 23,626             |
| Wool.....                  | 332            | 491                | 527                | 628                | 700                |
| Dairy products.....        | 39,963         | 42,989             | 46,402             | 49,119             | 52,284             |
| Fruits and vegetables..... | 5,346          | 4,837              | 7,078              | 7,880              | 7,894              |
| Poultry and eggs.....      | 6,487          | 6,271              | 7,221              | 7,664              | 8,215              |
| Fur farming.....           | 665            | 895                | 1,075              | 1,165              | 1,352              |
| Maple products.....        | 1,727          | 1,268              | 1,911              | 2,267              | 2,482              |
| Tobacco.....               | 329            | 270                | 831                | 642                | 1,089              |
| Flax fibre.....            | 2              | 2                  | 100                | 160                | 143                |
| Clover and grass seed..... | 110            | 70                 | 315                | 245                | 168                |
| Honey.....                 | 216            | 448                | 357                | 381                | 483                |
| <b>Totals.....</b>         | <b>138,042</b> | <b>138,819</b>     | <b>182,075</b>     | <b>175,079</b>     | <b>189,724</b>     |
| <b>Ontario—</b>            |                |                    |                    |                    |                    |
| Field crops.....           | 116,424        | 135,813            | 149,734            | 132,086            | 162,332            |
| Farm animals.....          | 21,957         | 31,500             | 34,089             | 43,344             | 46,732             |
| Wool.....                  | 287            | 553                | 479                | 575                | 735                |
| Dairy products.....        | 69,079         | 74,117             | 80,018             | 85,132             | 91,282             |
| Fruits and vegetables..... | 12,733         | 12,553             | 16,375             | 18,097             | 17,698             |
| Poultry and eggs.....      | 18,565         | 16,294             | 19,494             | 20,915             | 22,089             |
| Fur farming.....           | 644            | 721                | 704                | 966                | 1,121              |
| Maple products.....        | 888            | 720                | 1,040              | 1,161              | 1,161              |
| Tobacco.....               | 5,703          | 6,204              | 6,338              | 10,117             | 8,070              |
| Flax fibre.....            | 170            | 150                | 150                | 161                | 155                |
| Clover and grass seed..... | 615            | 1,079              | 857                | 710                | 1,442              |
| Honey.....                 | 619            | 895                | 1,020              | 864                | 718                |
| <b>Totals.....</b>         | <b>247,684</b> | <b>280,608</b>     | <b>304,277</b>     | <b>314,728</b>     | <b>354,380</b>     |
| <b>Manitoba—</b>           |                |                    |                    |                    |                    |
| Field crops.....           | 31,937         | 35,653             | 49,761             | 34,944             | 50,960             |
| Farm animals.....          | 4,468          | 6,308              | 6,568              | 7,301              | 9,068              |
| Wool.....                  | 28             | 89                 | 82                 | 95                 | 132                |
| Dairy products.....        | 8,751          | 10,796             | 9,848              | 10,416             | 11,631             |
| Fruits and vegetables..... | 986            | 876                | 1,471              | 1,644              | 1,827              |
| Poultry and eggs.....      | 3,395          | 2,860              | 2,946              | 3,338              | 3,669              |
| Fur farming.....           | 166            | 274                | 273                | 402                | 467                |
| Clover and grass seed..... | 50             | 45                 | 70                 | 207                | 83                 |
| Honey.....                 | 412            | 304                | 400                | 354                | 569                |
| <b>Totals.....</b>         | <b>50,193</b>  | <b>57,211</b>      | <b>71,418</b>      | <b>58,901</b>      | <b>77,066</b>      |
| <b>Saskatchewan—</b>       |                |                    |                    |                    |                    |
| Field crops.....           | 98,217         | 82,708             | 96,473             | 119,644            | 138,725            |
| Farm animals.....          | 8,984          | 12,711             | 13,777             | 16,306             | 18,246             |
| Wool.....                  | 74             | 206                | 180                | 240                | 220                |
| Dairy products.....        | 11,186         | 12,088             | 13,102             | 13,566             | 15,926             |
| Fruits and vegetables..... | 1,674          | 1,371              | 2,362              | 2,655              | 1,318              |
| Poultry and eggs.....      | 4,841          | 4,317              | 5,879              | 7,178              | 6,547              |
| Fur farming.....           | 121            | 166                | 207                | 265                | 296                |
| Clover and grass seed..... | 82             | 64                 | 102                | 168                | 210                |
| Honey.....                 | 46             | 100                | 72                 | 118                | 263                |
| <b>Totals.....</b>         | <b>125,295</b> | <b>113,721</b>     | <b>132,154</b>     | <b>160,127</b>     | <b>181,751</b>     |

<sup>1</sup> Subject to revision.<sup>2</sup> Not available.

## 1.—Estimated Gross Value of Agricultural Revenue of Canada, Itemized by Provinces, 1932-36—concluded.

| Item.                      | 1932.          | 1933. <sup>1</sup> | 1934. <sup>1</sup> | 1935. <sup>1</sup> | 1936. <sup>1</sup> |
|----------------------------|----------------|--------------------|--------------------|--------------------|--------------------|
|                            | \$'000         | \$'000             | \$'000             | \$'000             | \$'000             |
| <b>Alberta—</b>            |                |                    |                    |                    |                    |
| Field crops.....           | 95,913         | 85,499             | 111,044            | 93,687             | 98,914             |
| Farm animals.....          | 10,255         | 16,939             | 18,645             | 21,382             | 22,008             |
| Wool.....                  | 195            | 359                | 330                | 348                | 575                |
| Dairy products.....        | 11,859         | 12,086             | 14,407             | 14,357             | 15,756             |
| Fruits and vegetables..... | 1,426          | 1,203              | 1,996              | 2,247              | 1,202              |
| Poultry and eggs.....      | 3,613          | 2,999              | 3,893              | 4,459              | 4,132              |
| Fur farming.....           | 300            | 422                | 453                | 588                | 682                |
| Clover and grass seed..... | 77             | 55                 | 486                | 189                | 212                |
| Honey.....                 | 44             | 90                 | 150                | 69                 | 167                |
| <b>Totals.....</b>         | <b>123,682</b> | <b>121,552</b>     | <b>151,104</b>     | <b>137,356</b>     | <b>143,648</b>     |
| <b>British Columbia—</b>   |                |                    |                    |                    |                    |
| Field crops.....           | 11,224         | 12,377             | 12,749             | 13,045             | 15,891             |
| Farm animals.....          | 2,330          | 2,605              | 3,051              | 3,379              | 3,808              |
| Wool.....                  | 52             | 99                 | 95                 | 128                | 148                |
| Dairy products.....        | 7,399          | 7,051              | 8,232              | 7,746              | 8,245              |
| Fruits and vegetables..... | 6,758          | 7,296              | 8,946              | 9,271              | 8,484              |
| Poultry and eggs.....      | 2,626          | 2,601              | 3,346              | 3,380              | 4,412              |
| Fur farming.....           | 90             | 97                 | 121                | 138                | 160                |
| Tobacco.....               | 56             | 57                 | 63                 | 4                  | 26                 |
| Clover and grass seed..... | 36             | 39                 | 151                | 147                | 115                |
| Honey.....                 | 121            | 157                | 219                | 194                | 170                |
| <b>Totals.....</b>         | <b>30,692</b>  | <b>32,409</b>      | <b>36,873</b>      | <b>37,430</b>      | <b>41,459</b>      |

<sup>1</sup> Subject to revision.

Value of Farm Capital.—Table 2 shows approximately, by provinces, the current value of farm capital in the Dominion in 1935 and 1936.

## 2.—Current Value of Farm Capital in Canada, by Provinces, 1935 and 1936.

| Province.          | 1935.                |                           |                |                  | 1936.                |                           |                |                  |
|--------------------|----------------------|---------------------------|----------------|------------------|----------------------|---------------------------|----------------|------------------|
|                    | Lands and Buildings. | Implements and Machinery. | Live Stock.    | Total.           | Lands and Buildings. | Implements and Machinery. | Live Stock.    | Total.           |
|                    | \$'000               | \$'000                    | \$'000         | \$'000           | \$'000               | \$'000                    | \$'000         | \$'000           |
| P. E. Island.....  | 39,162               | 6,608                     | 7,354          | 53,124           | 39,162               | 6,326                     | 7,968          | 53,456           |
| Nova Scotia.....   | 88,240               | 8,596                     | 12,138         | 108,974          | 99,623               | 8,229                     | 13,411         | 121,263          |
| New Brunswick....  | 74,114               | 10,791                    | 14,132         | 99,037           | 83,008               | 10,331                    | 15,851         | 109,190          |
| Quebec.....        | 700,902              | 79,578                    | 95,085         | 875,555          | 649,320              | 76,167                    | 101,204        | 827,691          |
| Ontario.....       | 979,128              | 123,614                   | 179,087        | 1,281,829        | 1,036,126            | 120,563                   | 195,042        | 1,351,731        |
| Manitoba.....      | 246,165              | 41,054                    | 41,249         | 328,468          | 224,348 <sup>1</sup> | 40,137 <sup>1</sup>       | 45,885         | 310,470          |
| Saskatchewan.....  | 899,606              | 137,703                   | 92,205         | 1,129,514        | 797,795 <sup>1</sup> | 131,994 <sup>1</sup>      | 97,619         | 1,027,408        |
| Alberta.....       | 521,588              | 92,801                    | 79,251         | 693,640          | 517,003 <sup>1</sup> | 89,751 <sup>1</sup>       | 82,434         | 689,188          |
| British Columbia.. | 113,239              | 10,915                    | 18,493         | 142,647          | 117,089              | 10,699                    | 20,760         | 148,548          |
| <b>Totals.....</b> | <b>3,662,234</b>     | <b>511,193</b>            | <b>538,994</b> | <b>4,712,391</b> | <b>3,554,474</b>     | <b>494,197</b>            | <b>579,761</b> | <b>4,628,375</b> |

<sup>1</sup> Based on preliminary returns from the 1936 Quinquennial Census.

The items included in the term "farm capital" as used in Table 2, are lands and buildings, implements and machinery, including motor trucks and automobiles, and live stock, including poultry and animals on fur farms. The 1931 values of lands, buildings, implements, and machinery were reported by the decennial census taken at June 1, in that year. Changes in the total value of lands and buildings for the years 1932 to 1936 have been based on the value of occupied farm lands reported annually by crop correspondents. Changes in the annual values of farm implements and machinery have been estimated on the basis of sales reported each year.

The current value of farm capital in Canada for 1936 is estimated at \$4,628,375,000 as compared with the revised estimates of \$4,712,391,000 for 1935; \$4,464,147,000 for 1934; \$4,443,159,000 for 1933; \$4,515,944,000 for 1932; and \$5,220,660,000 for 1931.

### Subsection 2.—Acreages, Yields, and Values of Field Crops.

**The Chief Field Crops of the Latest Ten Years.**—In Table 3 will be found a summary statement of the acreages, yields, and values of wheat, oats, barley, rye, buckwheat, potatoes, hay and clover, and alfalfa for the latest ten years. Comparative figures back to 1908 were shown at pp. 230-232 of the 1929 Year Book.

A rapid increase in the acreage of field crops was a characteristic of the pre-war and the war periods, when settlement of the western plains occurred. During the latest ten years acreages have been relatively stable for wheat and oats. Fluctuations in the areas devoted to barley, rye, and flax have been quite marked as changes in the prices of these crops encouraged or discouraged production. Hay and clover acreage has shown a tendency to decline, but an upward trend in alfalfa acreage has occurred, due to the development of seed-producing areas in western Canada. Successive droughts in the West have considerably reduced production of the principal grain crops in the past few years, and thus the data given in the table do not reflect the average productive capacity of the areas sown to each crop. Certain figures for earlier years on acreage, yield, and value will be found in the Statistical Summary of the Progress of Canada at the beginning of this volume.

### 3.—Acreages, Yields, and Values of Principal Crops Grown in Canada, 1925-37.

NOTE.—Comparative figures for the years 1908-26 are given in the Canada Year Book, 1929, pp. 230-232. The total value for wheat for 1912 should be \$139,000,000 instead of \$19,000,000.

| Crop and Year. | Aren.               | Yield per Acre.   | Total Yield.         | Average Price.    | Total Value.         | Crop and Year. | Aren.              | Yield per Acre.  | Total Yield. | Average Price.    | Total Value.        |
|----------------|---------------------|-------------------|----------------------|-------------------|----------------------|----------------|--------------------|------------------|--------------|-------------------|---------------------|
|                | '000 acres.         | bu.               | '000 bu.             | \$ per bu.        | \$'000               |                | '000 acres.        | bu.              | '000 bu.     | \$ per bu.        | \$'000              |
| <b>Wheat—</b>  |                     |                   |                      |                   |                      | <b>Barley—</b> |                    |                  |              |                   |                     |
| 1928.....      | 24,119              | 23-5              | 566,726              | 0-80              | 451,235              | 1928.....      | 4,881              | 27-9             | 136,391      | 0-56              | 76,112              |
| 1929.....      | 25,255              | 12-1              | 304,520              | 1-05              | 319,715              | 1929.....      | 5,926              | 17-3             | 102,313      | 0-59              | 60,505              |
| 1930.....      | 24,898              | 16-9              | 420,672              | 0-49              | 204,693              | 1930.....      | 5,559              | 24-3             | 135,160      | 0-20              | 27,254              |
| 1931.....      | 26,365              | 12-2              | 321,325              | 0-38              | 123,550              | 1931.....      | 3,791              | 17-8             | 67,383       | 0-26              | 17,465              |
| 1932.....      | 27,132              | 16-3              | 443,961              | 0-35              | 154,760              | 1932.....      | 3,758              | 21-5             | 80,773       | 0-23              | 18,555              |
| 1933.....      | 25,991              | 10-8              | 281,892              | 0-49              | 136,958              | 1933.....      | 3,658              | 17-3             | 63,359       | 0-30              | 19,054              |
| 1934.....      | 23,985              | 11-5              | 275,849              | 0-61              | 169,631              | 1934.....      | 3,613              | 17-6             | 63,742       | 0-47              | 29,975              |
| 1935.....      | 24,116              | 11-7              | 281,935              | 0-61              | 173,065              | 1935.....      | 3,887              | 21-6             | 83,976       | 0-29              | 24,465              |
| 1936.....      | 25,005 <sup>1</sup> | 8-6 <sup>1</sup>  | 219,218 <sup>1</sup> | 0-94 <sup>1</sup> | 205,327 <sup>1</sup> | 1936.....      | 4,438 <sup>1</sup> | 16-2             | 71,922       | 0-69 <sup>1</sup> | 49,512 <sup>1</sup> |
| 1937.....      | 26,570              | 7-1               | 182,410              | 1-00              | 182,384              | 1937.....      | 4,331              | 19-2             | 83,124       | 0-51              | 41,984              |
| <b>Oats—</b>   |                     |                   |                      |                   |                      | <b>Rye—</b>    |                    |                  |              |                   |                     |
| 1928.....      | 13,137              | 34-4              | 452,153              | 0-47              | 210,956              | 1928.....      | 840                | 17-4             | 14,618       | 0-79              | 11,491              |
| 1929.....      | 12,479              | 22-7              | 282,838              | 0-59              | 168,017              | 1929.....      | 992                | 13-3             | 13,161       | 0-84              | 11,095              |
| 1930.....      | 13,269              | 31-9              | 423,148              | 0-24              | 102,919              | 1930.....      | 1,448              | 15-2             | 22,019       | 0-20              | 4,402               |
| 1931.....      | 12,838              | 25-6              | 328,275              | 0-24              | 77,970               | 1931.....      | 709                | 6-7              | 5,322        | 0-28              | 1,476               |
| 1932.....      | 13,148              | 29-8              | 391,561              | 0-19              | 75,988               | 1932.....      | 774                | 10-9             | 8,470        | 0-27              | 2,284               |
| 1933.....      | 13,529              | 22-7              | 307,478              | 0-26              | 79,818               | 1933.....      | 583                | 7-2              | 4,177        | 0-38              | 1,603               |
| 1934.....      | 12,731              | 23-4              | 321,120              | 0-32              | 103,124              | 1934.....      | 685                | 6-9              | 4,706        | 0-49              | 2,325               |
| 1935.....      | 14,086              | 28-0              | 394,348              | 0-24              | 93,409               | 1935.....      | 720                | 13-4             | 9,606        | 0-27              | 2,634               |
| 1936.....      | 13,283 <sup>1</sup> | 20-5 <sup>1</sup> | 271,773              | 0-43 <sup>1</sup> | 116,267 <sup>1</sup> | 1936.....      | 651 <sup>1</sup>   | 6-8 <sup>1</sup> | 4,281        | 0-70 <sup>1</sup> | 2,980 <sup>1</sup>  |
| 1937.....      | 13,049              | 20-6              | 268,442              | 0-43              | 114,665              | 1937.....      | 894                | 6-5              | 5,771        | 0-73              | 4,225               |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

## 3.—Acreages, Yields, and Values of Principal Crops Grown in Canada, 1928-37—concl.

| Crop and Year. | Area.            | Yield per Acre.   | Total Yield.       | Average Price.    | Total Value.       | Crop and Year.  | Area.              | Yield per Acre. | Total Yield.        | Average Price.    | Total Value.         |
|----------------|------------------|-------------------|--------------------|-------------------|--------------------|-----------------|--------------------|-----------------|---------------------|-------------------|----------------------|
|                | '000 acres.      | bu.               | '000 bu.           | \$ per bu.        | \$'000             |                 | '000 acres.        | cwt.            | '000 cwt.           | \$ per cwt.       | \$'000               |
| Buckwheat—     |                  |                   |                    |                   |                    | Potatoes—       |                    |                 |                     |                   |                      |
| 1928.....      | 503              | 21.7              | 10,809             | 0.93              | 10,128             | 1933.....       | 528                | 81.0            | 42,745              | 0.77              | 33,092               |
| 1929.....      | 510              | 20.3              | 10,470             | 0.94              | 9,867              | 1934.....       | 558                | 84.0            | 48,005              | 0.50              | 23,822               |
| 1930.....      | 490              | 22.2              | 10,903             | 0.65              | 7,124              | 1935.....       | 507                | 76.0            | 38,670              | 0.80              | 30,854               |
| 1931.....      | 336              | 20.6              | 6,917              | 0.50              | 3,454              | 1936.....       | 502 <sup>1</sup>   | 79.0            | 39,614 <sup>1</sup> | 1.14 <sup>1</sup> | 45,125 <sup>1</sup>  |
| 1932.....      | 308              | 22.9              | 8,424              | 0.43              | 3,585              | 1937.....       | 531                | 80.0            | 42,547              | 0.64              | 27,143               |
| 1933.....      | 398              | 21.5              | 8,483              | 0.50              | 4,233              |                 |                    |                 |                     |                   |                      |
| 1934.....      | 407              | 21.2              | 8,635              | 0.53              | 4,572              | Hay and Clover— |                    | tons.           | '000 tons.          | per ton.          |                      |
| 1935.....      | 380              | 20.0              | 7,649              | 0.51              | 4,017              | 1928.....       | 10,321             | 1.60            | 16,515              | 10.37             | 171,225              |
| 1936.....      | 397 <sup>1</sup> | 21.7 <sup>1</sup> | 8,596 <sup>1</sup> | 0.71 <sup>1</sup> | 6,088 <sup>1</sup> | 1929.....       | 10,560             | 1.50            | 15,833              | 11.65             | 184,528              |
| 1937.....      | 396              | 10.6              | 7,745              | 0.71              | 5,494              | 1930.....       | 10,618             | 1.54            | 16,397              | 9.83              | 161,122              |
| Flaxseed—      |                  |                   |                    |                   |                    | 1931.....       | 9,114              | 1.60            | 14,540              | 7.57              | 110,110              |
| 1928.....      | 378              | 9.6               | 3,614              | 1.59              | 5,758              | 1932.....       | 8,512              | 1.54            | 13,559              | 7.13              | 96,654               |
| 1929.....      | 382              | 5.4               | 2,060              | 2.38              | 4,596              | 1933.....       | 8,476              | 1.29            | 11,443              | 8.77              | 100,306              |
| 1930.....      | 582              | 8.7               | 5,069              | 0.94              | 4,741              | 1934.....       | 8,881              | 1.26            | 11,174              | 11.75             | 131,295              |
| 1931.....      | 648              | 3.8               | 2,465              | 0.79              | 1,944              | 1935.....       | 8,098              | 1.62            | 14,060              | 7.62              | 107,133              |
| 1932.....      | 462              | 5.0               | 2,719              | 0.62              | 1,682              | 1936.....       | 8,784 <sup>1</sup> | 1.87            | 16,503              | 7.66              | 126,703 <sup>1</sup> |
| 1933.....      | 244              | 2.6               | 632                | 1.20              | 756                | 1937.....       | 8,093              | 1.50            | 13,030              | 7.47              | 97,309               |
| 1934.....      | 227              | 4.0               | 910                | 1.15              | 1,049              |                 |                    |                 |                     |                   |                      |
| 1935.....      | 307              | 5.4               | 1,667              | 1.19              | 1,991              | Alfalfa—        |                    |                 |                     |                   |                      |
| 1936.....      | 477 <sup>1</sup> | 3.8               | 1,795              | 1.44              | 2,588 <sup>1</sup> | 1928.....       | 854                | 2.35            | 2,010               | 11.51             | 23,138               |
| 1937.....      | 241              | 2.0               | 698                | 1.51              | 1,054              | 1929.....       | 799                | 2.30            | 1,835               | 12.63             | 23,183               |
| Potatoes—      |                  | cwt.              | '000 cwt.          | per cwt.          |                    | 1930.....       | 744                | 2.20            | 1,640               | 12.12             | 19,877               |
| 1928.....      | 569              | 83.8              | 50,195             | 0.81              | 40,874             | 1931.....       | 568                | 2.45            | 1,388               | 10.36             | 14,381               |
| 1929.....      | 544              | 73.4              | 39,930             | 1.60              | 63,372             | 1932.....       | 605                | 2.65            | 1,764               | 8.58              | 15,121               |
| 1930.....      | 571              | 84.4              | 48,241             | 0.83              | 39,858             | 1933.....       | 722                | 2.29            | 1,662               | 9.25              | 15,279               |
| 1931.....      | 592              | 88.0              | 52,305             | 0.43              | 22,359             | 1934.....       | 679                | 1.96            | 1,328               | 12.67             | 16,822               |
| 1932.....      | 522              | 70.0              | 39,416             | 0.63              | 24,920             | 1935.....       | 762                | 2.57            | 1,959               | 8.04              | 15,743               |
|                |                  |                   |                    |                   |                    | 1936.....       | 854                | 2.30            | 1,965               | 9.19 <sup>1</sup> | 18,077 <sup>1</sup>  |
|                |                  |                   |                    |                   |                    | 1937.....       | 849                | 2.48            | 2,107               | 8.04              | 16,947               |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

Total Acreages and Values, 1932-37.—Table 4 shows for Canada and the provinces, for the latest six years, the total estimated areas and values of field crops, and Table 5 the areas, yields, and values of the principal field crops in Canada, by provinces, for the years 1936 and 1937.

## 4.—Total Acreages and Values of Field Crops in Canada, by Provinces, 1932-37.

NOTE.—For earlier figures, see Statistical Summary at the beginning of this volume.

| Province.             | 1932.        | 1933.        | 1934.        | 1935.        | 1936.                      | 1937.        |
|-----------------------|--------------|--------------|--------------|--------------|----------------------------|--------------|
|                       | acres.       | acres.       | acres.       | acres.       | acres.                     | acres.       |
| Acreages—             |              |              |              |              |                            |              |
| P. E. Island.....     | 476,200      | 476,850      | 473,000      | 472,900      | 483,200                    | 490,300      |
| Nova Scotia.....      | 536,000      | 542,100      | 554,800      | 558,700      | 551,400                    | 548,100      |
| New Brunswick.....    | 907,500      | 908,400      | 906,300      | 913,900      | 921,300                    | 907,800      |
| Quebec.....           | 5,532,100    | 5,754,700    | 5,950,300    | 5,912,800    | 6,018,400                  | 6,042,800    |
| Ontario.....          | 9,224,300    | 9,195,300    | 9,099,900    | 9,104,800    | 9,115,900                  | 9,037,000    |
| Manitoba.....         | 5,866,800    | 5,963,900    | 6,000,900    | 5,962,000    | 6,081,100 <sup>1</sup>     | 6,421,600    |
| Saskatchewan.....     | 22,333,900   | 21,306,000   | 19,771,820   | 20,176,210   | 21,757,350 <sup>1</sup>    | 20,483,600   |
| Alberta.....          | 14,028,700   | 13,909,400   | 12,878,900   | 13,451,450   | 12,743,150 <sup>1</sup>    | 13,408,800   |
| British Columbia..... | 437,700      | 446,800      | 454,400      | 463,700      | 472,050                    | 487,700      |
| Totals, Acreages..... | 59,643,200   | 58,533,450   | 55,990,320   | 57,016,460   | 58,116,850 <sup>1</sup>    | 57,826,700   |
| Values—               |              |              |              |              |                            |              |
| P. E. Island.....     | \$ 6,737,000 | \$ 8,841,000 | \$ 9,054,000 | \$ 8,561,000 | \$ 10,693,000 <sup>1</sup> | \$ 7,475,000 |
| Nova Scotia.....      | 9,064,000    | 12,151,000   | 12,995,000   | 11,748,000   | 13,593,000 <sup>1</sup>    | 10,570,000   |
| New Brunswick.....    | 12,029,000   | 12,044,000   | 14,961,000   | 14,542,000   | 13,396,000 <sup>1</sup>    | 13,598,000   |
| Quebec.....           | 70,382,000   | 87,512,000   | 95,309,000   | 93,616,000   | 91,276,000 <sup>1</sup>    | 81,029,000   |
| Ontario.....          | 116,429,000  | 135,813,000  | 143,734,000  | 132,089,000  | 166,283,000 <sup>1</sup>   | 150,397,000  |
| Manitoba.....         | 31,927,000   | 35,653,000   | 49,761,000   | 34,944,000   | 50,401,000 <sup>1</sup>    | 50,930,000   |
| Saskatchewan.....     | 98,210,000   | 82,708,000   | 96,472,500   | 119,947,600  | 141,795,400 <sup>1</sup>   | 92,187,600   |
| Alberta.....          | 95,913,000   | 86,499,000   | 111,044,000  | 93,687,000   | 103,603,000 <sup>1</sup>   | 130,474,000  |
| British Columbia..... | 11,224,000   | 12,377,000   | 12,749,000   | 13,045,300   | 16,261,000 <sup>1</sup>    | 16,592,500   |
| Totals, Values.....   | 452,526,900  | 453,598,000  | 549,079,600  | 512,176,900  | 612,300,400 <sup>1</sup>   | 553,823,100  |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

### 5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937.

Note.—The figures for 1936 differ, in many cases, from those appearing in the 1937 Year Book owing to revisions in the estimates. Those for 1937 are subject to revision.

| Province and Field Crop. | Year. | Area.      | Yield per Acre. | Total Yield. | Average Price. | Total Value. |
|--------------------------|-------|------------|-----------------|--------------|----------------|--------------|
|                          |       | acres.     | bu.             | bu.          | \$ per bu.     | \$           |
| <b>Canada—</b>           |       |            |                 |              |                |              |
| Fall wheat.....          | 1936  | 509,300    | 24.5            | 12,478,000   | 1.16           | 14,474,000   |
|                          | 1937  | 718,800    | 26.0            | 18,689,000   | 1.04           | 19,437,000   |
| Spring wheat.....        | 1936  | 25,095,500 | 8.2             | 206,740,000  | 0.92           | 190,853,000  |
|                          | 1937  | 24,351,400 | 6.6             | 163,721,000  | 1.00           | 162,947,000  |
| All wheat.....           | 1936  | 25,604,800 | 8.6             | 219,218,000  | 0.94           | 205,327,000  |
|                          | 1937  | 25,570,200 | 7.1             | 182,410,000  | 1.00           | 182,384,000  |
| Oats.....                | 1936  | 13,287,700 | 20.5            | 271,778,000  | 0.43           | 116,267,000  |
|                          | 1937  | 13,048,500 | 20.6            | 268,442,000  | 0.43           | 114,665,000  |
| Barley.....              | 1936  | 4,437,600  | 16.2            | 71,922,000   | 0.69           | 49,512,000   |
|                          | 1937  | 4,331,400  | 19.2            | 83,124,000   | 0.51           | 41,984,000   |
| Fall rye.....            | 1936  | 458,500    | 6.6             | 3,042,000    | 0.70           | 2,120,000    |
|                          | 1937  | 700,300    | 6.5             | 4,579,000    | 0.73           | 3,358,000    |
| Spring rye.....          | 1936  | 106,800    | 7.4             | 1,239,000    | 0.69           | 850,000      |
|                          | 1937  | 193,400    | 6.2             | 1,192,000    | 0.73           | 867,000      |
| All rye.....             | 1936  | 625,300    | 6.8             | 4,281,000    | 0.70           | 2,980,000    |
|                          | 1937  | 893,700    | 6.5             | 5,771,000    | 0.73           | 4,225,000    |
| Pears.....               | 1936  | 92,500     | 13.3            | 1,229,300    | 1.62           | 1,991,000    |
|                          | 1937  | 81,000     | 14.3            | 1,199,600    | 1.68           | 2,012,000    |
| Beans.....               | 1936  | 64,000     | 13.7            | 876,000      | 2.04           | 1,790,400    |
|                          | 1937  | 67,600     | 19.2            | 1,295,500    | 1.23           | 1,595,600    |
| Buckwheat.....           | 1936  | 396,700    | 21.7            | 8,596,000    | 0.71           | 6,038,000    |
|                          | 1937  | 395,500    | 19.6            | 7,745,000    | 0.71           | 5,494,000    |
| Mixed grains.....        | 1936  | 1,171,000  | 28.7            | 33,639,000   | 0.56           | 18,751,000   |
|                          | 1937  | 1,128,200  | 32.0            | 36,129,000   | 0.51           | 18,290,000   |
| Flaxseed.....            | 1936  | 477,150    | 3.8             | 1,795,300    | 1.44           | 2,588,000    |
|                          | 1937  | 241,300    | 2.9             | 697,600      | 1.51           | 1,053,500    |
| Corn for husking.....    | 1936  | 164,400    | 37.0            | 6,093,000    | 0.70           | 4,258,000    |
|                          | 1937  | 165,600    | 32.7            | 5,415,000    | 0.61           | 3,303,000    |
| Potatoes.....            | 1936  | 502,100    | cwt.            | cwt.         | per cwt.       |              |
|                          | 1937  | 531,200    | 79.0            | 39,614,000   | 1.14           | 45,125,000   |
|                          |       |            | 80.0            | 42,547,000   | 0.64           | 27,143,000   |
| Turnips, etc.....        | 1936  | 182,500    | 200.0           | 38,208,000   | 0.35           | 13,352,000   |
|                          | 1937  | 185,700    | 195.0           | 36,300,000   | 0.33           | 11,799,000   |
| Hay and clover.....      | 1936  | 8,794,100  | tons.           | tons.        | per ton.       |              |
|                          | 1937  | 8,698,300  | 1.57            | 13,803,000   | 7.66           | 105,703,000  |
|                          |       |            | 1.50            | 13,030,000   | 7.47           | 97,309,000   |
| Alfalfa.....             | 1936  | 854,200    | 2.30            | 1,966,000    | 9.19           | 18,077,000   |
|                          | 1937  | 848,900    | 2.48            | 2,107,000    | 9.04           | 19,947,000   |
| Fodder corn.....         | 1936  | 401,600    | 7.79            | 3,128,400    | 3.38           | 10,572,000   |
|                          | 1937  | 447,300    | 8.78            | 3,927,500    | 3.08           | 12,087,000   |
| Grain hay.....           | 1936  | 1,045,000  | 0.97            | 1,010,000    | 6.41           | 6,473,000    |
|                          | 1937  | 1,147,800  | 1.54            | 1,768,000    | 6.23           | 11,021,000   |
| Sugar beets.....         | 1936  | 55,600     | 10.70           | 595,000      | 5.74           | 3,410,000    |
|                          | 1937  | 46,500     | 8.99            | 418,000      | 5.99           | 2,505,000    |

5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—continued.

| Province and Field Crop.     | Year. | Area.   | Yield per Acre. | Total Yield. | Average Price. | Total Value. |
|------------------------------|-------|---------|-----------------|--------------|----------------|--------------|
|                              |       | acres.  | bu.             | bu.          | \$ per bu.     | \$           |
| <b>Prince Edward Island—</b> |       |         |                 |              |                |              |
| Spring wheat.....            | 1936  | 24,000  | 8.3             | 199,000      | 1.10           | 219,000      |
|                              | 1937  | 18,600  | 12.8            | 238,000      | 1.28           | 305,000      |
| Oats.....                    | 1936  | 154,800 | 35.3            | 5,464,000    | 0.45           | 2,459,000    |
|                              | 1937  | 153,300 | 22.4            | 3,437,000    | 0.47           | 1,615,000    |
| Barley.....                  | 1936  | 5,200   | 28.5            | 148,000      | 0.62           | 92,000       |
|                              | 1937  | 6,500   | 21.4            | 130,000      | 0.78           | 108,000      |
| Buckwheat.....               | 1936  | 3,800   | 22.1            | 84,000       | 0.59           | 50,000       |
|                              | 1937  | 3,700   | 15.4            | 57,000       | 0.70           | 40,000       |
| Mixed grains.....            | 1936  | 25,700  | 36.0            | 925,000      | 0.55           | 509,000      |
|                              | 1937  | 29,300  | 28.4            | 832,000      | 0.58           | 483,000      |
|                              |       |         | cwt.            | cwt.         | per cwt.       |              |
| Potatoes.....                | 1936  | 33,400  | 118.0           | 3,941,000    | 0.90           | 3,547,000    |
|                              | 1937  | 35,800  | 97.0            | 3,471,000    | 0.39           | 1,354,000    |
| Turnips, etc.....            | 1936  | 12,000  | 307.0           | 3,684,000    | 0.26           | 958,000      |
|                              | 1937  | 11,600  | 180.0           | 2,038,000    | 0.30           | 626,000      |
|                              |       |         | tons.           | tons.        | per ton.       |              |
| Hay and clover.....          | 1936  | 223,800 | 1.59            | 356,000      | 8.00           | 2,848,000    |
|                              | 1937  | 231,100 | 1.66            | 383,000      | 7.65           | 2,930,000    |
| Fodder corn.....             | 1936  | 500     | 5.00            | 2,500        | 4.50           | 11,000       |
|                              | 1937  | 400     | 6.75            | 2,700        | 5.00           | 14,000       |
| <b>Nova Scotia—</b>          |       |         |                 |              |                |              |
|                              |       |         | bu.             | bu.          | per bu.        |              |
| Spring wheat.....            | 1936  | 4,000   | 19.3            | 77,000       | 1.18           | 91,000       |
|                              | 1937  | 4,000   | 12.8            | 51,000       | 1.37           | 70,000       |
| Oats.....                    | 1936  | 96,600  | 30.2            | 3,788,000    | 0.60           | 2,273,000    |
|                              | 1937  | 87,400  | 24.0            | 2,174,000    | 0.64           | 1,391,000    |
| Barley.....                  | 1936  | 8,900   | 30.2            | 269,000      | 0.81           | 218,000      |
|                              | 1937  | 9,600   | 20.3            | 195,000      | 0.88           | 172,000      |
| Buckwheat.....               | 1936  | 5,700   | 23.3            | 133,000      | 0.89           | 118,000      |
|                              | 1937  | 5,200   | 17.3            | 90,000       | 0.89           | 80,000       |
| Mixed grains.....            | 1936  | 6,400   | 36.1            | 231,000      | 0.69           | 159,000      |
|                              | 1937  | 6,400   | 25.5            | 163,000      | 0.76           | 124,000      |
|                              |       |         | cwt.            | cwt.         | per cwt.       |              |
| Potatoes.....                | 1936  | 20,600  | 95.0            | 1,957,000    | 1.13           | 2,211,000    |
|                              | 1937  | 22,000  | 86.0            | 1,885,000    | 0.75           | 1,414,000    |
| Turnips, etc.....            | 1936  | 11,700  | 325.0           | 3,803,000    | 0.40           | 1,521,000    |
|                              | 1937  | 11,700  | 249.0           | 2,912,000    | 0.40           | 1,165,000    |
|                              |       |         | tons.           | tons.        | per ton.       |              |
| Hay and clover.....          | 1936  | 396,700 | 1.85            | 734,000      | 9.50           | 6,973,000    |
|                              | 1937  | 401,000 | 1.91            | 766,000      | 8.00           | 6,128,000    |
| Fodder corn.....             | 1936  | 800     | 8.95            | 7,200        | 4.00           | 29,000       |
|                              | 1937  | 800     | 8.00            | 6,400        | 4.00           | 26,000       |

5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—continued.

| Province and Field Crop. | Year. | Area.     | Yield per Acre. | Total Yield. | Average Price. | Total Value. |
|--------------------------|-------|-----------|-----------------|--------------|----------------|--------------|
|                          |       | acres.    | bu.             | bu.          | \$ per bu.     | \$           |
| <b>New Brunswick—</b>    |       |           |                 |              |                |              |
| Spring wheat.....        | 1936  | 16,400    | 19.0            | 311,000      | 1.18           | 367,600      |
|                          | 1937  | 13,000    | 14.2            | 184,000      | 1.37           | 252,000      |
| Oats.....                | 1936  | 219,900   | 32.8            | 7,218,000    | 0.57           | 4,114,000    |
|                          | 1937  | 210,400   | 24.4            | 5,144,000    | 0.57           | 2,932,000    |
| Barley.....              | 1936  | 13,300    | 27.4            | 365,000      | 0.73           | 266,000      |
|                          | 1937  | 13,400    | 20.0            | 268,000      | 0.75           | 201,000      |
| Beans.....               | 1936  | 1,200     | 15.2            | 18,000       | 2.22           | 40,000       |
|                          | 1937  | 1,100     | 19.0            | 21,000       | 2.49           | 52,000       |
| Buckwheat.....           | 1936  | 34,400    | 26.3            | 905,000      | 0.72           | 652,000      |
|                          | 1937  | 32,500    | 17.8            | 579,000      | 0.79           | 457,000      |
| Mixed grains.....        | 1936  | 3,700     | 24.6            | 91,000       | 0.59           | 54,000       |
|                          | 1937  | 3,900     | 25.1            | 98,000       | 0.68           | 67,000       |
| Potatoes.....            | 1936  | 45,100    | 126.0           | 5,683,000    | 1.05           | 5,967,000    |
|                          | 1937  | 50,200    | 115.0           | 5,773,000    | 0.50           | 2,887,000    |
| Turnips, etc.....        | 1936  | 11,800    | 238.0           | 2,808,000    | 0.40           | 1,123,000    |
|                          | 1937  | 11,500    | 240.0           | 2,760,000    | 0.40           | 1,104,000    |
| Hay and clover.....      | 1936  | 574,700   | 1.55            | 891,000      | 6.50           | 5,792,000    |
|                          | 1937  | 570,500   | 1.41            | 802,000      | 7.00           | 5,614,000    |
| Fodder corn.....         | 1936  | 800       | 7.13            | 5,700        | 3.75           | 21,000       |
|                          | 1937  | 800       | 9.21            | 7,400        | 4.38           | 32,000       |
| <b>Quebec—</b>           |       |           |                 |              |                |              |
|                          |       |           | bu.             | bu.          | per bu.        |              |
| Spring wheat.....        | 1936  | 56,300    | 16.5            | 931,000      | 1.15           | 1,069,000    |
|                          | 1937  | 53,000    | 16.6            | 879,000      | 1.24           | 1,094,000    |
| Oats.....                | 1936  | 1,690,200 | 27.9            | 47,182,000   | 0.49           | 23,329,000   |
|                          | 1937  | 1,644,500 | 21.8            | 35,850,000   | 0.61           | 22,023,000   |
| Barley.....              | 1936  | 153,900   | 26.4            | 4,060,000    | 0.71           | 2,884,000    |
|                          | 1937  | 168,500   | 21.3            | 3,589,000    | 0.80           | 2,875,000    |
| Spring rye.....          | 1936  | 6,300     | 17.3            | 109,000      | 0.83           | 91,000       |
|                          | 1937  | 6,700     | 16.0            | 107,000      | 0.95           | 102,000      |
| Peas.....                | 1936  | 18,500    | 14.0            | 259,000      | 2.02           | 522,000      |
|                          | 1937  | 20,400    | 13.2            | 270,000      | 2.07           | 559,000      |
| Beans.....               | 1936  | 4,600     | 17.8            | 82,000       | 2.35           | 193,000      |
|                          | 1937  | 7,500     | 17.6            | 132,000      | 2.11           | 279,000      |
| Buckwheat.....           | 1936  | 151,400   | 22.8            | 3,454,000    | 0.67           | 2,330,000    |
|                          | 1937  | 153,100   | 20.7            | 3,168,000    | 0.82           | 2,583,000    |
| Mixed grains.....        | 1936  | 128,800   | 28.3            | 3,647,000    | 0.64           | 2,329,000    |
|                          | 1937  | 133,800   | 23.6            | 3,159,000    | 0.74           | 2,350,000    |
| Flaxseed.....            | 1936  | 2,900     | 9.8             | 28,300       | 1.94           | 55,000       |
|                          | 1937  | 2,800     | 9.3             | 26,000       | 1.96           | 51,000       |
| Potatoes.....            | 1936  | 131,200   | 94.0            | 12,336,000   | 1.08           | 13,278,000   |
|                          | 1937  | 143,200   | 87.0            | 12,458,000   | 0.64           | 8,032,000    |
| Turnips, etc.....        | 1936  | 37,200    | 211.5           | 7,869,000    | 0.45           | 3,525,000    |
|                          | 1937  | 37,600    | 186.0           | 6,226,000    | 0.44           | 2,733,000    |

## 5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—continued.

| Province and Field Crop. | Year. | Area.     | Yield per Acre. | Total Yield. | Average Price. | Total Value. |
|--------------------------|-------|-----------|-----------------|--------------|----------------|--------------|
|                          |       | acres.    | tons.           | tons.        | per ton.       | \$           |
| <b>Quebec—concluded.</b> |       |           |                 |              |                |              |
| Hay and clover.....      | 1936  | 3,575,800 | 1-60            | 5,559,000    | 7-15           | 39,734,000   |
|                          | 1937  | 3,608,600 | 1-33            | 4,799,000    | 7-66           | 36,756,000   |
| Alfalfa.....             | 1936  | 13,000    | 2-80            | 36,000       | 8-42           | 303,000      |
|                          | 1937  | 15,300    | 2-20            | 34,000       | 9-03           | 307,000      |
| Fodder corn.....         | 1936  | 48,300    | 8-80            | 427,000      | 3-83           | 1,634,000    |
|                          | 1937  | 47,300    | 9-87            | 467,000      | 4-04           | 1,885,000    |
| <b>Ontario—</b>          |       |           |                 |              |                |              |
|                          |       |           | bu.             | bu.          | per bu.        |              |
| Fall wheat.....          | 1936  | 509,300   | 24-5            | 12,478,000   | 1-16           | 14,474,000   |
|                          | 1937  | 718,800   | 26-0            | 18,689,000   | 1-04           | 19,437,000   |
| Spring wheat.....        | 1936  | 98,000    | 17-7            | 1,735,000    | 1-15           | 1,995,000    |
|                          | 1937  | 94,200    | 17-0            | 1,601,000    | 1-02           | 1,633,000    |
| All wheat.....           | 1936  | 607,300   | 23-4            | 14,213,000   | 1-16           | 16,469,000   |
|                          | 1937  | 813,000   | 25-0            | 20,200,000   | 1-04           | 21,070,000   |
| Oats.....                | 1936  | 2,345,900 | 28-5            | 66,853,000   | 0-50           | 33,429,000   |
|                          | 1937  | 2,263,900 | 32-6            | 73,803,000   | 0-42           | 30,997,000   |
| Barley.....              | 1936  | 519,200   | 27-0            | 14,018,000   | 0-80           | 11,214,000   |
|                          | 1937  | 555,900   | 28-8            | 16,010,000   | 0-59           | 9,446,000    |
| Fall rye.....            | 1936  | 53,200    | 16-8            | 894,000      | 0-84           | 751,000      |
|                          | 1937  | 74,700    | 17-3            | 1,292,000    | 0-78           | 1,005,000    |
| Pens.....                | 1936  | 66,800    | 12-2            | 815,000      | 1-55           | 1,263,000    |
|                          | 1937  | 55,900    | 13-6            | 760,000      | 1-56           | 1,186,000    |
| Beans.....               | 1936  | 56,300    | 13-2            | 743,000      | 2-02           | 1,501,000    |
|                          | 1937  | 57,200    | 19-3            | 1,104,000    | 1-07           | 1,181,000    |
| Buckwheat.....           | 1936  | 197,000   | 20-1            | 3,960,000    | 0-73           | 2,891,000    |
|                          | 1937  | 195,200   | 19-2            | 3,748,000    | 0-60           | 2,249,000    |
| Mixed grains.....        | 1936  | 953,100   | 29-2            | 27,831,000   | 0-55           | 15,307,000   |
|                          | 1937  | 890,100   | 34-5            | 30,708,000   | 0-48           | 14,740,000   |
| Flaxseed.....            | 1936  | 5,300     | 6-5             | 34,000       | 1-48           | 50,000       |
|                          | 1937  | 5,000     | 10-3            | 52,000       | 1-40           | 73,000       |
| Corn for husking.....    | 1936  | 164,400   | 37-0            | 6,083,000    | 0-70           | 4,258,000    |
|                          | 1937  | 165,600   | 32-7            | 5,415,000    | 0-61           | 3,303,000    |
|                          |       |           | cwt.            | cwt.         | per cwt.       |              |
| Potatoes.....            | 1936  | 145,000   | 64-0            | 9,280,000    | 1-35           | 12,528,000   |
|                          | 1937  | 150,600   | 67-0            | 10,090,000   | 0-60           | 6,054,000    |
| Turnips, etc.....        | 1936  | 96,200    | 190-0           | 18,241,000   | 0-28           | 5,107,000    |
|                          | 1937  | 97,200    | 206-0           | 19,926,000   | 0-24           | 4,782,000    |
|                          |       |           | tons.           | tons.        | per ton.       |              |
| Hay and clover.....      | 1936  | 3,898,300 | 1-60            | 4,637,000    | 8-26           | 38,302,000   |
|                          | 1937  | 3,722,200 | 1-60            | 4,601,000    | 7-14           | 32,851,000   |
| Alfalfa.....             | 1936  | 666,400   | 2-28            | 1,519,000    | 8-74           | 13,276,000   |
|                          | 1937  | 646,700   | 2-87            | 1,662,000    | 7-31           | 12,149,000   |
| Fodder corn.....         | 1936  | 306,900   | 8-05            | 2,471,000    | 3-18           | 7,858,000    |
|                          | 1937  | 317,300   | 9-71            | 3,081,000    | 2-69           | 8,288,000    |
| Sugar beets.....         | 1936  | 37,600    | 10-40           | 391,000      | 5-32           | 2,080,000    |
|                          | 1937  | 26,500    | 6-98            | 185,000      | 5-35           | 990,000      |



5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—continued.

| Province and Field Crop. | Year. | Area.      | Yield per Acre. | Total Yield. | Average Price. | Total Value. |
|--------------------------|-------|------------|-----------------|--------------|----------------|--------------|
|                          |       | acres.     | bu.             | bu.          | \$ per bu.     | \$           |
| <b>Manitoba—</b>         |       |            |                 |              |                |              |
| Spring wheat.....        | 1936  | 2,556,600  | 10.2            | 26,000,000   | 0.91           | 23,660,000   |
|                          | 1937  | 2,872,000  | 16.7            | 48,000,000   | 0.97           | 46,560,000   |
| Oats.....                | 1936  | 1,453,400  | 14.0            | 20,400,000   | 0.37           | 7,548,000    |
|                          | 1937  | 1,410,000  | 30.5            | 43,075,000   | 0.39           | 16,790,000   |
| Barley.....              | 1936  | 1,423,000  | 13.3            | 18,990,000   | 0.66           | 12,533,000   |
|                          | 1937  | 1,393,000  | 25.0            | 34,800,000   | 0.47           | 16,356,000   |
| Fall rye.....            | 1936  | 74,700     | 10.7            | 800,000      | 0.61           | 488,000      |
|                          | 1937  | 116,600    | 19.0            | 2,220,000    | 0.73           | 1,621,000    |
| Spring rye.....          | 1936  | 13,600     | 11.0            | 150,000      | 0.61           | 92,000       |
|                          | 1937  | 18,600     | 12.9            | 240,000      | 0.73           | 175,000      |
| All rye.....             | 1936  | 88,300     | 10.8            | 950,000      | 0.61           | 580,000      |
|                          | 1937  | 135,200    | 18.2            | 2,460,000    | 0.73           | 1,796,000    |
| Pens.....                | 1936  | 1,600      | 13.8            | 22,000       | 1.13           | 25,000       |
|                          | 1937  | 2,600      | 17.1            | 44,000       | 1.49           | 66,000       |
| Buckwheat.....           | 1936  | 4,400      | 13.6            | 60,000       | 0.78           | 47,000       |
|                          | 1937  | 5,800      | 17.8            | 103,000      | 0.83           | 85,000       |
| Mixed grains.....        | 1936  | 9,900      | 15.5            | 153,000      | 0.45           | 69,000       |
|                          | 1937  | 23,800     | 26.3            | 626,000      | 0.44           | 275,000      |
| Flaxseed.....            | 1936  | 89,100     | 4.7             | 415,000      | 1.42           | 589,000      |
|                          | 1937  | 38,300     | 9.7             | 370,000      | 1.51           | 559,000      |
| Potatoes.....            | 1936  | 33,600     | 30.0            | 1,006,000    | 1.40           | 1,408,000    |
|                          | 1937  | 30,900     | 80.0            | 2,481,000    | 0.68           | 1,687,000    |
| Turnips, etc.....        | 1936  | 3,100      | 67.0            | 207,000      | 0.69           | 143,000      |
|                          | 1937  | 5,500      | 131.0           | 723,000      | 0.52           | 376,000      |
| Hay and clover.....      | 1936  | 358,700    | 1.61            | 578,000      | 5.00           | 2,890,000    |
|                          | 1937  | 410,000    | 1.92            | 788,000      | 5.64           | 4,444,000    |
| Alfalfa.....             | 1936  | 28,100     | 1.99            | 56,000       | 6.50           | 364,000      |
|                          | 1937  | 30,000     | 2.37            | 71,000       | 7.77           | 552,000      |
| Fodder corn.....         | 1936  | 31,300     | 3.87            | 121,000      | 4.50           | 545,000      |
|                          | 1937  | 64,500     | 4.26            | 275,000      | 5.00           | 1,375,000    |
| <b>Saskatchewan—</b>     |       |            |                 |              |                |              |
| Spring wheat.....        | 1936  | 14,744,000 | 7.5             | 110,000,000  | 0.92           | 101,202,000  |
|                          | 1937  | 13,893,000 | 2.7             | 37,000,000   | 1.04           | 38,480,000   |
| Oats.....                | 1936  | 4,684,200  | 14.0            | 65,462,000   | 0.35           | 22,912,000   |
|                          | 1937  | 4,380,000  | 5.1             | 22,338,000   | 0.37           | 8,265,000    |
| Barley.....              | 1936  | 1,302,100  | 12.8            | 16,627,000   | 0.67           | 11,140,000   |
|                          | 1937  | 1,174,000  | 4.7             | 5,518,000    | 0.46           | 2,538,000    |
| Fall rye.....            | 1936  | 253,700    | 3.8             | 974,000      | 0.63           | 614,000      |
|                          | 1937  | 429,000    | 0.9             | 386,000      | 0.67           | 259,000      |
| Spring rye.....          | 1936  | 82,400     | 6.3             | 515,000      | 0.63           | 324,000      |
|                          | 1937  | 89,000     | 2.8             | 249,000      | 0.67           | 167,000      |

5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—continued.

| Province and Field Crop.       | Year. | Area.     | Yield.<br>per Acre. | Total<br>Yield. | Average<br>Price. | Total<br>Value. |
|--------------------------------|-------|-----------|---------------------|-----------------|-------------------|-----------------|
|                                |       | acres.    | bu.                 | bu.             | \$<br>per bu.     | \$              |
| <b>Saskatchewan—concluded.</b> |       |           |                     |                 |                   |                 |
| All rye.....                   | 1936  | 336,100   | 4.4                 | 1,489,000       | 0.63              | 938,000         |
|                                | 1937  | 518,000   | 1.2                 | 635,000         | 0.67              | 426,000         |
| Peas.....                      | 1936  | 500       | 6.5                 | 3,300           | 0.85              | 3,000           |
|                                | 1937  | 400       | 3.9                 | 1,600           | 1.00              | 2,000           |
| Beans.....                     | 1936  | 250       | 8.5                 | 2,000           | 1.20              | 2,400           |
|                                | 1937  | 200       | 2.5                 | 500             | 1.20              | 600             |
| Mixed grains.....              | 1936  | 17,900    | 11.3                | 202,000         | 0.40              | 81,000          |
|                                | 1937  | 18,800    | 3.8                 | 71,000          | 0.50              | 36,000          |
| Flaxseed.....                  | 1936  | 366,200   | 3.4                 | 1,240,000       | 1.44              | 1,786,000       |
|                                | 1937  | 175,000   | 0.7                 | 123,000         | 1.47              | 181,000         |
|                                |       |           | cwt.                | cwt.            | per cwt.          |                 |
| Potatoes.....                  | 1936  | 46,100    | 35.0                | 1,635,000       | 1.11              | 1,815,000       |
|                                | 1937  | 48,600    | 27.0                | 1,312,000       | 0.78              | 1,023,000       |
| Turnips, etc.....              | 1936  | 2,000     | 36.0                | 72,000          | 0.68              | 49,000          |
|                                | 1937  | 2,400     | 18.0                | 43,000          | 0.72              | 31,000          |
|                                |       |           | tons.               | tons.           | per ton.          |                 |
| Hay and clover.....            | 1936  | 233,100   | 1.27                | 297,000         | 5.25              | 1,569,000       |
|                                | 1937  | 242,400   | 0.53                | 128,000         | 7.43              | 951,000         |
| Alfalfa.....                   | 1936  | 20,000    | 1.30                | 26,000          | 9.23              | 240,000         |
|                                | 1937  | 23,000    | 1.03                | 24,000          | 9.27              | 222,000         |
| Fodder corn.....               | 1936  | 4,900     | 1.43                | 7,000           | 5.40              | 38,000          |
|                                | 1937  | 7,800     | 0.62                | 5,000           | 6.42              | 32,000          |
| <b>Alberta—</b>                |       |           | bu.                 | bu.             | per bu.           |                 |
| Spring wheat.....              | 1936  | 7,537,200 | 8.8                 | 66,000,000      | 0.92              | 60,720,000      |
|                                | 1937  | 7,834,000 | 9.4                 | 74,000,000      | 0.98              | 72,520,000      |
| Oats.....                      | 1936  | 2,536,700 | 19.7                | 50,000,000      | 0.35              | 17,500,000      |
|                                | 1937  | 2,789,000 | 27.6                | 77,000,000      | 0.36              | 27,720,000      |
| Barley.....                    | 1936  | 999,000   | 17.0                | 17,000,000      | 0.64              | 10,880,000      |
|                                | 1937  | 995,300   | 22.2                | 22,100,000      | 0.45              | 9,945,000       |
| Fall rye.....                  | 1936  | 76,900    | 4.9                 | 374,000         | 0.74              | 277,000         |
|                                | 1937  | 80,000    | 8.5                 | 681,000         | 0.69              | 470,000         |
| Spring rye.....                | 1936  | 60,500    | 6.4                 | 388,000         | 0.74              | 287,000         |
|                                | 1937  | 75,000    | 6.7                 | 504,000         | 0.69              | 348,000         |
| All rye.....                   | 1936  | 137,400   | 5.5                 | 762,000         | 0.74              | 564,000         |
|                                | 1937  | 155,000   | 7.6                 | 1,185,000       | 0.69              | 813,000         |
| Peas.....                      | 1936  | 700       | 21.4                | 15,000          | 1.50              | 23,000          |
|                                | 1937  | 700       | 20.3                | 14,000          | 1.65              | 23,000          |
| Beans.....                     | 1936  | 850       | 10.6                | 9,000           | 1.50              | 14,000          |
|                                | 1937  | 900       | 19.0                | 17,000          | 2.40              | 41,000          |
| Mixed grains.....              | 1936  | 21,800    | 18.5                | 403,000         | 0.39              | 157,000         |
|                                | 1937  | 18,000    | 17.3                | 311,000         | 0.41              | 128,000         |
| Flaxseed.....                  | 1936  | 13,400    | 5.6                 | 75,000          | 1.39              | 104,000         |
|                                | 1937  | 20,000    | 6.2                 | 124,000         | 1.50              | 186,000         |

5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—concluded.

| Province and Field Crop.  | Year. | Area.     | Yield per Acre. | Total Yield. | Average Price. | Total Value. |
|---------------------------|-------|-----------|-----------------|--------------|----------------|--------------|
|                           |       | acres.    | cwt.            | cwt.         | \$ per cwt.    | \$           |
| <b>Alberta—concluded.</b> |       |           |                 |              |                |              |
| Potatoes.....             | 1936  | 29,600    | 61.0            | 1,816,000    | 0.95           | 1,725,000    |
|                           | 1937  | 31,000    | 90.0            | 2,790,000    | 0.78           | 2,176,000    |
| Turnips, etc.....         | 1936  | 2,600     | 51.0            | 133,000      | 0.70           | 93,000       |
|                           | 1937  | 2,700     | 116.0           | 313,000      | 0.63           | 197,000      |
|                           |       |           | tons.           | tons.        | per ton.       |              |
| Hay and clover.....       | 1936  | 367,500   | 1.15            | 424,000      | 7.84           | 3,324,000    |
|                           | 1937  | 356,500   | 1.23            | 438,000      | 8.23           | 3,605,000    |
| Alfalfa.....              | 1936  | 76,500    | 2.17            | 166,000      | 10.20          | 1,693,000    |
|                           | 1937  | 83,000    | 1.88            | 156,000      | 10.29          | 1,605,000    |
| Fodder corn.....          | 1936  | 1,900     | 5.26            | 10,000       | 7.00           | 70,000       |
|                           | 1937  | 2,700     | 5.55            | 15,000       | 6.33           | 95,000       |
| Grain hay.....            | 1936  | 1,000,000 | 0.90            | 900,000      | 6.00           | 5,400,000    |
|                           | 1937  | 1,100,000 | 1.50            | 1,650,000    | 6.00           | 9,900,000    |
| Sugar beets.....          | 1936  | 18,000    | 11.33           | 204,000      | 6.55           | 1,336,000    |
|                           | 1937  | 20,000    | 11.65           | 233,000      | 6.50           | 1,515,000    |
| <b>British Columbia—</b>  |       |           |                 |              |                |              |
|                           |       |           | bu.             | bu.          | per bu.        |              |
| Spring wheat.....         | 1936  | 50,000    | 25.2            | 1,487,000    | 1.03           | 1,532,000    |
|                           | 1937  | 69,600    | 25.4            | 1,768,000    | 1.15           | 2,033,000    |
| Oats.....                 | 1936  | 106,000   | 51.0            | 5,406,000    | 0.50           | 2,703,000    |
|                           | 1937  | 110,000   | 51.1            | 5,621,000    | 0.52           | 2,928,000    |
| Barley.....               | 1936  | 13,000    | 34.2            | 445,000      | 0.64           | 285,000      |
|                           | 1937  | 15,200    | 33.2            | 505,000      | 0.68           | 343,000      |
| Spring rye.....           | 1936  | 4,000     | 19.2            | 77,000       | 0.73           | 56,000       |
|                           | 1937  | 4,100     | 22.4            | 92,000       | 0.81           | 75,000       |
| Peas.....                 | 1936  | 4,400     | 26.2            | 115,000      | 1.35           | 155,000      |
|                           | 1937  | 4,000     | 27.5            | 110,000      | 1.60           | 176,000      |
| Beans.....                | 1936  | 800       | 27.1            | 22,000       | 1.80           | 40,000       |
|                           | 1937  | 700       | 29.3            | 21,000       | 2.00           | 42,000       |
| Mixed grains.....         | 1936  | 4,300     | 36.3            | 156,000      | 0.55           | 86,000       |
|                           | 1937  | 4,100     | 39.2            | 161,000      | 0.68           | 93,000       |
| Flaxseed.....             | 1936  | 250       | 13.5            | 3,000        | 1.25           | 4,000        |
|                           | 1937  | 200       | 13.0            | 2,600        | 1.35           | 3,500        |
|                           |       |           | cwt.            | cwt.         | per cwt.       |              |
| Potatoes.....             | 1936  | 17,500    | 112.0           | 1,960,000    | 1.35           | 2,646,000    |
|                           | 1937  | 18,900    | 121.0           | 2,287,000    | 1.10           | 2,516,000    |
| Turnips, etc.....         | 1936  | 5,900     | 236.0           | 1,392,000    | 0.62           | 863,000      |
|                           | 1937  | 5,500     | 238.0           | 1,309,000    | 0.60           | 785,000      |
|                           |       |           | tons.           | tons.        | per ton.       |              |
| Hay and clover.....       | 1936  | 155,500   | 2.10            | 327,000      | 13.00          | 4,251,000    |
|                           | 1937  | 151,000   | 2.15            | 325,000      | 13.40          | 4,030,000    |
| Alfalfa.....              | 1936  | 50,200    | 3.25            | 163,000      | 13.50          | 2,201,000    |
|                           | 1937  | 50,900    | 3.14            | 160,000      | 13.20          | 2,112,000    |
| Fodder corn.....          | 1936  | 6,200     | 12.47           | 77,000       | 4.75           | 366,000      |
|                           | 1937  | 5,700     | 11.96           | 68,000       | 5.00           | 340,000      |
| Grain hay.....            | 1936  | 45,000    | 2.45            | 110,000      | 9.75           | 1,073,000    |
|                           | 1937  | 47,800    | 2.47            | 118,000      | 9.50           | 1,121,000    |

**Acreages under Pasture.**—Table 6 gives the estimated acreages under pasture in Canada, by provinces, for the years 1931 to 1937.

**6.—Estimated Acreages under Pasture in Canada, 1931-37.**

| Province.                  | 1931.            | 1932.            | 1933.            | 1934.            | 1935.            | 1936.                        | 1937.            |
|----------------------------|------------------|------------------|------------------|------------------|------------------|------------------------------|------------------|
|                            | acres.           | acres.           | acres.           | acres.           | acres.           | acres.                       | acres.           |
| Prince Edward Island ..... | 235,000          | 210,200          | 209,703          | 203,600          | 214,000          | 219,200                      | 217,100          |
| Nova Scotia.....           | 866,500          | 704,100          | 704,100          | 709,400          | 695,200          | 726,200                      | 706,360          |
| New Brunswick.....         | 474,600          | 518,300          | 516,300          | 535,800          | 521,600          | 520,000                      | 507,800          |
| Quebec.....                | 3,686,100        | 2,669,600        | 2,843,700        | 2,919,700        | 2,973,200        | 2,992,500                    | 2,993,410        |
| Ontario.....               | 3,031,717        | 3,012,500        | 2,995,500        | 2,908,300        | 2,831,400        | 2,828,300                    | 2,782,800        |
| Manitoba.....              | 239,800          | 232,100          | 246,700          | 232,200          | 240,000          | 436,027 <sup>1</sup>         | 245,000          |
| Saskatchewan.....          | 400,300          | 444,900          | 451,600          | 453,900          | 475,350          | 635,050 <sup>1</sup>         | 445,720          |
| Alberta.....               | 384,900          | 350,500          | 220,000          | 201,800          | 245,640          | 517,841 <sup>1</sup>         | 298,780          |
| British Columbia.....      | 69,272           | 76,500           | 80,200           | 86,503           | 94,900           | 108,300                      | 111,000          |
| Indian Reserves.....       | 30,913           | 46,000           | 49,200           | 42,200           | 49,848           | 52,874                       | 58,232           |
| <b>Totals.....</b>         | <b>9,428,102</b> | <b>8,261,708</b> | <b>8,317,000</b> | <b>8,353,400</b> | <b>8,341,138</b> | <b>9,026,292<sup>2</sup></b> | <b>8,366,212</b> |

<sup>1</sup> Improved land under pasture.

<sup>2</sup> See text immediately following this table.

The foregoing totals are not entirely comprehensive since those for the Maritime Provinces, Quebec, and Ontario include all pasture, seeded and natural, while the figures for the four western provinces are 'seeded pasture' only, except for the year 1936 when the corresponding data for the Prairie Provinces are not available. The 1936 figures shown for these three provinces represent the acreage of 'improved land under pasture' as reported in the returns of the Quinquennial Census of the Prairie Provinces for 1936. The total figure for Canada shown for that year, therefore, although it is a more representative total than those for other years is not comparable with them.

Most of the land used for pasture in the Prairie Provinces is 'natural'. The census figures for the area under 'natural' pasture in 1936, with the corresponding figures from the Census of 1931 within brackets are, in acres, as follows: Manitoba 3,304,017 (3,601,644); Saskatchewan 15,230,425 (15,755,179); Alberta 15,196,595 (15,960,335).

The areas under grazing leases in the western provinces as at Mar. 31, 1935-37, are reported by the provincial lands administration branches as shown in Table 7.

**7.—Provincial Lands under Grazing Leases, 1935-37.**

| Province.             | 1935.             |                  | 1936.             |                  | 1937.             |                  |
|-----------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|
|                       | Number of Leases. | Acres.           | Number of Leases. | Acres.           | Number of Leases. | Acres.           |
| Manitoba.....         | 1,310             | 296,477          | 1,359             | 281,703          | 1,252             | 270,471          |
| Saskatchewan.....     | 7,559             | 4,277,476        | 9,125             | 4,569,500        | 7,397             | 4,330,503        |
| Alberta.....          | 3,310             | 3,141,842        | 3,201             | 3,590,562        | 2,782             | 3,152,126        |
| British Columbia..... | 634               | 474,770          | 697               | 484,758          | 730               | 501,527          |
| <b>Totals.....</b>    | <b>12,813</b>     | <b>8,190,565</b> | <b>14,382</b>     | <b>8,926,528</b> | <b>12,161</b>     | <b>8,314,687</b> |

**Average Yields per Acre.**—Table 8 gives, for the years 1930 to 1937, the average yields per acre of the various field crops, together with the long-time average yields per acre.

**8.—Annual Average Yields per Acre of Field Crops for Canada, 1930-37, with Long-Time Averages.**

| Field Crop.           | 1930. | 1931. | 1932. | 1933. | 1934. | 1935. | 1936.              | 1937. | Long-Time Average |
|-----------------------|-------|-------|-------|-------|-------|-------|--------------------|-------|-------------------|
|                       | bu.   | bu.   | bu.   | bu.   | bu.   | bu.   | bu.                | bu.   | bu.               |
| Wheat.....            | 16.9  | 12.2  | 16.3  | 10.8  | 11.5  | 11.5  | 8.6 <sup>1</sup>   | 7.1   | 17.1              |
| Oats.....             | 31.9  | 25.6  | 29.8  | 22.7  | 23.4  | 23.0  | 20.5 <sup>1</sup>  | 20.6  | 32.3              |
| Barley.....           | 24.3  | 17.8  | 21.5  | 17.3  | 17.6  | 21.6  | 16.2               | 19.2  | 25.2              |
| Rye.....              | 15.2  | 6.7   | 10.9  | 7.2   | 6.9   | 13.4  | 6.8 <sup>1</sup>   | 6.5   | 16.1              |
| Peas.....             | 18.3  | 16.9  | 17.9  | 16.3  | 16.7  | 17.1  | 13.3               | 14.3  | 16.9              |
| Beans.....            | 14.6  | 15.3  | 17.1  | 15.1  | 14.3  | 18.0  | 13.7               | 19.2  | 16.8              |
| Buckwheat.....        | 22.2  | 20.6  | 22.9  | 21.3  | 21.2  | 20.9  | 21.7 <sup>1</sup>  | 19.6  | 22.4              |
| Mixed grains.....     | 36.9  | 33.0  | 33.0  | 28.3  | 32.7  | 34.3  | 28.7               | 32.0  | 34.6              |
| Flaxseed.....         | 8.7   | 3.8   | 5.9   | 2.6   | 4.0   | 6.9   | 3.8                | 2.9   | 8.8               |
| Corn for husking..... | 36.1  | 41.3  | 38.9  | 37.0  | 42.2  | 46.3  | 37.0               | 32.7  | 49.3              |
| Potatoes.....         | cwt.  | cwt.  | cwt.  | cwt.  | cwt.  | cwt.  | cwt.               | cwt.  | cwt.              |
| Turnips, etc.....     | 84.4  | 88.0  | 76.0  | 81.0  | 84.0  | 76.0  | 79.0               | 80.0  | 89.0              |
|                       | 181.8 | 205.0 | 216.0 | 188.0 | 216.0 | 190.0 | 209.0 <sup>1</sup> | 195.0 | 189.0             |
| Hay and clover.....   | tons. | tons. | tons. | tons. | tons. | tons. | tons.              | tons. | tons.             |
| Fodder corn.....      | 1.5   | 1.6   | 1.5   | 1.3   | 1.3   | 1.6   | 1.6                | 1.5   | 1.5               |
| Sugar beets.....      | 8.2   | 8.6   | 7.8   | 8.3   | 7.7   | 8.5   | 7.8 <sup>1</sup>   | 8.3   | 9.0               |
| Alfalfa.....          | 9.0   | 9.1   | 10.8  | 9.9   | 8.3   | 8.9   | 10.7 <sup>1</sup>  | 9.0   | 9.4               |
|                       | 2.2   | 2.5   | 2.7   | 2.3   | 2.0   | 2.6   | 2.3                | 2.5   | 2.4               |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

**Grain Yields of the Prairie Provinces.**—Estimates of the acreages and yields of the grain crops of the Prairie Provinces (Manitoba, Saskatchewan, and Alberta) are given for 1937 in Table 9, together with comparative data for 1936 and 1935.

**9.—Areas and Yields of Wheat, Oats, Barley, Rye, and Flaxseed in the Prairie Provinces, 1935-37.**

| Province and Crop.        | Areas.     |            |            | Yields.     |                          |             |
|---------------------------|------------|------------|------------|-------------|--------------------------|-------------|
|                           | 1935.      | 1936.      | 1937.      | 1935.       | 1936.                    | 1937.       |
|                           | acres.     | acres.     | acres.     | bu.         | bu.                      | bu.         |
| <b>Prairie Provinces—</b> |            |            |            |             |                          |             |
| Wheat.....                | 23,293,000 | 24,837,800 | 24,598,000 | 264,096,000 | 202,000,000 <sup>1</sup> | 159,000,000 |
| Oats.....                 | 9,478,000  | 8,674,300  | 8,579,000  | 244,854,000 | 135,862,000              | 142,413,000 |
| Barley.....               | 3,187,000  | 3,724,100  | 3,562,300  | 62,625,000  | 52,617,000               | 62,418,000  |
| Rye.....                  | 649,300    | 561,800    | 808,000    | 8,379,000   | 3,201,000                | 4,280,000   |
| Flaxseed.....             | 296,700    | 468,700    | 233,300    | 1,563,400   | 1,730,000                | 617,000     |
| <b>Manitoba—</b>          |            |            |            |             |                          |             |
| Wheat.....                | 2,587,000  | 2,556,600  | 2,872,000  | 23,250,000  | 26,000,000 <sup>1</sup>  | 48,000,000  |
| Oats.....                 | 1,434,000  | 1,453,400  | 1,410,000  | 30,700,000  | 20,400,000               | 43,075,000  |
| Barley.....               | 1,121,000  | 1,423,000  | 1,393,000  | 23,100,000  | 18,990,000               | 34,800,000  |
| Rye.....                  | 107,000    | 88,300     | 135,200    | 1,916,000   | 950,000                  | 2,400,000   |
| Flaxseed.....             | 17,300     | 89,100     | 38,300     | 158,400     | 415,000                  | 370,000     |
| <b>Saskatchewan—</b>      |            |            |            |             |                          |             |
| Wheat.....                | 13,205,000 | 14,744,000 | 13,893,000 | 142,198,000 | 110,000,000 <sup>1</sup> | 37,000,000  |
| Oats.....                 | 4,942,000  | 4,684,200  | 4,380,000  | 131,951,000 | 65,462,000               | 22,338,000  |
| Barley.....               | 1,146,000  | 1,302,100  | 1,174,000  | 23,149,000  | 16,627,000               | 5,518,000   |
| Rye.....                  | 374,200    | 336,100    | 518,000    | 4,967,000   | 1,489,000                | 635,000     |
| Flaxseed.....             | 260,000    | 366,200    | 175,000    | 1,250,000   | 1,240,000                | 123,000     |
| <b>Alberta—</b>           |            |            |            |             |                          |             |
| Wheat.....                | 7,500,000  | 7,537,200  | 7,834,000  | 98,648,000  | 66,000,000 <sup>1</sup>  | 74,000,000  |
| Oats.....                 | 3,102,000  | 2,536,700  | 2,789,000  | 32,203,000  | 50,000,000               | 77,000,000  |
| Barley.....               | 920,000    | 999,000    | 995,300    | 16,376,000  | 17,000,000               | 22,100,000  |
| Rye.....                  | 168,100    | 137,400    | 155,000    | 1,596,000   | 762,000                  | 1,185,000   |
| Flaxseed.....             | 19,400     | 13,400     | 20,000     | 155,000     | 75,000                   | 124,000     |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

Stocks of Grain in Canada.—Table 10 shows the quantities of grain in farmers' hands on July 31, 1937, as compared with July 31, 1936 and 1935. Adding the stocks in elevators, in flour-mills and in transit, Table 11 shows the total quantities of grain in store at the close of each of the crop years ended July 31, 1935, 1936, and 1937.

10.—Stocks of Grain in Farmers' Hands on July 31, 1937, as Compared with July 31, 1936 and 1935, with Totals of Production of the Previous Years' Crops.

| Kind of Grain. | Total<br>Pro-<br>duction<br>in<br>1934. | On Farms,<br>July 31, 1936. |            | Total<br>Pro-<br>duction<br>in<br>1935. | On Farms,<br>July 31, 1936. |            | Total<br>Pro-<br>duction<br>in<br>1936. | On Farms,<br>July 31, 1937. |            |
|----------------|---|-----------------------------|------------|---|-----------------------------|------------|---|-----------------------------|------------|
|                | '000 bu.                                | p.c.                        | bu.        | '000 bu.                                | p.c.                        | bu.        | '000 bu.                                | p.c.                        | bu.        |
| Wheat.....     | 275,549                                 | 2.85                        | 7,861,000  | 281,935                                 | 1.96 <sup>1</sup>           | 5,520,000  | 229,218                                 | 1.74                        | 3,999,300  |
| Oats.....      | 321,120                                 | 6.25                        | 20,071,000 | 394,345                                 | 7.91                        | 31,186,000 | 271,778                                 | 5.60                        | 15,231,000 |
| Barley.....    | 63,742                                  | 3.17                        | 2,022,000  | 83,975                                  | 5.00                        | 4,199,200  | 71,922                                  | 2.05                        | 1,476,400  |
| Rye.....       | 5,423                                   | 1.44                        | 77,900     | 9,606                                   | 2.82                        | 270,600    | 4,281                                   | 1.83                        | 78,400     |
| Flaxseed.....  | 910                                     | 0.46                        | 4,200      | 1,666                                   | 0.52 <sup>1</sup>           | 7,600      | 1,795                                   | 0.55                        | 9,800      |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

11.—Detailed Stocks of Grain in Canada on July 31, 1935, 1936, and 1937.

| Item.   | Wheat.                         |                                |                   | Oats.                         |                               |                   |
|---|--------------------------------|--------------------------------|-------------------|-------------------------------|-------------------------------|-------------------|
|   | 1935.                          | 1936.                          | 1937.             | 1935.                         | 1936.                         | 1937.             |
|   | bu.                            | bu.                            | bu.               | bu.                           | bu.                           | bu.               |
| Held in—  |                                |                                |                   |                               |                               |                   |
| Farmers' hands.....   | 7,861,200                      | 5,520,000                      | 3,999,300         | 20,071,000                    | 31,186,000                    | 15,231,000        |
| Country, private, and mill<br>elevators and mills in<br>Western Division..... | 53,857,630                     | 36,242,730                     | 7,427,392         | 1,430,847                     | 4,161,502                     | 1,395,430         |
| Terminal elevators in West-<br>ern Inspection Division..                      | 83,825,528                     | 37,290,332                     | 11,752,253        | 3,786,402                     | 2,523,253                     | 588,276           |
| Eastern elevators.....  | 42,764,795                     | 22,365,381                     | 5,980,927         | 589,803                       | 1,198,655                     | 395,686           |
| Flour-mills (eastern).....  | 898,819 <sup>1</sup>           | 1,728,255 <sup>1</sup>         | 770,593           | 251,180 <sup>1</sup>          | 299,951 <sup>1</sup>          | 215,185           |
| Transit.....  | 12,959,810                     | 4,944,579                      | 2,809,387         | 310,077                       | 835,306                       | 452,931           |
| <b>Totals.....</b>  | <b>202,147,582<sup>1</sup></b> | <b>108,094,277<sup>1</sup></b> | <b>32,739,852</b> | <b>26,439,399<sup>1</sup></b> | <b>40,364,697<sup>1</sup></b> | <b>18,278,808</b> |
| Item.   | Barley.                        |                                |                   | Rye.                          |                               |                   |
|   | 1935.                          | 1936.                          | 1937.             | 1935.                         | 1936.                         | 1937.             |
|   | bu.                            | bu.                            | bu.               | bu.                           | bu.                           | bu.               |
| Held in—  |                                |                                |                   |                               |                               |                   |
| Farmers' hands.....   | 2,022,000                      | 4,199,200                      | 1,476,400         | 77,900                        | 270,600                       | 78,400            |
| Country, private, and mill<br>elevators and mills in<br>Western Division..... | 1,239,433                      | 2,957,629                      | 970,789           | 240,450                       | 1,077,542                     | 70,768            |
| Terminal elevators in West-<br>ern Inspection Division..                      | 1,035,973                      | 1,352,626                      | 960,744           | 2,167,954                     | 1,354,261                     | 99,771            |
| Eastern elevators.....  | 900,893                        | 761,969                        | 341,030           | 439,334                       | 367,111                       | 5,394             |
| Flour-mills (eastern).....  | 46,245 <sup>1</sup>            | 24,292 <sup>1</sup>            | 88,210            | 305 <sup>1</sup>              | 14,225                        | 2,716             |
| Transit.....  | 285,516                        | 581,915                        | 520,062           | 184,260                       | 110,530                       | 152,653           |
| <b>Totals.....</b>  | <b>5,530,060<sup>1</sup></b>   | <b>9,827,631<sup>1</sup></b>   | <b>4,363,235</b>  | <b>3,116,203<sup>1</sup></b>  | <b>3,194,369</b>              | <b>409,702</b>    |
| Item.   | Flaxseed.                      |                                |                   |                               |                               |                   |
|   | 1935.                          | 1936.                          | 1937.             |                               |                               |                   |
|   | bu.                            | bu.                            | bu.               |                               |                               |                   |
| Held in—  |                                |                                |                   |                               |                               |                   |
| Farmers' hands.....   | 4,200                          | 7,600                          | 9,800             |                               |                               |                   |
| Country, private, and mill elevators and mills in Western Division            | 105,091                        | 108,541                        | 112,796           |                               |                               |                   |
| Terminal elevators in Western Inspection Division.....                        | 177,404                        | 138,540                        | 312,572           |                               |                               |                   |
| Eastern elevators.....  | Nil                            | Nil                            | 2,115             |                               |                               |                   |
| Flour-mills (eastern).....  | 335                            | 90                             | 66                |                               |                               |                   |
| Transit.....  | 25,949                         | 15,516                         | 27,618            |                               |                               |                   |
| <b>Totals.....</b>  | <b>312,979</b>                 | <b>269,287</b>                 | <b>464,967</b>    |                               |                               |                   |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

**Distribution of Wheat and Oat Crops.**—The distribution of the wheat crops of Canada for the years ended July 31, 1936 and 1937, is calculated in Table 12.

**12.—Distribution of the Canadian Wheat Crops, by crop years, 1935-36 and 1936-37.**

NOTE.—Flour is expressed as wheat on the basis of one barrel of flour, weighing 196 lb., being equal to 4½ bushels of wheat. For similar calculations extending over a series of years both for wheat and oats, see the Year Book, 1920, pp. 263-266, and the April issues of the Monthly Bulletin of Agricultural Statistics for each of the years 1920 to 1933. For 1934 and later years, preliminary estimates will be found in the August numbers of the Bulletin.

| Item.  | Crop Year ended July 31, 1936. | Crop Year ended July 31, 1937. | Item.   | Crop Year ended July 31, 1936. | Crop Year ended July 31, 1937. |
|--|--------------------------------|--------------------------------|---|--------------------------------|--------------------------------|
|  | '000 bu.                       | '000 bu.                       |   | '000 bu.                       | '000 bu.                       |
| Carry-overs, Aug. 1, 1935, and Aug. 1, 1936..... | 203,273                        | 108,094                        | Exports as flour.....                             | 22,405                         | 20,365                         |
| Gross production.....                            | 281,935                        | 219,218                        | Totals, exports.....                              | 254,425                        | 195,223                        |
| Loss in cleaning.....                            | 4,300                          | 2,500                          | Retained as seed.....                             | 33,487                         | 34,112                         |
| Grain not merchantable...                        | 9,869                          | 1,515                          | Retained for feed.....                            | 20,939                         | 15,794                         |
| Net production and carry-overs.....              | 471,039                        | 323,297                        | Milled for food.....                              | 44,815                         | 43,549                         |
| Imports.....                                     | 292                            | 403                            | Carry-overs, July 31, 1936 and July 31, 1937..... | 108,094                        | 32,740                         |
| Available for distribution                       | 471,331                        | 323,700                        | Balances otherwise disposed of.....               | 8,229                          | 2,282                          |
| Exports as grain.....                            | 232,020                        | 174,858                        |   |                                |                                |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

Table 13 presents similar data for oats. The bulk of this crop is consumed as feed for live stock and the table shows approximately how the remaining portion of the crop is disposed of, including: the quantities exported as grain, oatmeal, and rolled oats; the quantities retained for seed; and the quantities milled for home consumption, representing chiefly oatmeal and rolled oats used for human food. The carry-over represents grain in the elevators, in farmers' hands, in transit, etc., and the balance is the quantity used in Canada, for feeding to live stock, this amount being estimated at 312,627,000 bushels in 1935-36 and 235,449,000 bushels in 1936-37.

**13.—Distribution of the Canadian Oat Crops, by crop years, 1935-36 and 1936-37.**

| Item.  | Crop Year ended July 31, 1936. | Crop Year ended July 31, 1937. | Item.   | Crop Year ended July 31, 1936. | Crop Year ended July 31, 1937. |
|--|--------------------------------|--------------------------------|---|--------------------------------|--------------------------------|
|  | '000 bu.                       | '000 bu.                       |   | '000 bu.                       | '000 bu.                       |
| Carry-overs, Aug. 1, 1935, and Aug. 1, 1936..... | 26,471                         | 40,305                         | Exports as meal, etc.....                         | 3,533                          | 3,503                          |
| Gross production.....                            | 304,348                        | 271,778                        | Totals, exports.....                              | 15,514                         | 9,500                          |
| Grain not merchantable...                        | 11,323                         | 8,509                          | Retained as seed.....                             | 32,796                         | 32,621                         |
| Net production and carry-overs.....              | 409,496                        | 303,574                        | Milled for home consumption.....                  | 8,535                          | 7,749                          |
| Imports.....                                     | 356                            | 24                             | Carry-overs, July 31, 1936 and July 31, 1937..... | 40,305                         | 18,279                         |
| Available for distribution...                    | 409,852                        | 303,598                        | Balances for home consumption as grain.....       | 312,627                        | 235,449                        |
| Exports as grain.....                            | 11,981                         | 5,997                          |   |                                |                                |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

**Per Capita Consumption of Wheat in Canada.**—According to calculations, the average annual per capita consumption of wheat ground for human food in Canada during the ten years 1928 to 1937 was 4.1 bushels. The range for the period was between 3.9 and 4.4 bushels. The per capita consumption in 1937 was

estimated at 3.9 bushels. Details for the years 1919-27 were given at p. 241 of the 1929 Year Book. Annual estimates are published in the April number of the Monthly Bulletin of Agricultural Statistics.

### Subsection 3.—Farm Live Stock and Poultry.

The growth of the live-stock and poultry industries in Canada from decade to decade is indicated in summary statistical form in Table 14.

#### 14.—Summary Statistics of the Numbers of Live Stock and Poultry on Farms in the Dominion of Canada, Censuses of 1871-1931.

| Item.                 | 1871.     | 1881.     | 1891.                   | 1901.      | 1911.      | 1921. <sup>1</sup> | 1931.                   |
|-----------------------|-----------|-----------|-------------------------|------------|------------|--------------------|-------------------------|
| Horses.....           | 836,743   | 1,059,358 | 1,470,572               | 1,577,493  | 2,598,958  | 3,610,494          | 3,112,909               |
| Cattle.....           | 2,624,290 | 3,433,989 | 4,120,586               | 5,576,451  | 6,526,083  | 8,519,484          | 7,973,031               |
| Sheep.....            | 3,155,509 | 3,048,678 | 2,563,781               | 2,510,239  | 2,174,300  | 3,203,966          | 3,627,116               |
| Swine.....            | 1,366,083 | 1,207,619 | 1,733,850               | 2,353,828  | 3,634,778  | 3,040,730          | 4,699,831               |
| All poultry.....      | 2         | 2         | 14,105,102 <sup>2</sup> | 17,922,658 | 31,793,261 | 50,325,248         | 65,184,689 <sup>4</sup> |
| Hens and chickens.... | —         | —         | 12,696,701              | 16,651,337 | 29,773,457 | 48,021,647         | 61,277,229              |
| Turkeys.....          | —         | —         | 458,306                 | 584,569    | 863,182    | 1,086,721          | 2,223,197               |
| Ducks.....            | —         | —         | 320,160                 | 290,755    | 527,098    | 603,152            | 749,930                 |
| Geese.....            | —         | —         | 537,932                 | 395,997    | 629,524    | 603,728            | 802,251                 |
| Hives of bees.....    | 144,791   | —         | 199,288                 | 189,986    | 180,372    | 185,530            | 215,349                 |

<sup>1</sup> Includes live stock elsewhere than on farms as follows: horses 158,742; cattle 149,995; sheep 3,490; swine 80,439; poultry 6,978,054; hives 37,425. <sup>2</sup> Poultry not reported for this census.

<sup>3</sup> Includes 91,994 unspecified.

<sup>4</sup> Includes 32,082 other poultry.

#### 15.—Numbers and Values of Farm Live Stock in Canada, by Provinces, as at June 1, 1934-37.

NOTE.—The figures for Canada and for the Prairie Provinces have been revised since the publication of the 1937 Year Book.

| Province and Item.  | Numbers.  |           |           |           | Values. |         |         |         |
|---------------------|-----------|-----------|-----------|-----------|---------|---------|---------|---------|
|                     | 1934.     | 1935.     | 1936.     | 1937.     | 1934.   | 1935.   | 1936.   | 1937.   |
|                     |           |           |           |           | \$'000  | \$'000  | \$'000  | \$'000  |
| <b>Canada—</b>      |           |           |           |           |         |         |         |         |
| Horses.....         | 2,933,492 | 2,931,337 | 2,891,540 | 2,882,990 | 168,132 | 189,341 | 208,170 | 206,957 |
| Milch cows.....     | 3,804,200 | 3,849,200 | 3,885,300 | 3,940,400 | 110,721 | 134,000 | 143,316 | 156,467 |
| Other cattle.....   | 5,087,700 | 4,971,400 | 4,955,300 | 4,900,100 | 84,657  | 107,152 | 112,247 | 123,731 |
| Sheep.....          | 3,421,100 | 3,399,100 | 3,327,100 | 3,339,900 | 14,298  | 17,055  | 18,077  | 18,741  |
| Swine.....          | 3,654,000 | 3,549,200 | 4,145,000 | 3,963,300 | 36,029  | 41,778  | 45,488  | 48,802  |
| <b>Totals.....</b>  | —         | —         | —         | —         | 413,837 | 489,326 | 527,298 | 554,659 |
| <b>P.E. Island—</b> |           |           |           |           |         |         |         |         |
| Horses.....         | 27,430    | 27,920    | 27,600    | 28,800    | 2,085   | 2,289   | 2,484   | 2,621   |
| Milch cows.....     | 46,300    | 47,000    | 45,600    | 46,100    | 1,158   | 1,457   | 1,599   | 1,706   |
| Other cattle.....   | 50,500    | 48,600    | 47,100    | 53,400    | 758     | 1,021   | 1,130   | 1,282   |
| Sheep.....          | 54,100    | 50,200    | 48,800    | 49,600    | 216     | 272     | 249     | 275     |
| Swine.....          | 31,500    | 38,300    | 41,800    | 43,900    | 288     | 498     | 481     | 463     |
| <b>Totals.....</b>  | —         | —         | —         | —         | 4,505   | 5,597   | 5,939   | 6,347   |
| <b>Nova Scotia—</b> |           |           |           |           |         |         |         |         |
| Horses.....         | 41,900    | 41,110    | 40,380    | 42,500    | 3,478   | 3,618   | 3,796   | 4,335   |
| Milch cows.....     | 124,100   | 116,500   | 114,300   | 115,700   | 3,351   | 3,345   | 4,343   | 4,859   |
| Other cattle.....   | 120,300   | 106,600   | 99,600    | 113,200   | 1,925   | 2,239   | 2,360   | 3,170   |
| Sheep.....          | 145,300   | 132,800   | 134,900   | 137,500   | 545     | 587     | 634     | 718     |
| Swine.....          | 41,600    | 38,700    | 43,300    | 50,000    | 443     | 521     | 611     | 715     |
| <b>Totals.....</b>  | —         | —         | —         | —         | 9,742   | 10,810  | 11,774  | 13,797  |



**15.—Numbers and Values of Farm Live Stock in Canada, by Provinces, as at June 1, 1934-37—concluded.**

| Province and Item.       | Numbers.  |           |           |           | Values.        |                |                |                |
|--------------------------|-----------|-----------|-----------|-----------|----------------|----------------|----------------|----------------|
|                          | 1934.     | 1935.     | 1936.     | 1937.     | 1934.          | 1935.          | 1936.          | 1937.          |
|                          |           |           |           |           | \$'000         | \$'000         | \$'000         | \$'000         |
| <b>New Brunswick—</b>    |           |           |           |           |                |                |                |                |
| Horses.....              | 51,200    | 51,170    | 49,490    | 52,300    | 4,454          | 5,373          | 5,493          | 5,962          |
| Milch cows.....          | 114,500   | 113,000   | 110,000   | 111,400   | 3,206          | 3,522          | 3,900          | 4,010          |
| Other cattle.....        | 112,200   | 94,300    | 88,600    | 103,100   | 1,633          | 1,603          | 1,861          | 2,165          |
| Sheep.....               | 113,900   | 110,900   | 108,800   | 107,100   | 456            | 500            | 542            | 590            |
| Swine.....               | 70,800    | 79,200    | 82,100    | 95,200    | 874            | 1,157          | 1,302          | 1,431          |
| <b>Totals.....</b>       | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>10,673</b>  | <b>12,155</b>  | <b>13,158</b>  | <b>14,128</b>  |
| <b>Quebec—</b>           |           |           |           |           |                |                |                |                |
| Horses.....              | 264,500   | 266,600   | 270,600   | 279,900   | 28,302         | 31,992         | 30,307         | 32,748         |
| Milch cows.....          | 947,000   | 936,300   | 938,900   | 962,400   | 27,463         | 31,834         | 35,678         | 41,383         |
| Other cattle.....        | 778,600   | 725,900   | 757,500   | 801,700   | 10,122         | 11,614         | 16,665         | 19,241         |
| Sheep.....               | 612,000   | 666,800   | 654,100   | 658,000   | 2,448          | 3,334          | 3,427          | 3,665          |
| Swine.....               | 551,400   | 611,200   | 704,200   | 773,900   | 7,168          | 8,557          | 7,535          | 10,535         |
| <b>Totals.....</b>       | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>75,503</b>  | <b>87,331</b>  | <b>93,612</b>  | <b>107,872</b> |
| <b>Ontario—</b>          |           |           |           |           |                |                |                |                |
| Horses.....              | 563,700   | 562,900   | 562,900   | 557,900   | 45,660         | 51,787         | 59,105         | 57,464         |
| Milch cows.....          | 1,176,800 | 1,181,800 | 1,181,500 | 1,175,900 | 37,658         | 49,036         | 54,349         | 56,443         |
| Other cattle.....        | 1,317,700 | 1,287,400 | 1,292,700 | 1,278,300 | 23,989         | 37,335         | 38,781         | 40,906         |
| Sheep.....               | 962,300   | 945,700   | 886,500   | 874,700   | 5,042          | 5,731          | 6,206          | 6,688          |
| Swine.....               | 1,177,900 | 1,225,300 | 1,408,300 | 1,487,900 | 11,779         | 14,887         | 16,379         | 18,450         |
| <b>Totals.....</b>       | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>129,128</b> | <b>159,376</b> | <b>174,820</b> | <b>179,351</b> |
| <b>Manitoba—</b>         |           |           |           |           |                |                |                |                |
| Horses.....              | 296,000   | 297,000   | 304,400   | 324,700   | 14,504         | 16,038         | 18,873         | 20,781         |
| Milch cows.....          | 339,100   | 329,800   | 327,900   | 390,400   | 7,799          | 9,894          | 9,509          | 12,493         |
| Other cattle.....        | 455,700   | 429,700   | 419,500   | 456,600   | 6,380          | 8,594          | 8,810          | 10,953         |
| Sheep.....               | 216,000   | 218,000   | 207,900   | 216,200   | 754            | 970            | 1,017          | 1,096          |
| Swine.....               | 242,000   | 183,500   | 269,700   | 228,900   | 2,255          | 2,004          | 3,015          | 2,747          |
| <b>Totals.....</b>       | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>31,692</b>  | <b>37,506</b>  | <b>41,224</b>  | <b>48,075</b>  |
| <b>Saskatchewan—</b>     |           |           |           |           |                |                |                |                |
| Horses.....              | 932,200   | 933,800   | 898,300   | 873,600   | 39,152         | 45,756         | 50,305         | 46,301         |
| Milch cows.....          | 556,000   | 553,900   | 591,100   | 563,700   | 13,344         | 15,509         | 15,960         | 15,754         |
| Other cattle.....        | 948,500   | 932,300   | 943,900   | 877,500   | 13,279         | 17,714         | 16,990         | 17,550         |
| Sheep.....               | 448,200   | 459,700   | 342,300   | 345,000   | 1,479          | 1,903          | 1,499          | 1,628          |
| Swine.....               | 596,400   | 514,400   | 666,800   | 454,100   | 5,129          | 5,478          | 6,861          | 5,036          |
| <b>Totals.....</b>       | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>72,383</b>  | <b>86,360</b>  | <b>91,615</b>  | <b>86,299</b>  |
| <b>Alberta—</b>          |           |           |           |           |                |                |                |                |
| Horses.....              | 668,300   | 691,200   | 677,000   | 661,200   | 27,234         | 29,035         | 33,850         | 32,399         |
| Milch cows.....          | 451,700   | 464,200   | 458,200   | 453,600   | 12,004         | 12,998         | 11,913         | 13,608         |
| Other cattle.....        | 1,108,500 | 1,140,000 | 1,095,900 | 1,003,700 | 16,628         | 21,600         | 19,726         | 22,081         |
| Sheep.....               | 696,200   | 639,600   | 765,900   | 768,500   | 2,492          | 2,737          | 3,454          | 3,506          |
| Swine.....               | 896,100   | 809,100   | 877,800   | 773,700   | 7,572          | 8,140          | 8,655          | 8,410          |
| <b>Totals.....</b>       | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>65,930</b>  | <b>74,579</b>  | <b>77,598</b>  | <b>80,064</b>  |
| <b>British Columbia—</b> |           |           |           |           |                |                |                |                |
| Horses.....              | 58,262    | 59,537    | 60,870    | 62,090    | 3,263          | 3,453          | 3,937          | 4,346          |
| Milch cows.....          | 98,700    | 106,100   | 117,800   | 121,200   | 4,739          | 5,305          | 6,008          | 6,181          |
| Other cattle.....        | 195,700   | 205,600   | 210,500   | 212,600   | 4,893          | 5,372          | 5,894          | 6,378          |
| Sheep.....               | 173,100   | 175,400   | 177,900   | 183,200   | 866            | 1,021          | 1,050          | 1,145          |
| Swine.....               | 46,300    | 48,500    | 51,000    | 55,700    | 521            | 566            | 649            | 715            |
| <b>Totals.....</b>       | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>14,281</b>  | <b>15,717</b>  | <b>17,558</b>  | <b>18,765</b>  |

## 16.—Average Values per Head of Farm Live Stock in Canada, as Estimated by Crop Correspondents, 1935-37.

NOTE.—Figures for 1925-34 will be found at pp. 272-273 of the 1934-35 Year Book.

| Province and Item.           | 1935. | 1936. | 1937. | Province and Item.       | 1935. | 1936. | 1937. |
|------------------------------|-------|-------|-------|--------------------------|-------|-------|-------|
|                              | \$    | \$    | \$    |                          | \$    | \$    | \$    |
| <b>Canada—</b>               |       |       |       | <b>Ontario—</b>          |       |       |       |
| Horses.....                  | 65    | 72    | 72    | Horses.....              | 92    | 105   | 103   |
| Milch cows.....              | 35    | 37    | 40    | Milch cows.....          | 42    | 46    | 48    |
| Other cattle.....            | 22    | 23    | 25    | Other cattle.....        | 29    | 30    | 32    |
| All cattle.....              | 27    | 29    | 32    | All cattle.....          | 35    | 38    | 40    |
| Sheep.....                   | 5-02  | 5-42  | 5-61  | Sheep.....               | 6-00  | 7-00  | 6-96  |
| Swine.....                   | 11-77 | 10-98 | 12-31 | Swine.....               | 12-15 | 11-63 | 12-40 |
| <b>Prince Edward Island—</b> |       |       |       | <b>Manitoba—</b>         |       |       |       |
| Horses.....                  | 82    | 90    | 91    | Horses.....              | 54    | 62    | 64    |
| Milch cows.....              | 31    | 35    | 37    | Milch cows.....          | 30    | 29    | 32    |
| Other cattle.....            | 21    | 24    | 24    | Other cattle.....        | 20    | 21    | 24    |
| All cattle.....              | 28    | 29    | 30    | All cattle.....          | 24    | 24    | 28    |
| Sheep.....                   | 5-41  | 5-08  | 5-55  | Sheep.....               | 4-45  | 4-89  | 5-07  |
| Swine.....                   | 12-23 | 11-50 | 10-55 | Swine.....               | 10-92 | 11-18 | 12-00 |
| <b>Nova Scotia—</b>          |       |       |       | <b>Saskatchewan—</b>     |       |       |       |
| Horses.....                  | 88    | 94    | 102   | Horses.....              | 49    | 56    | 53    |
| Milch cows.....              | 33    | 33    | 42    | Milch cows.....          | 25    | 27    | 28    |
| Other cattle.....            | 21    | 24    | 28    | Other cattle.....        | 19    | 18    | 20    |
| All cattle.....              | 27    | 31    | 35    | All cattle.....          | 22    | 21    | 23    |
| Sheep.....                   | 4-42  | 4-70  | 5-22  | Sheep.....               | 4-14  | 4-38  | 4-72  |
| Swine.....                   | 13-12 | 14-10 | 14-30 | Swine.....               | 10-05 | 10-25 | 11-09 |
| <b>New Brunswick—</b>        |       |       |       | <b>Alberta—</b>          |       |       |       |
| Horses.....                  | 105   | 111   | 114   | Horses.....              | 42    | 50    | 49    |
| Milch cows.....              | 31    | 36    | 36    | Milch cows.....          | 25    | 26    | 30    |
| Other cattle.....            | 17    | 21    | 21    | Other cattle.....        | 19    | 19    | 22    |
| All cattle.....              | 25    | 29    | 29    | All cattle.....          | 22    | 20    | 24    |
| Sheep.....                   | 4-51  | 4-98  | 5-23  | Sheep.....               | 4-28  | 4-51  | 4-64  |
| Swine.....                   | 14-61 | 15-86 | 15-03 | Swine.....               | 10-06 | 9-88  | 10-87 |
| <b>Quebec—</b>               |       |       |       | <b>British Columbia—</b> |       |       |       |
| Horses.....                  | 120   | 112   | 117   | Horses.....              | 58    | 65    | 70    |
| Milch cows.....              | 34    | 38    | 43    | Milch cows.....          | 50    | 51    | 51    |
| Other cattle.....            | 10    | 22    | 24    | Other cattle.....        | 26    | 28    | 30    |
| All cattle.....              | 26    | 31    | 34    | All cattle.....          | 34    | 38    | 38    |
| Sheep.....                   | 5-00  | 5-24  | 5-57  | Sheep.....               | 5-82  | 5-90  | 5-25  |
| Swine.....                   | 14-00 | 10-70 | 14-00 | Swine.....               | 11-60 | 12-73 | 12-84 |

## 17.—Numbers and Values of Farm Poultry in Canada, by Provinces, as at June 1, 1936 and 1937.

| Province and Item.     | No.                          | Average Value per Head. | Total Value.            | Province and Item.     | No.          | Average Value per Head. | Total Value. |
|------------------------|------------------------------|-------------------------|-------------------------|------------------------|--------------|-------------------------|--------------|
|                        |                              | \$                      | \$                      |                        |              | \$                      | \$           |
| <b>Canada—</b>         |                              |                         |                         | <b>P. E. Island—</b>   |              |                         |              |
| Hens and chickens..... | 1936 55,709,300 <sup>1</sup> | 0-69                    | 35,040,000 <sup>1</sup> | Hens and chickens..... | 1936 851,000 | 0-68                    | 579,000      |
|                        | 1937 53,982,900              | 0-69                    | 37,355,000              |                        | 1937 826,200 | 0-72                    | 598,000      |
| Turkeys.....           | 1936 2,044,700 <sup>1</sup>  | 1-77                    | 3,623,000 <sup>1</sup>  | Turkeys.....           | 1936 11,800  | 1-83                    | 22,000       |
|                        | 1937 1,997,900               | 1-90                    | 3,804,000               |                        | 1937 11,800  | 1-89                    | 22,000       |
| Geese.....             | 1936 854,900 <sup>1</sup>    | 1-36                    | 1,165,000 <sup>1</sup>  | Geese.....             | 1936 28,100  | 1-21                    | 34,000       |
|                        | 1937 874,900                 | 1-44                    | 1,250,000               |                        | 1937 26,300  | 1-36                    | 36,000       |
| Ducks.....             | 1936 670,500 <sup>1</sup>    | 0-80                    | 538,000 <sup>1</sup>    | Ducks.....             | 1936 15,800  | 0-71                    | 11,000       |
|                        | 1937 654,400                 | 0-85                    | 556,000                 |                        | 1937 13,900  | 0-81                    | 11,000       |
| <b>Totals, Canada—</b> | 1936 59,339,400 <sup>1</sup> | —                       | 40,366,000 <sup>1</sup> | <b>Totals, P.E.I.—</b> | 1936 907,300 | —                       | 646,000      |
|                        | 1937 57,510,100              | —                       | 42,954,000              |                        | 1937 878,200 | —                       | 664,000      |

For footnote, see end of table, p. 254.

**17.—Numbers and Values of Farm Poultry in Canada, by Provinces, as at June 1, 1936 and 1937—concluded.**

| Province and Item.      | No.                    | Average Value per Head. | Total Value.      | Province and Item.       | No.                               | Average Value per Head. | Total Value.                 |
|-------------------------|------------------------|-------------------------|-------------------|--------------------------|-----------------------------------|-------------------------|------------------------------|
|                         |                        | \$                      | \$                |                          |                                   | \$                      | \$                           |
| <b>Nova Scotia—</b>     |                        |                         |                   | <b>Manitoba—</b>         |                                   |                         |                              |
| Hens and chickens.....  | 1936 1,235,500         | 0.75                    | 927,000           | Hens and chickens.....   | 1936 4,255,500 <sup>1</sup>       | 0.53                    | 2,255,000 <sup>1</sup>       |
|                         | 1937 1,211,600         | 0.73                    | 884,000           |                          | 1937 3,832,000                    | 0.58                    | 2,223,000                    |
| Turkeys.....            | 1936 14,500            | 2.38                    | 35,000            | Turkeys.....             | 1936 380,000 <sup>1</sup>         | 1.09                    | 642,000 <sup>1</sup>         |
|                         | 1937 16,700            | 2.23                    | 35,000            |                          | 1937 392,600                      | 1.86                    | 730,000                      |
| Geese.....              | 1936 11,500            | 1.81                    | 21,000            | Geese.....               | 1936 55,900 <sup>1</sup>          | 1.08                    | 60,000 <sup>1</sup>          |
|                         | 1937 11,700            | 1.78                    | 21,000            |                          | 1937 72,500                       | 1.19                    | 86,000                       |
| Ducks.....              | 1936 7,100             | 0.97                    | 7,000             | Ducks.....               | 1936 37,400 <sup>1</sup>          | 0.64                    | 24,000 <sup>1</sup>          |
|                         | 1937 5,100             | 0.91                    | 5,000             |                          | 1937 35,900                       | 0.69                    | 25,000                       |
| <b>Totals, N.S.....</b> | <b>1936 1,268,600</b>  | —                       | <b>990,000</b>    | <b>Totals, Man.....</b>  | <b>1936 4,728,800<sup>1</sup></b> | —                       | <b>2,981,000<sup>1</sup></b> |
|                         | <b>1937 1,244,100</b>  | —                       | <b>945,000</b>    |                          | <b>1937 4,333,000</b>             | —                       | <b>3,061,000</b>             |
| <b>New Brunswick—</b>   |                        |                         |                   | <b>Saskatchewan—</b>     |                                   |                         |                              |
| Hens and chickens.....  | 1936 1,314,800         | 0.77                    | 1,012,000         | Hens and chickens.....   | 1936 8,862,300 <sup>1</sup>       | 0.45                    | 3,988,000 <sup>1</sup>       |
|                         | 1937 1,299,900         | 0.83                    | 1,071,000         |                          | 1937 8,116,000                    | 0.44                    | 3,577,000                    |
| Turkeys.....            | 1936 28,800            | 2.60                    | 75,000            | Turkeys.....             | 1936 587,400 <sup>1</sup>         | 1.51                    | 887,000 <sup>1</sup>         |
|                         | 1937 26,600            | 2.52                    | 67,000            |                          | 1937 524,000                      | 1.56                    | 817,000                      |
| Geese.....              | 1936 15,300            | 1.72                    | 26,000            | Geese.....               | 1936 113,100 <sup>1</sup>         | 0.99                    | 112,000 <sup>1</sup>         |
|                         | 1937 14,300            | 1.68                    | 24,000            |                          | 1937 111,100                      | 1.01                    | 112,000                      |
| Ducks.....              | 1936 8,300             | 1.09                    | 9,000             | Ducks.....               | 1936 72,000 <sup>1</sup>          | 0.60                    | 43,000 <sup>1</sup>          |
|                         | 1937 8,500             | 1.14                    | 10,000            |                          | 1937 74,200                       | 0.59                    | 44,000                       |
| <b>Totals, N.B.....</b> | <b>1936 1,367,200</b>  | —                       | <b>1,122,000</b>  | <b>Totals, Sask.....</b> | <b>1936 9,634,800<sup>1</sup></b> | —                       | <b>5,030,000<sup>1</sup></b> |
|                         | <b>1937 1,339,300</b>  | —                       | <b>1,172,000</b>  |                          | <b>1937 8,825,300</b>             | —                       | <b>4,544,000</b>             |
| <b>Quebec—</b>          |                        |                         |                   | <b>Alberta—</b>          |                                   |                         |                              |
| Hens and chickens.....  | 1936 7,459,900         | 0.60                    | 4,924,000         | Hens and chickens.....   | 1936 6,307,200 <sup>1</sup>       | 0.42                    | 2,649,000 <sup>1</sup>       |
|                         | 1937 7,362,300         | 0.88                    | 6,479,000         |                          | 1937 6,161,100                    | 0.45                    | 2,772,000                    |
| Turkeys.....            | 1936 127,400           | 2.20                    | 280,000           | Turkeys.....             | 1936 430,300 <sup>1</sup>         | 1.40                    | 602,000 <sup>1</sup>         |
|                         | 1937 110,700           | 2.46                    | 272,000           |                          | 1937 444,500                      | 1.80                    | 711,000                      |
| Geese.....              | 1936 72,100            | 1.40                    | 101,000           | Geese.....               | 1936 97,500 <sup>1</sup>          | 0.92                    | 90,000 <sup>1</sup>          |
|                         | 1937 61,100            | 1.63                    | 100,000           |                          | 1937 123,000                      | 1.01                    | 124,000                      |
| Ducks.....              | 1936 80,300            | 0.88                    | 71,000            | Ducks.....               | 1936 63,800 <sup>1</sup>          | 0.54                    | 34,000 <sup>1</sup>          |
|                         | 1937 69,000            | 0.95                    | 66,000            |                          | 1937 64,900                       | 0.59                    | 38,000                       |
| <b>Totals, Que.....</b> | <b>1936 7,739,700</b>  | —                       | <b>5,376,000</b>  | <b>Totals, Alta.....</b> | <b>1936 6,898,800<sup>1</sup></b> | —                       | <b>3,375,000<sup>1</sup></b> |
|                         | <b>1937 7,603,100</b>  | —                       | <b>6,917,000</b>  |                          | <b>1937 6,793,500</b>             | —                       | <b>3,645,000</b>             |
| <b>Ontario—</b>         |                        |                         |                   | <b>British Columbia—</b> |                                   |                         |                              |
| Hens and chickens.....  | 1936 21,723,600        | 0.74                    | 16,075,000        | Hens and chickens.....   | 1936 3,758,900                    | 0.70                    | 2,631,000 <sup>1</sup>       |
|                         | 1937 21,314,300        | 0.79                    | 16,838,000        |                          | 1937 3,869,500                    | 0.78                    | 2,902,000                    |
| Turkeys.....            | 1936 428,100           | 2.31                    | 989,000           | Turkeys.....             | 1936 36,400                       | 2.50                    | 91,000                       |
|                         | 1937 425,400           | 2.42                    | 1,029,000         |                          | 1937 46,600                       | 2.60                    | 121,000                      |
| Geese.....              | 1936 452,000           | 1.56                    | 705,000           | Geese.....               | 1936 9,400                        | 1.73                    | 16,000                       |
|                         | 1937 448,200           | 1.66                    | 741,000           |                          | 1937 8,700                        | 1.77                    | 15,000                       |
| Ducks.....              | 1936 354,600           | 0.87                    | 309,000           | Ducks.....               | 1936 31,200                       | 0.95                    | 30,000                       |
|                         | 1937 350,300           | 0.93                    | 326,000           |                          | 1937 32,500                       | 0.96                    | 31,000                       |
| <b>Totals, Ont.....</b> | <b>1936 22,958,300</b> | —                       | <b>18,078,000</b> | <b>Totals, B.C.....</b>  | <b>1936 3,835,900</b>             | —                       | <b>2,768,000</b>             |
|                         | <b>1937 22,536,200</b> | —                       | <b>18,934,000</b> |                          | <b>1937 3,957,400</b>             | —                       | <b>3,069,000</b>             |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

**Production and Value of Wool.**—The production of wool in Canada is placed at 18,946,000 lb. from 3,315,500 sheep and lambs in 1937 as compared with 18,929,000 lb. from 3,327,100 sheep and lambs in 1936. Table 18 gives the total estimated production and value of wool for the years 1928 to 1937.

**18.—Estimated Quantities and Values of Canadian Wool Clip, 1928-37.**

(Excluding Indian Reserves.)

| Year.     | Sheep.                 | Production of Wool.     | Average Price per lb. of Wool. | Value.    |
|-----------|------------------------|-------------------------|--------------------------------|-----------|
|           | No.                    | lb.                     | cts.                           | \$        |
| 1928..... | 3,415,788              | 19,593,443              | 20                             | 5,090,000 |
| 1929..... | 3,728,309              | 21,218,000              | 20                             | 4,470,000 |
| 1930..... | 3,696,000              | 21,000,000              | 12                             | 2,311,000 |
| 1931..... | 3,608,000              | 20,365,000              | 8                              | 1,644,000 |
| 1932..... | 3,645,000              | 20,503,000              | 5                              | 1,093,000 |
| 1933..... | 3,385,800              | 19,253,000              | 10                             | 2,005,000 |
| 1934..... | 3,421,100              | 19,528,000              | 10                             | 1,899,000 |
| 1935..... | 3,399,100              | 19,357,000              | 12                             | 2,232,000 |
| 1936..... | 3,327,100 <sup>1</sup> | 18,929,000 <sup>1</sup> | 15 <sup>1</sup>                | 2,782,000 |
| 1937..... | 3,315,500              | 18,946,000              | 16                             | 2,972,000 |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

**Egg Production.**—Table 19 gives the estimated numbers of egg-producing hens, quantities of eggs produced, prices and values, by provinces, for the years 1935 to 1937, inclusive. The data for egg-laying hens were calculated from the numbers of mature birds shown in the June surveys, with reductions to allow for cocks and cockerels. The production of eggs per hen and the average prices shown in the table were made with the assistance and advice of extension workers and poultrymen connected with the provincial Departments of Agriculture.

**19.—Annual Production and Value of Farm Eggs in Canada, by Provinces, 1935-37.**

| Province.                 | Year. | Number of Laying Hens.  | Production of Eggs per Hen. | Number of Eggs Produced. | Price Per Dozen.  | Value.                  |
|---------------------------|-------|-------------------------|-----------------------------|--------------------------|-------------------|-------------------------|
|                           |       |                         |                             | doz.                     | cts.              | \$                      |
| Prince Edward Island..... | 1935  | 480,000                 | 91                          | 3,640,000                | 17                | 619,000                 |
|                           | 1936  | 448,000                 | 92                          | 3,435,000                | 18                | 618,000                 |
|                           | 1937  | 428,000                 | 91                          | 3,246,000                | 17                | 552,000                 |
| Nova Scotia.....          | 1935  | 575,000                 | 91                          | 4,300,000                | 22                | 959,000                 |
|                           | 1936  | 527,000                 | 92                          | 4,040,000                | 23                | 929,000                 |
|                           | 1937  | 519,000                 | 93                          | 4,022,000                | 21                | 845,000                 |
| New Brunswick.....        | 1935  | 619,000                 | 95                          | 4,900,000                | 20                | 980,000                 |
|                           | 1936  | 598,000                 | 94                          | 4,684,000                | 21                | 984,000                 |
|                           | 1937  | 573,000                 | 94                          | 4,459,000                | 20                | 898,000                 |
| Quebec.....               | 1935  | 3,280,000               | 112                         | 36,613,000               | 19                | 5,816,000               |
|                           | 1936  | 3,428,000               | 114                         | 32,566,000               | 20                | 6,519,000               |
|                           | 1937  | 3,481,500               | 116                         | 33,160,000               | 19                | 6,302,000               |
| Ontario.....              | 1935  | 8,265,000               | 119                         | 81,961,000               | 19                | 15,573,000              |
|                           | 1936  | 8,286,000               | 121                         | 83,550,000               | 21                | 17,545,000              |
|                           | 1937  | 8,210,000               | 120                         | 82,100,000               | 19-5              | 16,010,000              |
| Manitoba.....             | 1935  | 1,937,000               | 104                         | 16,787,000               | 14-5              | 2,434,000               |
|                           | 1936  | 1,896,000               | 104                         | 16,432,000 <sup>1</sup>  | 15-5              | 2,547,000               |
|                           | 1937  | 1,915,000               | 104                         | 16,517,000               | 15                | 2,490,000               |
| Saskatchewan.....         | 1935  | 5,208,000               | 90                          | 42,066,000               | 12-5              | 5,371,000               |
|                           | 1936  | 4,365,000               | 99                          | 36,011,000 <sup>1</sup>  | 13-5              | 4,861,000 <sup>1</sup>  |
|                           | 1937  | 4,380,000               | 98                          | 35,362,000               | 13-5              | 4,774,000               |
| Alberta.....              | 1935  | 3,025,000               | 101                         | 25,460,000               | 12-5              | 3,183,000               |
|                           | 1936  | 2,767,000               | 100                         | 22,975,000               | 13                | 2,987,000               |
|                           | 1937  | 2,972,000               | 99                          | 24,519,000               | 12                | 2,942,000               |
| British Columbia.....     | 1935  | 1,205,000               | 128                         | 12,853,000               | 22                | 2,828,000               |
|                           | 1936  | 1,493,000               | 127                         | 15,801,000               | 24                | 3,792,000               |
|                           | 1937  | 1,453,000               | 129                         | 15,942,000               | 23                | 3,667,000               |
| Totals.....               | 1935  | 24,594,000              | 109                         | 223,540,000              | 17                | 37,763,000              |
|                           | 1936  | 23,798,000 <sup>1</sup> | 111 <sup>1</sup>            | 213,494,000 <sup>1</sup> | 18-5 <sup>1</sup> | 40,775,000 <sup>1</sup> |
|                           | 1937  | 23,861,000              | 110                         | 219,443,000              | 17-5              | 38,489,000              |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

## Subsection 4.—Dairying Statistics.

The dairy industry is dealt with under the following headings: total milk production; butter and cheese; miscellaneous factory products; and, finally, the total value of the dairy production of Canada. For the year 1937 preliminary estimates have been made which will be revised when annual returns are available.

**Total Milk Production.**—The data presented in Table 20 represent the quantities of dairy products expressed in terms of milk. The total milk production for 1937 is estimated at 17,188,617,700 lb., an increase of 190,202,200 lb. or 1·12 p.c. over the previous year.

All products contributed to the increase in the total milk production of Canada between 1936 and 1937 except butter, the amount of milk used in the manufacture of dairy butter having decreased by 22,060,000 lb. and in that of creamery butter by 106,387,200 lb.

20.—Dairy Production of Canada Expressed in Pounds of Milk, 1926-37, and by Provinces, 1937.

| Province.                | Total Milk Production. | Made into Butter.    |                      | Made into Cheese. |                      | Miscellaneous Factory Products. <sup>1</sup> | Whole Milk Otherwise Used. |
|--------------------------|------------------------|----------------------|----------------------|-------------------|----------------------|--|----------------------------|
|                          |                        | Dairy.               | Creamery.            | Farm-Made.        | Factory.             |  |                            |
|                          | lb.                    | lb.                  | lb.                  | lb.               | lb.                  | lb.  | lb.                        |
| <b>Totals, 1926.....</b> | <b>14,591,873,000</b>  | <b>2,223,950,000</b> | <b>4,148,469,000</b> | <b>5,788,000</b>  | <b>1,923,394,000</b> | <b>254,072,000</b>                           | <b>6,036,200,000</b>       |
| 1927.....                | 14,825,821,000         | 2,223,950,000        | 4,143,077,000        | 4,653,000         | 1,516,237,000        | 287,417,000                                  | 6,020,487,000              |
| 1928.....                | 14,512,899,000         | 2,106,800,000        | 3,933,513,000        | 4,873,000         | 1,619,345,000        | 296,254,000                                  | 6,552,011,000              |
| 1929.....                | 14,346,023,000         | 2,060,080,000        | 3,998,667,000        | 5,490,000         | 1,329,959,000        | 307,725,000                                  | 6,847,102,000              |
| 1930.....                | 15,126,459,000         | 2,283,152,000        | 4,348,431,000        | 9,115,000         | 1,333,977,000        | 312,890,000                                  | 6,838,984,000              |
| 1931.....                | 15,772,852,000         | 2,418,488,000        | 5,269,612,000        | 10,085,000        | 1,276,315,000        | 252,532,000                                  | 6,823,810,000              |
| 1932.....                | 15,817,868,000         | 2,593,881,000        | 5,009,790,000        | 11,563,000        | 1,349,572,000        | 219,571,000                                  | 6,523,751,000              |
| 1933.....                | 16,048,724,000         | 2,492,790,000        | 5,132,325,000        | 10,565,000        | 1,244,540,700        | 245,716,000                                  | 6,924,570,000              |
| 1934.....                | 16,329,285,400         | 2,573,186,000        | 5,498,032,500        | 11,372,400        | 1,112,682,400        | 235,459,300                                  | 6,574,563,000              |
| 1935.....                | 16,527,913,300         | 2,672,530,000        | 5,639,903,100        | 13,805,000        | 1,124,786,700        | 290,197,100                                  | 6,736,655,000              |
| 1936.....                | 16,998,415,500         | 2,600,356,000        | 5,874,312,900        | 13,766,400        | 1,334,183,000        | 316,772,200                                  | 6,790,025,000              |
| <b>1937.<sup>2</sup></b> |                        |                      |                      |                   |                      |  |                            |
| P. E. Island.....        | 152,453,500            | 40,546,000           | 49,505,000           | 3,400             | 5,107,100            | 628,000                                      | 56,664,000                 |
| Nova Scotia.....         | 485,742,900            | 151,111,000          | 137,511,900          | 224,000           | Nil                  | 17,449,000                                   | 179,447,000                |
| New Brunswick.....       | 419,095,000            | 146,547,000          | 84,832,800           | 56,000            | 6,688,200            | 4,264,000                                    | 176,707,000                |
| Quebec.....              | 4,544,094,900          | 339,804,000          | 1,734,295,700        | 2,867,000         | 333,594,200          | 25,102,000                                   | 2,108,932,000              |
| Ontario.....             | 6,770,145,300          | 734,255,000          | 1,901,533,000        | 1,478,000         | 1,033,265,300        | 287,160,000                                  | 2,812,454,000              |
| Manitoba.....            | 1,170,835,400          | 238,782,000          | 569,881,000          | 1,885,000         | 32,747,400           | 5,731,000                                    | 318,839,000                |
| Saskatchewan.....        | 1,603,618,700          | 566,622,000          | 551,819,100          | 2,845,000         | 3,846,600            | 5,963,000                                    | 472,623,000                |
| Alberta.....             | 1,488,400,800          | 365,196,000          | 616,234,600          | 3,505,000         | 20,592,200           | 8,813,000                                    | 473,970,000                |
| British Columbia.....    | 554,201,200            | 65,093,000           | 122,312,900          | 846,000           | 2,735,600            | 60,120,000                                   | 303,154,000                |
| <b>Totals, 1937.....</b> | <b>17,188,617,700</b>  | <b>2,647,296,000</b> | <b>5,767,925,700</b> | <b>13,799,400</b> | <b>1,438,576,600</b> | <b>419,230,000</b>                           | <b>6,902,790,000</b>       |

<sup>1</sup> The data in this column for 1933-37 include the ice cream made in specialized ice-cream plants and confectionery establishments. <sup>2</sup> Figures for 1935 and 1936 have been revised since the publication of the 1937 Year Book. <sup>3</sup> Subject to revision.

**Butter and Cheese.**—The butter output of creameries in 1937 was 246,387,300 lb., a decrease of 4,544,477 lb., or 1·81 p.c., from the record production of 1936. Dairy butter production also decreased slightly, the 1937 production being 942,000 lb., or 0·83 p.c. under that of 1936. The maximum export of butter was in the year ended June 30, 1903, when 34,128,944 lb. were exported. In the calendar year 1937 the exports were 4,096,600 lb. and the imports were 65,918 lb. The apparent consumption of butter in 1937 is estimated at 363,759,626 lb., or 32·71 lb. per capita, as compared with 355,885,234 lb., or 32·27 lb. per capita in 1936.

The quantity of factory cheese made in Canada during 1937 is estimated at 128,444,300 lb., an increase of 9,320,817 lb. or 7·82 p.c. Cheese made on farms is estimated at 1,232,300 lb., an increase of 3,000 lb. Since 1926, as shown in Table 21, there has been a significant reduction in cheese manufacturing. The decrease recorded between 1933 and 1934 was greater than that shown between 1932 and 1933, but the most outstanding decline occurred in 1927 and a lesser decline in 1929. The increase in factory cheese production which took place between 1935 and 1937 was more than sufficient to cover the 21,177,626 lb. decline which occurred between 1932 and 1934. In 1868 the quantity of cheese exported from Canada was 6,141,570 lb.; in 1904 a maximum exportation of 233,980,716 lb. was reached. For the calendar year 1937, the exports were 88,955,300 lb. The apparent consumption of cheese in 1937 was 39,287,906 lb., or 3·53 lb. per capita compared with 40,239,072 lb., or 3·65 lb. per capita in the previous year. It will be seen that the domestic consumption as shown in 1937 represented only 30·30 p.c. of the total cheese production of the Dominion.

21.—Production of Butter and Cheese in Canada, 1926–37, and by Provinces, 1937.

| Year and Province.        | Dairy Butter.      | Creamery Butter.   | Total Butter.      | Farm-Made Cheese. | Factory Cheese.    | Total Cheese.      |
|---------------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|
|                           | lb.                | lb.                | lb.                | lb.               | lb.                | lb.                |
| <b>Totals, 1926.....</b>  | 95,000,000         | 177,209,287        | 272,209,287        | 516,745           | 171,731,631        | 172,248,376        |
| 1927.....                 | 95,000,000         | 176,978,947        | 271,978,947        | 415,417           | 138,056,908        | 138,472,325        |
| 1928.....                 | 90,000,000         | 168,027,039        | 258,027,039        | 435,059           | 144,554,619        | 145,019,678        |
| 1929.....                 | 85,000,000         | 170,810,230        | 255,810,230        | 490,000           | 118,746,256        | 119,236,256        |
| 1930.....                 | 97,529,000         | 185,751,061        | 283,280,061        | 515,000           | 119,105,203        | 119,615,203        |
| 1931.....                 | 103,310,000        | 225,455,246        | 328,765,246        | 901,300           | 113,056,639        | 114,557,939        |
| 1932.....                 | 106,936,400        | 214,002,127        | 320,938,527        | 1,037,100         | 120,524,243        | 121,551,343        |
| 1933.....                 | 106,485,000        | 219,232,500        | 325,717,500        | 943,300           | 111,146,500        | 112,060,800        |
| 1934.....                 | 109,918,000        | 234,852,961        | 344,770,961        | 1,011,300         | 99,346,617         | 100,357,917        |
| 1935.....                 | 114,161,999        | 240,918,799        | 355,080,798        | 1,232,148         | 100,427,390        | 101,659,538        |
| 1936.....                 | 114,026,000        | 250,931,777        | 364,957,777        | 1,229,300         | 119,123,463        | 120,352,763        |
| <b>1937.*</b>             |                    |                    |                    |                   |                    |                    |
| Prince Edward Island..... | 1,732,000          | 2,114,700          | 3,846,700          | 800               | 456,000            | 456,800            |
| Nova Scotia.....          | 6,455,000          | 5,374,100          | 12,229,100         | 20,000            | Nil                | 20,000             |
| New Brunswick.....        | 6,260,000          | 3,623,800          | 9,883,800          | 5,000             | 597,200            | 602,200            |
| Quebec.....               | 14,494,000         | 74,083,500         | 88,577,500         | 256,000           | 29,785,200         | 30,041,200         |
| Ontario.....              | 31,365,000         | 81,227,400         | 112,592,400        | 132,000           | 92,355,800         | 92,387,800         |
| Manitoba.....             | 10,200,000         | 24,343,500         | 34,543,500         | 108,000           | 2,933,900          | 3,041,900          |
| Saskatchewan.....         | 24,200,000         | 23,571,900         | 47,771,900         | 254,000           | 343,400            | 597,400            |
| Alberta.....              | 15,000,000         | 26,323,000         | 41,323,000         | 321,000           | 1,338,600          | 2,159,600          |
| British Columbia.....     | 2,778,000          | 6,224,800          | 8,002,800          | 76,000            | 244,200            | 320,200            |
| <b>Totals, 1937.....</b>  | <b>113,054,000</b> | <b>246,387,300</b> | <b>359,441,300</b> | <b>1,232,300</b>  | <b>128,444,300</b> | <b>129,676,600</b> |

\*Revised since the publication of the 1937 Year Book.

‡ Subject to revision.

**Miscellaneous Factory Products.**—The production of condensed milk in Canada in 1937 is estimated at 10,861,000 lb. as compared with 7,986,693 lb. in the previous year. Evaporated milk increased from 71,074,564 lb. to 91,054,000 lb. The production of all concentrated whole-milk products amounted to 107,637,000 lb. in 1937 as compared with 81,928,106 lb. in 1936. The production of concentrated milk by-products amounted to 30,279,000 lb. in 1937 (according to provisional figures) of which 18,037,000 lb. was skim-milk powder. In 1936 the production of skim-milk powder was 18,529,982 lb. Thus concentrated whole-milk products increased 31·38 p.c. and concentrated milk by-products increased 8·58 p.c. Ice cream made in factories in 1937 amounted to 6,111,764 gallons as compared with 4,925,767 gallons in 1936, an increase of 24·08 p.c.

## 22.—Quantities and Values of Miscellaneous Products of Dairy Factories, 1935-37.

| Product.                                 | Quantities.       |                   |                    | Values.          |                  |                    |
|--|-------------------|-------------------|--------------------|------------------|------------------|--------------------|
|  | 1935.             | 1936.             | 1937. <sup>1</sup> | 1935.            | 1936.            | 1937. <sup>1</sup> |
|  | lb.               | lb.               | lb.                | \$               | \$               | \$                 |
| <b>CONCENTRATED WHOLE-MILK PRODUCTS—</b> |                   |                   |                    |                  |                  |                    |
| Condensed milk.....                      | 9,149,300         | 7,986,693         | 10,861,000         | 847,837          | 724,175          | 985,000            |
| Evaporated milk.....                     | 66,218,061        | 71,074,564        | 91,084,000         | 4,170,421        | 4,585,838        | 5,873,000          |
| Milk powder.....                         | 2,236,904         | 2,735,745         | 5,602,000          | 265,761          | 351,890          | 720,000            |
| Cream powder.....                        | 24,109            | 45,244            | 36,000             | 8,606            | 15,403           | 12,000             |
| Condensed coffee.....                    | 83,358            | 85,860            | 84,000             | 10,925           | 11,006           | 11,000             |
| <b>Totals.....</b>                       | <b>77,711,741</b> | <b>81,928,106</b> | <b>107,637,000</b> | <b>5,363,610</b> | <b>5,688,312</b> | <b>7,601,000</b>   |
| <b>CONCENTRATED MILK BY-PRODUCTS—</b>    |                   |                   |                    |                  |                  |                    |
| Condensed skim milk.....                 | 4,386,104         | 4,515,713         | 4,766,000          | 218,906          | 233,402          | 246,000            |
| Evaporated skim milk.....                | 145,988           | 185,655           | 1,477,000          | 3,984            | 4,889            | 39,000             |
| Skin-milk powder.....                    | 18,890,048        | 18,529,782        | 18,037,000         | 1,220,511        | 1,237,059        | 1,204,000          |
| Condensed buttermilk.....                | 387,899           | 921,783           | 2,386,000          | 8,065            | 21,594           | 56,000             |
| Buttermilk powder.....                   | 2,165,006         | 2,210,953         | 2,423,000          | 105,838          | 103,936          | 114,000            |
| Casein.....                              | 1,204,379         | 1,335,910         | 998,000            | 112,323          | 134,518          | 101,000            |
| Sugar of milk.....                       | 230,716           | 186,423           | 192,000            | 13,803           | 11,186           | 12,000             |
| <b>Totals.....</b>                       | <b>27,410,140</b> | <b>27,886,219</b> | <b>30,279,000</b>  | <b>1,683,430</b> | <b>1,746,584</b> | <b>1,772,000</b>   |
| ICE CREAM <sup>2</sup> .....             | 4,345,915         | 4,925,767         | 6,111,764          | 5,212,046        | 5,729,286        | 7,388,902          |
| SUNDRIES.....                            | —                 | —                 | —                  | 1,256,066        | 1,225,811        | 1,590,387          |

<sup>1</sup> Provisional estimate.<sup>2</sup> Gallons.

**Total Value of Dairy Production.**—The value of all dairy products in 1937 is estimated at \$228,403,127 as compared with \$211,421,764 in 1936, an increase of 8.03 p.c. The value of the dairy production of Canada in 1937 was the highest since 1930 and shows an advance of \$69,328,994 or 43.58 p.c. over the low value recorded in 1932. All products increased in value. The prices of creamery butter during the first quarter of 1937 were slightly lower than in the same period of the preceding year; in the summer months June to September, prices were considerably higher but dropped to about the level of 1935 prices for the rest of the year. The value per lb. of creamery butter, as deduced from Tables 21 and 23, represents an average of 23.4 cents in 1937 and 20.8 cents in 1936. Total butter shows a value of \$86,939,300 in 1937, an increase of \$8,351,140 as compared with 1936, while total cheese was valued at \$18,019,327 in 1937, an increase of \$2,291,486.

## 23.—Value of Dairy Production of Canada, 1926-37, and by Provinces, 1937.

| Year.                    | Dairy Butter.           | Creamery Butter.  | Farm-Made Cheese.    | Factory Cheese.   | Misc. Factory Products. | Milk Otherwise Used. | All Products. <sup>1</sup> |
|--------------------------|-------------------------|-------------------|----------------------|-------------------|-------------------------|----------------------|----------------------------|
|                          | \$                      | \$                | \$                   | \$                | \$                      | \$                   | \$                         |
| <b>Totals, 1926.....</b> | <b>28,252,777</b>       | <b>61,753,390</b> | <b>80,240</b>        | <b>28,807,841</b> | <b>17,767,271</b>       | <b>140,643,460</b>   | <b>277,304,979</b>         |
| 1927.....                | 30,435,121              | 65,709,986        | 70,654               | 25,522,148        | 18,879,335              | 154,257,346          | 294,874,590                |
| 1928.....                | 29,103,000              | 61,702,538        | 82,000               | 30,494,463        | 20,581,400              | 152,661,856          | 297,625,347                |
| 1929.....                | 28,929,000              | 65,929,782        | 82,800               | 21,471,330        | 22,091,945              | 153,238,000          | 291,742,857                |
| 1930.....                | 27,385,000              | 66,670,504        | 115,555              | 18,089,870        | 21,074,228              | 101,230,000          | 237,068,157                |
| 1931.....                | 21,450,000              | 69,195,878        | 108,590              | 12,824,085        | 16,556,619              | 78,876,000           | 191,389,692                |
| 1932.....                | 15,311,000              | 49,475,478        | 94,120               | 11,379,322        | 13,112,612              | 71,627,000           | 159,074,133                |
| 1933.....                | 16,623,000              | 43,546,408        | 94,021               | 11,127,354        | 15,594,553              | 78,046,000           | 178,325,667                |
| 1934.....                | 17,492,000              | 48,168,600        | 106,021              | 9,797,600         | 15,931,400              | 84,974,000           | 183,791,221                |
| 1935.....                | 19,237,000 <sup>2</sup> | 62,228,133        | 123,023 <sup>2</sup> | 10,570,309        | 16,705,958              | 86,151,000           | 196,487,423                |
| 1936.....                | 20,926,000              | 57,662,160        | 162,028 <sup>2</sup> | 15,565,813        | 18,070,763              | 89,431,000           | 211,421,764                |

For footnotes, see end of table, p. 259.

## 23.—Value of Dairy Production of Canada, 1926-37, and by Provinces, 1937—concluded.

| Year and Province.     | Dairy Butter. | Creamery Butter. | Farm-Made Cheese. | Factory Cheese. | Misc. Factory Products. | Milk Otherwise Used. | All Products. <sup>1</sup> |
|------------------------|---------------|------------------|-------------------|-----------------|-------------------------|----------------------|----------------------------|
| 1937. <sup>3</sup>     |               |                  |                   |                 |                         |                      |                            |
| Prince Edward Island.. | 398,000       | 568,400          | 27                | 64,700          | 52,000                  | 604,000              | 1,825,127                  |
| Nova Scotia.....       | 1,743,000     | 1,633,000        | 2,000             | Nil             | 842,600                 | 2,475,000            | 7,194,600                  |
| New Brunswick.....     | 1,627,000     | 951,300          | 1,000             | 86,600          | 344,700                 | 2,095,000            | 5,505,600                  |
| Quebec.....            | 3,189,000     | 19,261,700       | 36,000            | 4,110,400       | 2,637,000               | 28,565,000           | 58,019,100                 |
| Ontario.....           | 6,900,000     | 21,444,000       | 17,000            | 12,823,600      | 14,650,000              | 41,014,000           | 99,631,600                 |
| Manitoba.....          | 1,989,000     | 5,842,400        | 22,000            | 394,700         | 802,500                 | 3,180,000            | 13,362,600                 |
| Saskatchewan.....      | 4,356,000     | 5,657,300        | 35,000            | 50,500          | 494,900                 | 4,507,000            | 16,281,700                 |
| Alberta.....           | 2,964,000     | 6,344,000        | 42,000            | 272,100         | 697,900                 | 5,666,000            | 17,117,000                 |
| British Columbia.....  | 556,000       | 1,515,200        | 19,000            | 42,700          | 2,546,900               | 4,420,000            | 9,465,800                  |
| Totals, 1937.....      | 23,722,000    | 63,217,300       | 174,027           | 17,845,300      | 23,068,500              | 90,562,000           | 228,403,127                |

<sup>1</sup> The data in this column include the value of skim milk and buttermilk for the years 1930-37. For all Canada this was \$9,814,000 in 1937 as compared with \$9,604,000 in 1936, \$8,462,000 in 1935, \$8,177,600 in 1934, \$7,617,000 in 1933, \$7,074,000 in 1932, \$11,381,000 in 1931, and \$12,503,000 in 1930. <sup>2</sup> Revised since the publication of the 1937 Year Book. <sup>3</sup> Subject to revision.

**Apparent Consumption of Butter and Cheese, 1932-37.**—The apparent consumption of butter and cheese for the years 1933-37 is shown at pp. 607-608 of this volume (Table 17 of Chapter XVII dealing with Internal Trade). Figures are given for various animal products of the total and per capita consumption calculated from the stocks at the beginning and end of the year, and the production, imports and exports during the year. For the year 1937 the preliminary figures for the consumption of butter and cheese were: butter, total consumption 363,759,626 lb. and per capita consumption 32.71 lb.; and cheese, total, 39,287,906 lb. and per capita 3.53 lb. The per capita consumption of cheese in Canada is small and has not changed materially in the past ten years. In the case of butter, on the other hand, per capita consumption is high, amounting to nearly 10 oz. per person per week in the latest years. There has been a definite increase in per capita consumption in the past ten years and even the depression years 1932 and 1933 did not show an appreciable decline.

#### Subsection 5.—Horticulture.

The statistical treatment of horticulture is confined to fruit growing, vegetable growing, floriculture, and nursery stock production, all on a commercial scale. Of the several branches of commercial horticulture, fruit and vegetable growing are the most important. In recent years the latter has made remarkable gains and now surpasses fruit growing in total value of production. Vegetables and flowers grown in home gardens for private use probably exceed the volume of commercial production. The processing of fruits and vegetables is an important development closely allied to the production industry. In 1936, the latest year for which complete figures are available, the total value of processed fruits and vegetables, including wine, was almost \$49,000,000.



Apple growing is the mainstay of the fruit industry in Canada, the value of commercial production averaging over \$10,000,000 annually for the years 1926-35. Other fruits cultivated include the pear, peach, plum, cherry, apricot, and grape, together with various berries of which the strawberry is most important. Substantial revenue is derived from the native blueberry and cranberry, the former being abundant over large areas of Eastern Canada, while the cranberry is found chiefly in the Maritime Provinces. Commercial fruit growing is centred mainly in the provinces of Nova Scotia, Ontario, and British Columbia. For a fuller discussion of fruit growing in Canada, the reader is referred to pp. 242-247 of the 1931 edition of the Year Book.

Satisfactory annual statistics of the commercial vegetable-growing industry are not at present available, but important information on the subject is obtained through the decennial census. This material will be found on pp. 254-255 of the 1936 Year Book.

**Annual Statistics of Fruit Production.**—Table 24 shows the quantities and values of commercial fruit production in Canada for the years 1933-36, inclusive, together with the averages for the two five-year periods, 1926-30 and 1931-35. Statistics of the production for the years 1926-32 were published at p. 258 of the 1937 edition of the Year Book.

**24.—Estimated Quantities and Values of Chief Commercial Fruit Production in Canada, 1933-36, with Five-Year Averages, 1926-30 and 1931-35.**

| Item.                     | 1933.             | 1934.             | 1935.             | 1936.             | Averages.         |                   |
|---------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                           |                   |                   |                   |                   | 1926-30.          | 1931-35.          |
| Apples..... bbl.          | 5,473,230         | 4,254,430         | 4,499,900         | 4,115,200         | 3,319,489         | 4,431,264         |
| \$                        | 10,559,800        | 9,424,450         | 11,539,900        | 9,759,000         | 10,624,270        | 9,502,810         |
| Pears..... bu.            | 535,900           | 446,400           | 476,130           | 431,300           | 335,238           | 448,357           |
| \$                        | 582,170           | 598,760           | 641,285           | 602,500           | 583,604           | 517,084           |
| Peaches..... bu.          | 823,350           | 443,830           | 619,500           | 429,900           | 514,940           | 710,752           |
| \$                        | 1,155,000         | 1,033,600         | 907,650           | 658,000           | 1,141,303         | 1,035,138         |
| Apricots..... bu.         | 34,100            | 100,770           | 33,300            | 1,300             | 23,710            | 52,956            |
| \$                        | 102,300           | 246,000           | 90,000            | 4,042             | 88,194            | 135,308           |
| Plums and prunes..... bu. | 246,710           | 240,230           | 263,130           | 158,700           | 318,614           | 240,534           |
| \$                        | 272,000           | 371,050           | 356,860           | 241,700           | 493,401           | 292,209           |
| Cherries..... bu.         | 236,780           | 194,675           | 213,270           | 186,800           | 227,450           | 226,672           |
| \$                        | 515,680           | 557,900           | 556,500           | 480,300           | 771,276           | 540,735           |
| Strawberries..... qt.     | 21,943,400        | 20,242,780        | 27,505,350        | 20,579,000        | 11,340,616        | 21,499,563        |
| \$                        | 1,916,600         | 1,968,070         | 2,352,000         | 1,929,100         | 1,553,284         | 1,886,443         |
| Raspberries..... qt.      | 6,120,440         | 5,835,460         | 8,140,260         | 5,052,000         | 4,748,574         | 6,587,456         |
| \$                        | 756,475           | 824,450           | 1,041,170         | 703,900           | 805,606           | 848,723           |
| Loganberries..... lb.     | 1,787,440         | 2,333,360         | 2,186,000         | 1,247,400         | 1,747,602         | 2,145,906         |
| \$                        | 72,910            | 108,340           | 108,660           | 68,300            | 134,840           | 99,412            |
| Grapes..... lb.           | 42,486,200        | 48,565,000        | 42,945,500        | 22,915,000        | 44,243,000        | 47,010,743        |
| \$                        | 653,400           | 987,100           | 668,700           | 495,200           | 1,637,028         | 768,049           |
| <b>Totals..... \$</b>     | <b>16,556,335</b> | <b>16,119,720</b> | <b>18,363,785</b> | <b>14,972,042</b> | <b>17,852,016</b> | <b>15,626,001</b> |

**The Fruit Nursery Industry.**—The first commercial nursery in Canada was established near Fonthill, Ontario, and this district still continues to be one of the leading centres of the industry. While the province of Ontario accounts for the

major part of the fruit stock output, there are nurseries distributed through all the provinces and the wholesale value of the product sold during the year ended May 31, 1937, was \$371,777, as compared with \$369,827 in 1936.

**25.—Numbers and Values of Fruit Trees, Bushes, and Plants Sold by Nurserymen in Canada, years ended May 31, 1934-37.**

| Kind of Tree, Bush, or Plant. | Numbers Sold. |           |                        |           | Values. |         |                      |         |
|-------------------------------|---------------|-----------|------------------------|-----------|---------|---------|----------------------|---------|
|                               | 1934.         | 1935.     | 1936.                  | 1937.     | 1934.   | 1935.   | 1936.                | 1937.   |
|                               |               |           |                        |           | \$      | \$      | \$                   | \$      |
| Apples—                       |               |           |                        |           |         |         |                      |         |
| Early.....                    | 49,932        | 62,939    | 82,063                 | 68,725    | 16,833  | 24,156  | 32,115               | 26,422  |
| Full.....                     | 51,637        | 72,212    | 95,710                 | 67,463    | 16,980  | 27,024  | 36,365               | 26,680  |
| Winter.....                   | 149,500       | 208,873   | 256,959                | 257,615   | 50,705  | 72,970  | 97,104               | 96,652  |
| Crab.....                     | 10,767        | 9,906     | 12,533                 | 15,075    | 4,902   | 3,531   | 4,226                | 4,682   |
| Totals, Apples.               | 267,836       | 354,920   | 447,365                | 409,478   | 89,420  | 127,681 | 160,942 <sup>2</sup> | 154,476 |
| Pears.....                    | 67,713        | 60,497    | 66,156                 | 84,337    | 29,440  | 26,762  | 26,635               | 34,520  |
| Plums.....                    | 61,630        | 56,740    | 62,893                 | 76,974    | 16,108  | 23,472  | 24,870               | 28,984  |
| Peaches.....                  | 97,387        | 112,990   | 204,099                | 201,271   | 22,859  | 26,496  | 45,884               | 48,220  |
| Cherries.....                 | 43,318        | 57,758    | 64,352                 | 71,230    | 18,505  | 26,276  | 28,696               | 30,564  |
| Apricots.....                 | 4,414         | 4,169     | 5,357                  | 4,724     | 959     | 988     | 1,721 <sup>1</sup>   | 1,478   |
| Nectarines.....               | 35            | 46        | 103                    | 47        | 18      | 23      | 43                   | 17      |
| Quinces.....                  | 52            | 87        | 776                    | 283       | 26      | 44      | 331                  | 136     |
| Blackberries.....             | 27,432        | 43,062    | 56,576                 | 19,601    | 915     | 1,810   | 1,801                | 802     |
| Currants.....                 | 61,841        | 60,013    | 88,343                 | 74,554    | 5,873   | 6,147   | 8,399                | 6,395   |
| Grapes.....                   | 210,613       | 168,724   | 128,004                | 174,036   | 20,334  | 17,257  | 11,742               | 13,611  |
| Gooseberries.....             | 39,672        | 31,529    | 35,408                 | 39,467    | 5,001   | 4,361   | 5,110                | 4,996   |
| Raspberries.....              | 765,732       | 948,618   | 1,145,221 <sup>1</sup> | 826,180   | 26,253  | 33,246  | 30,880               | 26,115  |
| Loganberries.....             | 411           | 3,304     | 2,506                  | 805       | 37      | 234     | 85                   | 48      |
| Strawberries.....             | 1,164,396     | 1,683,451 | 1,971,282              | 3,315,142 | 9,525   | 13,815  | 13,678               | 21,406  |
| Totals.....                   | -             | -         | -                      | -         | 215,332 | 308,612 | 369,827 <sup>2</sup> | 371,777 |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

<sup>2</sup> Includes crab seedlings valued at \$136 not shown.

**Floriculture.**—The total value of floriculture and ornamental nursery stock sold in Canada during the years ended May 31, 1936 and 1937, was \$2,784,172 and \$3,138,126, respectively, as shown by Table 26. Care should be used in making comparisons between 1936 and 1937 figures, as the latter cover a much larger proportion of the industry than do the former. Similarly, the figures for 1936 are more representative than are those collected for earlier years.

**26.—Quantities and Values of Floricultural and Ornamental Nursery Stock Grown in Canada and Sold during the years ended May 31, 1936 and 1937.**

| Description.                         | 1936.          |                        | 1937.          |                        |
|--------------------------------------|----------------|------------------------|----------------|------------------------|
|                                      | Quantity Sold. | Total Wholesale Value. | Quantity Sold. | Total Wholesale Value. |
|                                      | No.            | \$.                    | No.            | \$                     |
| Outdoor roses.....                   | 452,161        | 92,831                 | 518,016        | 110,542                |
| Ornamental trees (evergreen).....    | 87,494         | 144,082                | 115,354        | 151,411                |
| Ornamental trees (deciduous).....    | 88,324         | 36,351                 | 154,982        | 57,913                 |
| Shrubs for outdoor planting.....     | 992,279        | 91,577                 | 1,046,676      | 101,661                |
| Hardy climbing vines.....            | 32,782         | 7,647                  | 30,287         | 7,845                  |
| Herbaceous perennials.....           | 444,591        | 49,162                 | 526,176        | 66,856                 |
| Herbaceous biennials.....            | 27,554         | 3,724                  | 44,621         | 3,454                  |
| Bedding plants.....                  | 5,337,849      | 196,250                | 8,850,977      | 297,681                |
| Flowering plants for indoor use..... | 664,663        | 258,574                | 661,925        | 302,044                |
| Foliage plants for indoor use.....   | 307,891        | 79,299                 | 268,037        | 69,013                 |
| Flowering bulbs.....                 | 2,527,440      | 61,682                 | 2,981,433      | 66,424                 |
| Cut flowers, grown inside.....       | 48,245,743     | 1,724,868              | 51,130,619     | 1,992,123              |
| Cut flowers, grown outdoors.....     | 2,294,168      | 38,150                 | 2,841,242      | 47,151                 |
| Totals.....                          | -              | 2,784,172              | -              | 3,138,126              |

**Vegetables.**—Census figures of areas, quantities, and values of vegetables produced for sale on farms in Canada, in the years 1920 and 1930, were shown at pp. 254-255 of the 1936 Year Book.

## Subsection 6.—Special Agricultural Crops.

**Maple Syrup and Sugar.**—The Canada Year Book, 1924, contained on pp. 247 and 248 a description of the process of making maple sugar. Table 27 gives the production and value of maple sugar and syrup in Canada for the years 1935-37, as estimated by the Dominion Bureau of Statistics.

The table shows that in 1937 for the whole of Canada there was an estimated decrease of 4,818,656 lb. of maple sugar and a decrease of 790,650 gal. of maple syrup, while the combined value of the two products showed a decrease of \$1,468,739 as compared with the previous year.

## 27.—Estimated Quantities and Values of Maple Sugar and Maple Syrup Produced in Canada, by Provinces, 1935-37.

| Province and Year.     | Maple Sugar. |                         |           | Maple Syrup. |                           |           | Total Value of Sugar and Syrup. |
|------------------------|--------------|-------------------------|-----------|--------------|---------------------------|-----------|---------------------------------|
|                        | Quantity.    | Average Price per Pound | Value.    | Quantity.    | Average Price per Gallon. | Value.    |                                 |
|                        | lb.          | cts.                    | \$        | gal.         | \$                        | \$        | \$                              |
| Nova Scotia.....1935   | 94,570       | 26                      | 24,590    | 10,664       | 2.03                      | 21,650    | 46,240                          |
| 1936                   | 56,555       | 21                      | 11,877    | 5,220        | 2.44                      | 12,737    | 24,614                          |
| 1937                   | 45,240       | 25                      | 11,310    | 6,787        | 2.14                      | 14,554    | 25,864                          |
| New Brunswick.....1935 | 135,170      | 18                      | 24,330    | 12,980       | 1.85                      | 24,020    | 48,350                          |
| 1936                   | 131,512      | 21                      | 27,618    | 11,203       | 1.67                      | 18,709    | 46,327                          |
| 1937                   | 116,480      | 19                      | 22,131    | 5,571        | 1.74                      | 9,693     | 31,824                          |
| Quebec.....1935        | 5,747,900    | 10.4                    | 595,800   | 1,581,600    | 1.06                      | 1,671,500 | 2,267,300                       |
| 1936                   | 8,506,000    | 10.9                    | 927,152   | 1,387,900    | 1.12                      | 1,554,448 | 2,481,600                       |
| 1937                   | 4,020,000    | 11.0                    | 442,200   | 780,000      | 1.11                      | 865,800   | 1,308,000                       |
| Ontario.....1935       | 561,320      | 17                      | 95,425    | 645,519      | 1.65                      | 1,065,105 | 1,160,530                       |
| 1936                   | 537,736      | 17                      | 91,415    | 618,396      | 1.73                      | 1,069,825 | 1,161,240                       |
| 1937                   | 231,427      | 21                      | 48,600    | 439,711      | 1.89                      | 831,054   | 879,654                         |
| Canada.....1935        | 6,538,960    | 11                      | 746,145   | 2,236,769    | 1.24                      | 2,782,275 | 3,528,420                       |
| 1936                   | 9,231,993    | 11                      | 1,058,062 | 2,022,719    | 1.31                      | 2,655,719 | 3,713,781                       |
| 1937                   | 4,413,147    | 12                      | 534,244   | 1,232,069    | 1.40                      | 1,729,801 | 2,264,042                       |

**Sugar Beets and Beetroot Sugar.**—A brief account of the development of the beetroot sugar industry in Canada will be found in the Canada Year Book, 1925, pp. 255-256. At the present time two companies are operating in Canada: the Canada and Dominion Sugar Co., Ltd., with factories at Chatham and Wallaceburg in Ontario, and the Canadian Sugar Factories, Ltd., with plants at Raymond, and Picture Butte, Alberta. Table 28 shows the areas, yields, and values of sugar beets grown in Canada in the years 1927-36.

## 28.—Acreages, Yields, and Values of Sugar Beets Grown in Canada and Quantities of Refined Beetroot Sugar Produced, 1927-36.

NOTE.—For the years 1911-20, see the 1932 Year Book, p. 1057. For 1921-25, see the 1933 Year Book, p. 257.

| Year.     | Sugar Beets. |                 |              |                        |              | Quantity and Value of Refined Beetroot Sugar Produced. |           |               |
|-----------|--------------|-----------------|--------------|------------------------|--------------|--|-----------|---------------|
|           | Area Grown.  | Yield per Acre. | Total Yield. | Average Price per Ton. | Total Value. |  |           |               |
|           | acres.       | tons.           | tons.        | \$                     | \$           | lb.  | \$        | cents per lb. |
| 1927..... | 25,961       | 7.96            | 206,713      | 9.73                   | 2,012,134    | 60,909,131   | 3,604,203 | 6.05          |
| 1928..... | 34,323       | 7.14            | 244,930      | 8.33                   | 2,041,465    | 64,653,348   | 3,340,571 | 6.17          |
| 1929..... | 32,550       | 7.23            | 235,405      | 8.84                   | 2,080,096    | 69,399,215   | 3,335,344 | 4.81          |
| 1930..... | 40,632       | 9.80            | 397,576      | 8.25                   | 3,278,625    | 94,624,700   | 4,529,944 | 4.79          |
| 1931..... | 43,337       | 10.06           | 435,992      | 7.32                   | 3,190,198    | 107,139,129  | 4,794,551 | 4.48          |
| 1932..... | 44,817       | 11.28           | 505,671      | 6.15                   | 3,113,942    | 132,016,859  | 5,789,205 | 4.39          |
| 1933..... | 43,807       | 10.10           | 442,391      | 6.31                   | 2,790,929    | 131,392,501  | 5,713,181 | 4.35          |
| 1934..... | 38,495       | 10.72           | 412,072      | 6.30                   | 2,599,982    | 114,002,950  | 4,714,025 | 4.10          |
| 1935..... | 51,985       | 8.33            | 439,223      | 6.27                   | 2,831,098    | 119,857,068  | 4,617,733 | 3.90          |
| 1936..... | 62,748       | 10.54           | 665,969      | 6.31                   | 3,510,922    | 156,060,242  | 6,103,204 | 3.90          |

The production in 1936-37 of raw beet sugar in the principal beet-growing countries, in thousands of short tons, was as follows: U.S.S.R., 2,203; Germany, 1,992; United States, 1,396; France, 960; Czechoslovakia, 801; United Kingdom, 650; Poland, 505; Italy, 380; Sweden, 330; Belgium, 266; Netherlands, 259; Denmark, 249; Spain, 249; Austria, 161; Hungary, 158; Yugoslavia, 110; Irish Free State, 107.

**Tobacco.**—In 1936 the commercial tobacco crop of Canada amounted to 46,084,000 lb. from 54,965 acres, as compared with 54,473,000 lb. from 46,870 acres in 1935. The farm value of the tobacco crop for 1936 is estimated at \$9,420,200 as compared with \$10,762,500 for 1935.

Table 29 lists the acreages, quantities produced, and average yields per acre for the years 1927-36. Census figures from 1900 to 1921 and annual figures from 1921 to 1926 were given at p. 284 of the 1934-35 Year Book. For further details, see the March number of the Monthly Bulletin of Agricultural Statistics.

29.—Acreages and Yields of Tobacco in Canada, by Provinces, 1927-36.

| Year.     | Arens.  |                     |                      | Yields.            |          |                      | Average Yields.  |                    |                      |
|-----------|---------|---------------------|----------------------|--------------------|----------|----------------------|------------------|--------------------|----------------------|
|           | Quebec. | Ontario.            | Canada. <sup>1</sup> | Quebec.            | Ontario. | Canada. <sup>1</sup> | Quebec.          | Ontario.           | Canada. <sup>1</sup> |
|           | acres.  | acres.              | acres.               | '000 lb.           | '000 lb. | '000 lb.             | lb. per acre.    | lb. per acre.      | lb. per acre.        |
| 1927..... | 10,018  | 33,050              | 44,068               | 7,824              | 35,622   | 43,917 <sup>2</sup>  | 781 <sup>2</sup> | 1,059 <sup>2</sup> | 997                  |
| 1928..... | 10,368  | 32,654              | 43,138               | 8,536 <sup>2</sup> | 33,206   | 41,960 <sup>2</sup>  | 823 <sup>2</sup> | 1,019 <sup>2</sup> | 973 <sup>2</sup>     |
| 1929..... | 9,300   | 28,303 <sup>2</sup> | 37,700 <sup>2</sup>  | 8,380              | 27,419   | 29,886               | 901              | 757 <sup>2</sup>   | 793 <sup>2</sup>     |
| 1930..... | 8,450   | 32,308              | 41,444               | 8,021              | 28,617   | 36,717               | 946 <sup>2</sup> | 872 <sup>2</sup>   | 886                  |
| 1931..... | 7,330   | 47,360              | 55,060               | 6,340              | 44,770   | 51,300               | 865              | 945                | 932                  |
| 1932..... | 8,520   | 45,105              | 54,138               | 7,952              | 45,760   | 54,094               | 923              | 1,014              | 999                  |
| 1933..... | 6,090   | 40,271              | 46,898               | 6,095              | 38,550   | 44,904               | 1,001            | 955 <sup>2</sup>   | 957                  |
| 1934..... | 8,175   | 32,320              | 40,963               | 7,070              | 31,400   | 38,734               | 865              | 971 <sup>2</sup>   | 946                  |
| 1935..... | 5,425   | 41,428              | 46,870               | 5,965              | 48,492   | 54,473               | 1,100            | 1,171              | 1,162                |
| 1936..... | 8,678   | 46,162              | 54,965               | 9,111              | 30,883   | 40,084               | 1,050            | 799                | 838                  |

<sup>1</sup> The totals for Canada include small amounts produced in other provinces, principally in British Columbia.

<sup>2</sup> Revised since the publication of the 1937 Year Book.

**Flax Fibre.**—Table 30, compiled from information furnished by the Economic Fibre Division of the Dominion Experimental Farms, shows the areas, production, and values of flax fibre and allied products in Canada for each of the years 1928 to 1937. Figures for the years 1915 to 1927 will be found at p. 284 of the 1934-35 Year Book.

30.—Acreages, Yields, and Values of Flaxseed, Fibre, and Tow in Canada, 1928-37.

| Year.     | Area.  | Production. |           |       | Values. |         |         |         |
|-----------|--------|-------------|-----------|-------|---------|---------|---------|---------|
|           |        | Seed.       | Fibre.    | Tow.  | Seed.   | Fibre.  | Tow.    | Total.  |
|           | acres. | bu.         | lb.       | tons. | \$      | \$      | \$      | \$      |
| 1928..... | 6,880  | 41,280      | Nil       | 6,880 | 165,120 | —       | 344,000 | 509,120 |
| 1929..... | 6,280  | 32,970      | Nil       | 4,500 | 156,607 | —       | 236,250 | 392,857 |
| 1930..... | 6,143  | 62,232      | Nil       | 6,086 | 96,684  | —       | 273,870 | 370,554 |
| 1931..... | 4,220  | 35,870      | 25,000    | 3,019 | 53,805  | 4,000   | 120,760 | 178,565 |
| 1932..... | 5,135  | 35,945      | 200,000   | 3,552 | 56,156  | 18,000  | 95,964  | 170,120 |
| 1933..... | 5,091  | 30,546      | Nil       | 3,055 | 65,227  | —       | 90,233  | 161,460 |
| 1934..... | 5,995  | 41,755      | 45,000    | 4,351 | 123,268 | 7,200   | 114,450 | 249,918 |
| 1935..... | 6,200  | 37,200      | 90,000    | 5,950 | 142,800 | 10,200  | 162,250 | 321,250 |
| 1936..... | 6,242  | 31,210      | 635,100   | 3,094 | 106,185 | 114,318 | 77,350  | 297,853 |
| 1937..... | 7,907  | 39,535      | 1,368,600 | 2,654 | 40,220  | 211,880 | 79,620  | 331,720 |

**Apiculture.**—The data on beekeeping in Canada for the years 1935 and 1936, as given in the following table, have been furnished by the provincial Departments of Agriculture and compiled in consultation with the Dominion Apiarist. The estimates for Ontario have been compiled on a new basis and are not strictly comparable with estimates published for the years prior to 1933. Values are as quoted

by the provincial Departments and represent for the most part average wholesale prices; for British Columbia, the values, as in previous years, have been calculated on what is considered a fair average of the wholesale and retail prices.

Statistics of beeswax, where not furnished by the provinces, have been estimated at 1.5 p.c. of the honey crop and valued at the average price of 25 cents per lb. in 1936 and 27 cents per lb. in 1935.

Table 31 shows for Canada, by provinces, the numbers of beekeepers, numbers of hives, average production per colony, and the production and values of honey and wax for the years 1935 and 1936. Production in 1936 showed an increase of 16 p.c. in volume and 17 p.c. in value.

Figures of honey production, as at the Censuses of 1921 and 1931, were given at p. 285 of the 1934-35 edition of the Year Book.

31.—Production and Values of Honey and Beeswax in Canada, by Provinces, 1935 and 1936.

| Province and Year.        | Bee-keepers. | Hives.  | Honey.                  |                   |                       | Beeswax.     |             |        | Total Value, Honey and Wax. |
|---------------------------|--------------|---------|-------------------------|-------------------|-----------------------|--------------|-------------|--------|-----------------------------|
|                           |              |         | Average Yield per Hive. | Total Production. | Average Price per lb. | Total Value. | Production. | Value. |                             |
|                           | No.          | No.     | lb.                     | lb.               | cts.                  | \$           | lb.         | \$     | \$                          |
| Prince Edward Island..... |              |         |                         |                   |                       |              |             |        |                             |
| 1935                      | 1            | 1       | 1                       | 9,500             | 10-0                  | 950          | 140         | 40     | 990                         |
| 1936                      | 1            | 1       | 1                       | 14,000            | 11-0                  | 1,500        | 210         | 60     | 1,560                       |
| Nova Scotia.....          |              |         |                         |                   |                       |              |             |        |                             |
| 1935                      | 250          | 1,160   | 48-8                    | 56,600            | 15-9                  | 9,000        | 1,300       | 400    | 9,400                       |
| 1936                      | 250          | 1,200   | 45-0                    | 60,000            | 15-0                  | 9,000        | 1,000       | 300    | 9,300                       |
| New Brunswick.....        |              |         |                         |                   |                       |              |             |        |                             |
| 1935                      | 1            | 1       | 1                       | 50,000            | 13-9                  | 6,950        | 750         | 200    | 7,150                       |
| 1936                      | 1            | 1       | 1                       | 50,000            | 13-0                  | 6,500        | 750         | 200    | 6,700                       |
| Quebec.....               |              |         |                         |                   |                       |              |             |        |                             |
| 1935                      | 5,800        | 60,000  | 67-0                    | 4,013,600         | 9-5                   | 380,800      | 46,800      | 12,600 | 393,400                     |
| 1936                      | 6,800        | 71,500  | 75-3                    | 5,395,500         | 8-9                   | 482,900      | 69,400      | 18,000 | 500,900                     |
| Ontario.....              |              |         |                         |                   |                       |              |             |        |                             |
| 1935                      | 8,200        | 195,000 | 60-0                    | 11,700,000        | 7-4                   | 864,500      | 152,100     | 42,500 | 907,000                     |
| 1936                      | 8,200        | 195,000 | 46-0                    | 8,970,000         | 8-0                   | 717,600      | 110,200     | 30,850 | 748,450                     |
| Manitoba.....             |              |         |                         |                   |                       |              |             |        |                             |
| 1935                      | 3,300        | 51,400  | 97-0                    | 5,018,700         | 7-1                   | 354,600      | 49,500      | 12,400 | 367,000                     |
| 1936                      | 3,440        | 51,300  | 158-6                   | 8,135,500         | 7-0                   | 569,000      | 82,000      | 16,400 | 585,400                     |
| Saskatchewan.....         |              |         |                         |                   |                       |              |             |        |                             |
| 1935                      | 2,680        | 14,100  | 74-7                    | 1,051,400         | 11-2                  | 117,700      | 15,800      | 4,300  | 122,000                     |
| 1936                      | 2,990        | 17,100  | 155-1                   | 2,636,300         | 10-0                  | 263,100      | 39,500      | 9,100  | 272,200                     |
| Alberta.....              |              |         |                         |                   |                       |              |             |        |                             |
| 1935                      | 1,000        | 13,500  | 84-2                    | 1,100,000         | 9-0                   | 99,000       | 13,750      | 3,700  | 102,700                     |
| 1936                      | 1,150        | 12,200  | 152-0                   | 1,850,000         | 9-0                   | 166,500      | 27,750      | 6,400  | 172,900                     |
| British Columbia.....     |              |         |                         |                   |                       |              |             |        |                             |
| 1935                      | 3,130        | 22,750  | 56-9                    | 1,291,200         | 15-0                  | 193,700      | 12,900      | 3,300  | 197,000                     |
| 1936                      | 3,080        | 21,000  | 53-7                    | 1,129,700         | 15-0                  | 169,500      | 11,300      | 2,800  | 172,300                     |
| Totals.....               |              |         |                         |                   |                       |              |             |        |                             |
| 1935                      | 1            | 1       | 1                       | 24,291,000        | 8-3                   | 2,027,200    | 293,040     | 79,440 | 2,106,640                   |
| 1936                      | 1            | 1       | 1                       | 28,241,000        | 8-4                   | 2,385,600    | 342,110     | 84,110 | 2,469,710                   |

<sup>1</sup> Information not available for Prince Edward Island and New Brunswick.

### Subsection 7.—Farm Labour and Wages.

**Average Wages of Farm Help.**—The cost of farm labour reached its highest point in 1920. In the next two years there was a rapid drop, while from 1923 until 1929 there was little change. The years 1930 to 1933 showed continuous marked reductions in average values of yearly wages and board, following the downward trend of the prices of farm produce. From 1934 to 1937 slight increases were registered.

In Table 32 the values of wages and board are given for the years 1914, 1920, 1930, and 1935-37, both for the summer season and for the year, distinction being made in all cases between wages and board.

### 32.—Average Wages and Board of Farm Help in Canada, as Estimated by Crop Correspondents, 1914, 1920, 1930, and 1935-37.

NOTE.—M=Males. F=Females.

| Provinces.        | Year. | Per Month in Summer Season. |    |        |    |                  |    | Per Year. |     |        |     |                  |     |
|-------------------|-------|-----------------------------|----|--------|----|------------------|----|-----------|-----|--------|-----|------------------|-----|
|                   |       | Wages.                      |    | Board. |    | Wages and Board. |    | Wages.    |     | Board. |     | Wages and Board. |     |
|                   |       | M.                          | F. | M.     | F. | M.               | F. | M.        | F.  | M.     | F.  | M.               | F.  |
|                   |       | \$                          | \$ | \$     | \$ | \$               | \$ | \$        | \$  | \$     | \$  | \$               | \$  |
| Canada.....       | 1914  | 22                          | 8  | 14     | 11 | 36               | 19 | 155       | 57  | 168    | 132 | 323              | 189 |
|                   | 1920  | 26                          | 47 | 26     | 20 | 86               | 47 | 543       | 275 | 278    | 212 | 821              | 492 |
|                   | 1930  | 34                          | 22 | 22     | 18 | 56               | 38 | 326       | 190 | 183    | 199 | 559              | 440 |
|                   | 1935  | 20                          | 11 | 15     | 12 | 35               | 23 | 181       | 117 | 174    | 137 | 353              | 254 |
|                   | 1936  | 21                          | 11 | 16     | 13 | 37               | 24 | 206       | 138 | 163    | 135 | 374              | 261 |
|                   | 1937  | 23                          | 12 | 17     | 13 | 40               | 25 | 224       | 134 | 176    | 138 | 400              | 272 |
| P. E. Island..... | 1914  | 15                          | 5  | 10     | 8  | 25               | 13 | 101       | 40  | 120    | 96  | 221              | 136 |
|                   | 1920  | 42                          | 18 | 18     | 14 | 60               | 32 | 371       | 212 | 201    | 160 | 572              | 372 |
|                   | 1930  | 32                          | 16 | 18     | 14 | 50               | 26 | 308       | 179 | 205    | 165 | 513              | 344 |
|                   | 1935  | 18                          | 11 | 13     | 11 | 31               | 22 | 183       | 122 | 155    | 125 | 343              | 245 |
|                   | 1936  | 18                          | 11 | 13     | 11 | 31               | 22 | 190       | 126 | 161    | 136 | 351              | 262 |
|                   | 1937  | 21                          | 11 | 15     | 13 | 36               | 24 | 206       | 125 | 168    | 137 | 374              | 262 |
| Nova Scotia.....  | 1914  | 20                          | 7  | 11     | 8  | 31               | 15 | 109       | 59  | 132    | 96  | 301              | 155 |
|                   | 1920  | 49                          | 21 | 24     | 17 | 73               | 38 | 472       | 218 | 263    | 190 | 735              | 408 |
|                   | 1930  | 34                          | 17 | 20     | 14 | 54               | 31 | 353       | 187 | 209    | 157 | 562              | 344 |
|                   | 1935  | 22                          | 12 | 15     | 11 | 37               | 24 | 213       | 128 | 151    | 117 | 363              | 245 |
|                   | 1936  | 22                          | 12 | 15     | 11 | 37               | 23 | 245       | 136 | 170    | 124 | 415              | 260 |
|                   | 1937  | 25                          | 12 | 15     | 11 | 40               | 23 | 262       | 145 | 173    | 127 | 435              | 272 |
| New Brunswick...  | 1914  | 21                          | 7  | 11     | 8  | 32               | 15 | 170       | 69  | 132    | 96  | 302              | 165 |
|                   | 1920  | 56                          | 19 | 23     | 16 | 79               | 35 | 531       | 213 | 254    | 178 | 785              | 391 |
|                   | 1930  | 34                          | 16 | 20     | 15 | 54               | 31 | 335       | 181 | 215    | 164 | 550              | 345 |
|                   | 1935  | 21                          | 10 | 14     | 11 | 35               | 21 | 210       | 103 | 150    | 113 | 368              | 216 |
|                   | 1936  | 25                          | 11 | 15     | 11 | 40               | 22 | 257       | 117 | 141    | 101 | 398              | 218 |
|                   | 1937  | 28                          | 12 | 16     | 12 | 44               | 24 | 295       | 133 | 147    | 115 | 442              | 248 |
| Quebec.....       | 1914  | 21                          | 7  | 13     | 9  | 34               | 16 | 140       | 44  | 150    | 108 | 296              | 152 |
|                   | 1920  | 62                          | 24 | 24     | 16 | 86               | 40 | 524       | 235 | 243    | 172 | 767              | 407 |
|                   | 1930  | 33                          | 17 | 19     | 13 | 52               | 30 | 310       | 175 | 194    | 139 | 510              | 314 |
|                   | 1935  | 18                          | 10 | 13     | 10 | 31               | 20 | 170       | 98  | 136    | 98  | 306              | 196 |
|                   | 1936  | 19                          | 10 | 13     | 10 | 32               | 20 | 196       | 106 | 136    | 100 | 332              | 206 |
|                   | 1937  | 25                          | 12 | 15     | 11 | 40               | 23 | 226       | 121 | 150    | 111 | 376              | 232 |
| Ontario.....      | 1914  | 19                          | 7  | 13     | 10 | 32               | 17 | 141       | 52  | 156    | 120 | 297              | 172 |
|                   | 1920  | 52                          | 25 | 23     | 19 | 75               | 44 | 474       | 259 | 262    | 211 | 736              | 470 |
|                   | 1930  | 31                          | 21 | 20     | 17 | 51               | 38 | 304       | 229 | 228    | 194 | 532              | 423 |
|                   | 1935  | 20                          | 12 | 16     | 14 | 36               | 26 | 187       | 137 | 185    | 150 | 372              | 287 |
|                   | 1936  | 21                          | 13 | 16     | 14 | 37               | 27 | 211       | 147 | 177    | 148 | 388              | 295 |
|                   | 1937  | 25                          | 14 | 18     | 15 | 43               | 29 | 235       | 158 | 186    | 154 | 421              | 312 |
| Manitoba.....     | 1914  | 24                          | 9  | 15     | 13 | 39               | 22 | 184       | 70  | 180    | 156 | 364              | 226 |
|                   | 1920  | 70                          | 34 | 28     | 24 | 98               | 58 | 650       | 312 | 325    | 247 | 975              | 559 |
|                   | 1930  | 32                          | 18 | 21     | 18 | 53               | 36 | 298       | 194 | 238    | 204 | 536              | 398 |
|                   | 1935  | 17                          | 9  | 15     | 12 | 32               | 21 | 160       | 92  | 163    | 140 | 323              | 232 |
|                   | 1936  | 19                          | 9  | 16     | 13 | 34               | 22 | 178       | 103 | 163    | 132 | 336              | 235 |
|                   | 1937  | 21                          | 10 | 16     | 13 | 37               | 23 | 202       | 113 | 165    | 136 | 367              | 249 |
| Saskatchewan....  | 1914  | 24                          | 9  | 17     | 14 | 41               | 23 | 162       | 67  | 204    | 168 | 366              | 235 |
|                   | 1920  | 72                          | 35 | 30     | 25 | 102              | 60 | 667       | 364 | 336    | 289 | 1,003            | 653 |
|                   | 1930  | 37                          | 21 | 23     | 19 | 60               | 40 | 340       | 215 | 253    | 212 | 593              | 427 |
|                   | 1935  | 18                          | 9  | 15     | 13 | 33               | 22 | 173       | 96  | 172    | 144 | 345              | 240 |
|                   | 1936  | 19                          | 9  | 16     | 13 | 35               | 22 | 188       | 105 | 168    | 133 | 346              | 238 |
|                   | 1937  | 19                          | 10 | 16     | 13 | 35               | 23 | 184       | 106 | 160    | 127 | 344              | 235 |
| Alberta.....      | 1914  | 24                          | 10 | 16     | 14 | 40               | 24 | 173       | 68  | 192    | 168 | 365              | 236 |
|                   | 1920  | 76                          | 36 | 31     | 26 | 107              | 62 | 697       | 360 | 341    | 278 | 1,038            | 638 |
|                   | 1930  | 37                          | 21 | 23     | 20 | 60               | 41 | 342       | 223 | 256    | 222 | 598              | 445 |
|                   | 1935  | 21                          | 11 | 16     | 14 | 37               | 25 | 189       | 115 | 178    | 156 | 367              | 271 |
|                   | 1936  | 22                          | 11 | 16     | 14 | 38               | 25 | 206       | 125 | 172    | 140 | 378              | 271 |
|                   | 1937  | 23                          | 12 | 17     | 15 | 40               | 27 | 221       | 131 | 180    | 151 | 401              | 282 |

32.—Average Wages and Board of Farm Help in Canada, as Estimated by Crop Correspondents, 1914, 1920, 1930, and 1935-37—concluded.

NOTE.—M = Males. F = Females.

| Province.             | Year. | Per Month in Summer Season. |    |        |    |                  |    | Per Year. |     |        |     |                  |     |
|-----------------------|-------|-----------------------------|----|--------|----|------------------|----|-----------|-----|--------|-----|------------------|-----|
|                       |       | Wages.                      |    | Board. |    | Wages and Board. |    | Wages.    |     | Board. |     | Wages and Board. |     |
|                       |       | M.                          | F. | M.     | F. | M.               | F. | M.        | F.  | M.     | F.  | M.               | F.  |
|                       |       | \$                          | \$ | \$     | \$ | \$               | \$ | \$        | \$  | \$     | \$  | \$               | \$  |
| British Columbia..... | 1914  | 27                          | 13 | 21     | 18 | 48               | 31 | 208       | 108 | 252    | 216 | 460              | 324 |
|                       | 1920  | 64                          | 36 | 31     | 27 | 95               | 63 | 684       | 431 | 340    | 311 | 1,033            | 742 |
|                       | 1930  | 46                          | 25 | 26     | 21 | 72               | 46 | 450       | 270 | 291    | 242 | 741              | 512 |
|                       | 1935  | 26                          | 14 | 19     | 16 | 45               | 30 | 242       | 160 | 223    | 187 | 465              | 347 |
|                       | 1936  | 25                          | 15 | 21     | 17 | 46               | 32 | 265       | 166 | 229    | 192 | 494              | 358 |
|                       | 1937  | 28                          | 17 | 21     | 18 | 49               | 35 | 279       | 170 | 234    | 193 | 513              | 363 |

Subsection 8.—Prices of Agricultural Produce.

The average monthly cash prices of representative grades of Canadian wheat, oats, barley, flaxseed, and rye in the Winnipeg market—basis, in store at Port William and Port Arthur—will be found for each month from August, 1935, to December, 1937, in Table 33. The average monthly prices of flour, bran, and shorts at Montreal, Toronto, Winnipeg, Minneapolis, and Duluth for 1937 are given in Table 34.

The yearly average prices per cwt. of Canadian live stock at Toronto, Montreal, Winnipeg, and Edmonton are given for 1936 in Table 35 and the average monthly prices in 1937 at these centres and at Calgary in Table 36.

33.—Monthly Average Cash Prices per Bushel at Winnipeg of Representative Grades of Canadian Wheat, Oats, Barley, Flaxseed, and Rye—basis in store at Port William and Port Arthur—Aug., 1935-Dec., 1937, and Yearly Average Prices for crop years ended July 31, 1926-37.

| Year and Month.                         | Wheat,<br>No. 1 N. | Oats,<br>No. 2 C.W. | Barley,<br>No. 3 C.W. | Flaxseed,<br>No. 1 C.W. | Rye,<br>No. 2 C.W. |
|---|--------------------|---------------------|-----------------------|-------------------------|--------------------|
|   | cts.               | cts.                | cts.                  | cts.                    | cts.               |
| Averages, crop year ended July, 1926... | 151.2              | 49.6                | 63.9                  | 213.8                   | 89.8               |
| Averages, crop year ended July, 1927... | 146.2              | 58.8                | 72.7                  | 195.0                   | 99.7               |
| Averages, crop year ended July, 1928... | 146.3              | 65.2                | 85.3                  | 189.9                   | 129.9              |
| Averages, crop year ended July, 1929... | 124.0              | 58.8                | 71.4                  | 202.2                   | 100.7              |
| Averages, crop year ended July, 1930... | 124.2              | 58.6                | 60.0                  | 247.5                   | 86.2               |
| Averages, crop year ended July, 1931... | 64.2               | 29.9                | 28.4                  | 114.1                   | 34.7               |
| Averages, crop year ended July, 1932... | 59.8               | 31.4                | 37.3                  | 93.7                    | 40.0               |
| Averages, crop year ended July, 1933... | 54.3               | 26.4                | 32.3                  | 90.6                    | 37.8               |
| Averages, crop year ended July, 1934... | 68.1               | 33.9                | 38.8                  | 148.0                   | 47.5               |
| Averages, crop year ended July, 1935... | 81.9               | 42.8                | 48.2                  | 138.6                   | 52.9               |
| 1935.                                   |                    |                     |                       |                         |                    |
| August.....                             | 84.5               | 36.4                | 33.9                  | 123.8                   | 36.5               |
| September.....                          | 90.3               | 36.0                | 35.8                  | 136.4                   | 40.5               |
| October.....                            | 90.8               | 34.0                | 33.9                  | 141.1                   | 42.3               |
| November.....                           | 85.8               | 31.9                | 33.3                  | 141.1                   | 41.1               |
| December.....                           | 84.6               | 29.8                | 33.0                  | 145.8                   | 41.6               |
| 1936.                                   |                    |                     |                       |                         |                    |
| January.....                            | 84.8               | 33.6                | 35.3                  | 159.6                   | 42.5               |
| February.....                           | 82.1               | 35.5                | 36.1                  | 159.0                   | 42.9               |
| March.....                              | 85.1               | 35.9                | 37.8                  | 157.3                   | 43.4               |
| April.....                              | 80.5               | 33.6                | 37.9                  | 150.0                   | 41.4               |
| May.....                                | 76.8               | 33.0                | 37.3                  | 145.4                   | 41.1               |
| June.....                               | 79.5               | 33.4                | 33.0                  | 140.3                   | 44.0               |
| July.....                               | 93.5               | 41.4                | 51.0                  | 135.4                   | 55.3               |
| Averages, crop year ended July, 1936... | 84.6               | 34.5                | 37.0                  | 147.6                   | 42.7               |
| August.....                             | 102.3              | 49.5                | 59.9                  | 177.4                   | 67.1               |
| September.....                          | 103.9              | 44.9                | 58.9                  | 167.6                   | 68.0               |
| October.....                            | 110.9              | 44.4                | 61.0                  | 168.6                   | 69.8               |
| November.....                           | 108.5              | 45.3                | 61.9                  | 159.3                   | 78.4               |
| December.....                           | 120.3              | 50.0                | 70.4                  | 167.6                   | 96.6               |

**33.—Monthly Average Cash Prices per Bushel at Winnipeg of Representative Grades of Canadian Wheat, Oats, Barley, Flaxseed, and Rye—basis in store at Port William and Port Arthur—Aug., 1935-Dec., 1937, and Yearly Average Prices for crop years ended July 31, 1926-37—concluded.**

| Year and Month.                         | Wheat,<br>No. 1 N. | Oats,<br>No. 2 C.W. | Barley,<br>No. 3 C.W. | Flaxseed,<br>No. 1 C.W. | Rye,<br>No. 2 C.W. |
|---|--------------------|---------------------|-----------------------|-------------------------|--------------------|
|   | cts.               | cts.                | cts.                  | cts.                    | cts.               |
| 1937.                                   |                    |                     |                       |                         |                    |
| January.....                            | 124.7              | 54.5                | 83.8                  | 160.5                   | 103.1              |
| February.....                           | 127.0              | 55.0                | 83.3                  | 170.0                   | 104.5              |
| March.....                              | 135.6              | 56.4                | 81.4                  | 178.0                   | 107.0              |
| April.....                              | 138.9              | 58.8                | 74.8                  | 182.3                   | 113.5              |
| May.....                                | 130.6              | 56.3                | 71.1                  | 172.0                   | 114.4              |
| June.....                               | 124.1              | 57.1                | 66.0                  | 165.6                   | 116.1              |
| July.....                               | 145.6              | 63.6                | 71.9                  | 180.0                   | 147.3              |
| Averages, crop year ended July, 1937... | 122.7              | 53.0                | 70.9                  | 171.2                   | 98.8               |
| August.....                             | 131.8              | 50.9                | 58.3                  | 173.3                   | 87.5               |
| September.....                          | 133.6              | 52.0                | 59.3                  | 175.9                   | 89.5               |
| October.....                            | 142.3              | 53.4                | 62.1                  | 178.0                   | 84.5               |
| November.....                           | 134.6              | 47.5                | 58.6                  | 174.0                   | 73.8               |
| December.....                           | 137.4              | 49.5                | 57.3                  | 170.1                   | 75.8               |

**34.—Monthly Average Prices of Flour, Bran, and Shorts at Principal Markets, 1937.**

Sources: For Montreal, the *Gazette*; for Toronto, dealers' quotations; for Winnipeg and U.S. cities, the *No. Western Miller*, Minneapolis.

NOTE.—The ton=2,000 lb. and the barrel=196 lb.

| Month.         | Montreal.                                |  |                |                | Toronto.                                      |   |                |                |
|----------------|--|--|----------------|----------------|---|---|----------------|----------------|
|                | Flour,<br>First<br>Patents. <sup>1</sup> | Flour,<br>Ontario,<br>Delivered<br>at<br>Montreal. | Bran.          | Shorts.        | Flour,<br>First<br>Patents<br>(Jute<br>Bags). | Flour,<br>First<br>Patents<br>(Cotton<br>Bags). | Bran.          | Shorts.        |
|                | per bbl.<br>\$                           | per bbl.<br>\$                                     | per ton.<br>\$ | per ton.<br>\$ | per bbl.<br>\$                                | per bbl.<br>\$                                  | per ton.<br>\$ | per ton.<br>\$ |
| January.....   | 7.46                                     | 5.58   | 33.93          | 35.01          | 7.46  | 7.60  | 33.50          | 34.75          |
| February.....  | 7.50                                     | 5.74   | 32.58          | 33.58          | 7.50  | 7.70  | 32.40          | 33.40          |
| March.....     | 7.85                                     | 5.82   | 32.75          | 33.75          | 7.85  | 8.00  | 32.50          | 33.75          |
| April.....     | 7.91                                     | 5.99   | 36.63          | 37.64          | 7.91  | 7.60  | 36.75          | 37.75          |
| May.....       | 7.58                                     | 5.82   | 35.25          | 36.25          | 7.58  | 7.50  | 35.00          | 36.00          |
| June.....      | 7.36                                     | 5.61   | 28.29          | 32.75          | 7.36  | 7.40  | 29.00          | 32.75          |
| July.....      | 8.38                                     | 6.09   | 28.37          | 33.37          | 8.38  | 8.90  | 27.25          | 32.25          |
| August.....    | 7.86                                     | 5.26   | 25.10          | 27.33          | 7.86  | 8.20  | 28.40          | 28.00          |
| September..... | 7.83                                     | 5.18   | 24.56          | 26.56          | 7.83  | 7.70  | 24.25          | 26.25          |
| October.....   | 7.99                                     | 5.12   | 25.48          | 27.48          | 7.99  | 7.90  | 25.20          | 27.20          |
| November.....  | 7.69                                     | 4.96   | 27.25          | 29.25          | 7.69  | 7.60  | 28.00          | 30.00          |
| December.....  | 7.95                                     | 4.71   | 28.25          | 30.25          | 7.95  | 7.90  | 28.00          | 30.00          |

| Month.         | Winnipeg.      |                |                | Minneapolis.   |                |                | Duluth.        |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                | Flour.         | Bran.          | Shorts.        | Flour.         | Bran.          | Shorts.        | Flour.         |
|                | per bbl.<br>\$ | per ton.<br>\$ | per ton.<br>\$ | per bbl.<br>\$ | per ton.<br>\$ | per ton.<br>\$ | per bbl.<br>\$ |
| January.....   | 7.18           | 30.00          | 32.00          | 7.85-8.10      | 34.00-34.37    | 34.00-34.50    | 7.95-8.10      |
| February.....  | 7.10           | 29.50          | 31.00          | 7.71-8.08      | 30.80-31.90    | 32.20-32.90    | 7.84-8.04      |
| March.....     | 7.48           | 29.75          | 30.75          | 7.71-8.10      | 34.00-34.25    | 35.75-36.38    | 7.93-8.08      |
| April.....     | 7.68           | 32.00          | 33.00          | 7.55-8.02      | 36.38-36.75    | 37.03-38.12    | 7.83-7.98      |
| May.....       | 7.30           | 32.00          | 33.00          | 7.30-7.75      | 33.00-32.00    | 36.70-37.30    | 7.37-7.52      |
| June.....      | 7.25           | 29.50          | 30.50          | 7.15-7.44      | 32.75-33.75    | 30.25-31.50    | 7.36-7.51      |
| July.....      | 8.37           | 27.00          | 30.25          | 7.66-7.90      | 25.75-26.25    | 32.00-32.25    | 8.27-8.43      |
| August.....    | 7.80           | 24.00          | 26.40          | 6.81-7.11      | 18.25-18.80    | 19.35-20.30    | 7.12-7.27      |
| September..... | 7.60           | 22.75          | 24.75          | 6.26-6.53      | 18.19-18.62    | 20.00-20.25    | 6.66-6.81      |
| October.....   | 7.80           | 23.00          | 25.00          | 6.02-6.24      | 19.10-19.30    | 20.10-20.40    | 6.52-6.67      |
| November.....  | 7.67           | 23.00          | 25.00          | 5.60-5.84      | 19.00-19.75    | 19.00-19.63    | 6.15-6.30      |
| December.....  | 7.60           | 23.00          | 25.00          | 5.81-5.98      | 18.87-19.37    | 18.87-19.37    | 6.10-6.34      |

<sup>1</sup> Carload lots—Montreal rate points, which includes the Toronto district also.



## 35.—Yearly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1936.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

| Item.                                | Toronto. | Montreal. | Winnipeg. | Edmonton. |
|--------------------------------------|----------|-----------|-----------|-----------|
|                                      | \$       | \$        | \$        | \$        |
| Steers, up to 1,050 lb., good.....   | 5-04     | 5-64      | 4-49      | 4-10      |
| Steers, up to 1,050 lb., medium..... | 4-59     | 4-80      | 3-67      | 3-52      |
| Steers, up to 1,050 lb., common..... | 3-75     | 3-85      | 2-99      | 2-62      |
| Steers, over 1,050 lb., good.....    | 5-41     | 5-67      | 4-54      | 4-14      |
| Steers, over 1,050 lb., medium.....  | 5-05     | 4-81      | 3-71      | 3-63      |
| Steers, over 1,050 lb., common.....  | 4-53     | 3-89      | 2-81      | 2-54      |
| Heifers, good.....                   | 5-01     | 4-66      | 3-77      | 3-39      |
| Heifers, medium.....                 | 4-59     | 3-78      | 2-98      | 2-81      |
| Calves, fed, good.....               | 6-26     | 6-23      | 5-28      | 4-26      |
| Calves, fed, medium.....             | 5-63     | 5-12      | 4-05      | 3-50      |
| Calves, veal, good and choice.....   | 8-30     | 7-38      | 5-68      | 4-27      |
| Calves, veal, common and medium..... | 6-53     | 5-78      | 3-76      | 3-05      |
| Cows, good.....                      | 3-54     | 3-61      | 2-85      | 2-84      |
| Cows, medium.....                    | 3-07     | 3-21      | 2-27      | 1-78      |
| Bulls, good.....                     | 8-52     | 3-87      | 2-48      | 2-12      |
| Stock and feeder steers, good.....   | 3-95     | 2         | 3-27      | 2-89      |
| Stock and feeder steers, common..... | 3-38     | 2         | 2-00      | 2-01      |
| Stock cows and heifers, good.....    | 3-00     | 2         | 2-30      | 1-99      |
| Stock cows and heifers, common.....  | 1-68     | 2         | 1-60      | 1-44      |
| Hogs, select bacon.....              | 8-94     | 9-30      | 8-38      | 8-16      |
| Hogs, bacon.....                     | 8-43     | 8-81      | 7-87      | 7-65      |
| Hogs, butchers.....                  | 1        | 8-36      | 7-37      | 7-22      |
| Hogs, heavies.....                   | 1        | 8-40      | 7-65      | 6-77      |
| Hogs, lights and feeders.....        | 1        | 8-40      | 7-34      | 6-93      |
| Lambs, good handy weights.....       | 8-77     | 7-80      | 6-86      | 6-23      |
| Lambs, common, all weights.....      | 6-66     | 6-28      | 4-89      | 4-26      |
| Sheep, good handy weights.....       | 3-98     | 4-02      | 2-42      | 3-35      |

1 Bacon price less \$1 per head.

2 No sales reported.

## 36.—Monthly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1937.

| Market and Item.                   | Jan.  | Feb. | Mar.  | April. | May. | June. | July. | Aug.  | Sept. | Oct. | Nov. | Dec. |
|------------------------------------|-------|------|-------|--------|------|-------|-------|-------|-------|------|------|------|
|                                    | \$    | \$   | \$    | \$     | \$   | \$    | \$    | \$    | \$    | \$   | \$   | \$   |
| <b>Montreal—</b>                   |       |      |       |        |      |       |       |       |       |      |      |      |
| Steers, up to 1,050 lb., good..... | 6-34  | 6-80 | 7-13  | 8-02   | 8-01 | 8-59  | 8-40  | 8-31  | 8-09  | 7-91 | 7-06 | 6-90 |
| Heifers, good.....                 | 5-14  | 5-30 | 5-73  | 6-37   | 6-62 | 7-08  | 6-71  | 6-49  | 5-64  | 5-07 | 5-24 | 5-35 |
| Calves, veal, good and choice..... | 9-98  | 9-62 | 7-97  | 6-97   | 7-10 | 7-58  | 7-58  | 8-61  | 8-92  | 9-19 | 9-48 | 9-81 |
| Hogs, bacon.....                   | 8-68  | 8-57 | 8-88  | 9-23   | 9-14 | 9-52  | 10-19 | 10-46 | 10-26 | 9-11 | 8-30 | 8-67 |
| Hogs, butchers.....                | 8-19  | 8-07 | 8-38  | 8-74   | 8-63 | 9-05  | 9-71  | 9-97  | 9-75  | 8-62 | 7-80 | 8-17 |
| Lambs, good handy weights.....     | 8-67  | 9-21 | 9-32  | 1      | 1    | 10-61 | 8-91  | 8-57  | 8-51  | 7-96 | 7-69 | 8-00 |
| Sheep, good handy weights.....     | 4-08  | 4-09 | 5-24  | 5-17   | 4-78 | 3-99  | 3-40  | 3-76  | 3-75  | 3-61 | 3-67 | 3-92 |
| <b>Toronto—</b>                    |       |      |       |        |      |       |       |       |       |      |      |      |
| Steers, up to 1,050 lb., good..... | 5-74  | 5-73 | 6-32  | 7-13   | 7-34 | 7-95  | 7-50  | 7-56  | 7-12  | 6-19 | 5-74 | 5-67 |
| Heifers, good.....                 | 5-63  | 5-61 | 6-20  | 7-11   | 7-28 | 7-87  | 7-32  | 7-37  | 7-08  | 6-13 | 5-87 | 5-71 |
| Calves, veal, good and choice..... | 10-93 | 9-41 | 9-24  | 9-19   | 8-37 | 7-78  | 8-17  | 9-28  | 9-52  | 9-61 | 9-63 | 9-71 |
| Hogs, bacon.....                   | 8-53  | 8-28 | 8-51  | 8-75   | 8-85 | 9-25  | 10-24 | 10-62 | 10-52 | 8-74 | 8-20 | 8-32 |
| Hogs, butchers.....                | 2     | 2    | 2     | 2      | 2    | 2     | 2     | 2     | 2     | 2    | 7-65 | 7-77 |
| Lambs, good handy weights.....     | 9-81  | 9-04 | 10-08 | 10-88  | 2    | 11-71 | 10-90 | 9-45  | 8-62  | 7-84 | 7-82 | 7-68 |
| Sheep, good handy weights.....     | 5-32  | 5-11 | 5-21  | 5-61   | 4-43 | 3-30  | 3-56  | 3-83  | 4-04  | 3-94 | 4-19 | 4-24 |
| <b>Winnipeg—</b>                   |       |      |       |        |      |       |       |       |       |      |      |      |
| Steers, up to 1,050 lb., good..... | 5-32  | 5-44 | 6-22  | 6-66   | 6-99 | 7-50  | 7-24  | 7-02  | 6-71  | 5-65 | 5-40 | 5-23 |
| Heifers, good.....                 | 4-40  | 4-48 | 5-17  | 5-63   | 6-06 | 6-38  | 5-56  | 5-81  | 4-86  | 4-28 | 4-30 | 4-34 |
| Calves, veal, good and choice..... | 7-69  | 7-20 | 6-53  | 6-33   | 6-49 | 5-73  | 5-11  | 5-83  | 6-12  | 6-42 | 6-81 | 7-98 |
| Hogs, bacon.....                   | 7-71  | 7-74 | 8-10  | 8-41   | 8-05 | 8-60  | 9-37  | 9-97  | 9-32  | 7-98 | 7-78 | 8-63 |
| Hogs, butchers.....                | 7-21  | 7-24 | 7-60  | 7-91   | 7-55 | 8-10  | 8-91  | 9-49  | 8-81  | 7-48 | 7-28 | 7-53 |
| Lambs, good handy weights.....     | 8-06  | 8-43 | 8-62  | 7-96   | 9-97 | 8-67  | 8-15  | 7-78  | 7-07  | 6-22 | 6-72 | 6-82 |
| Sheep, good handy weights.....     | 2-51  | 2-90 | 3-03  | 3-29   | 3-98 | 3-93  | 2-83  | 2-81  | 2-72  | 2-67 | 2-75 | 2-74 |

1 Spring lambs, per head: April, \$6-75-\$7-20; May \$4-40-\$7-25.

2 Spring lambs per head: \$5-\$11.

3 Bacon price less \$1 per head.

## 36.—Monthly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1937—concluded.

| Market and Item.                   | Jan. | Feb. | Mar. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|------------------------------------|------|------|------|--------|------|-------|-------|------|-------|------|------|------|
| <b>Calgary—</b>                    | \$   | \$   | \$   | \$     | \$   | \$    | \$    | \$   | \$    | \$   | \$   | \$   |
| Steers, up to 1,050 lb., good..... | 5-38 | 5-52 | 5-87 | 7-55   | 8-07 | 7-89  | 7-22  | 6-93 | 6-21  | 5-14 | 4-78 | 4-75 |
| Heifers, good.....                 | 4-39 | 4-75 | 5-33 | 6-68   | 7-02 | 7-15  | 5-64  | 5-48 | 4-85  | 4-47 | 4-08 | 4-00 |
| Calves, veal, good and choice..... | 5-68 | 6-50 | 7-25 | 7-11   | 7-78 | 5-61  | 4-90  | 5-25 | 5-30  | 5-25 | 4-70 | 4-50 |
| Hogs, bacon.....                   | 7-60 | 7-50 | 7-66 | 7-95   | 7-72 | 8-15  | 8-96  | 9-71 | 9-18  | 8-12 | 7-66 | 7-79 |
| Hogs, butchers.....                | 7-09 | 6-99 | 7-17 | 7-45   | 7-22 | 7-65  | 8-46  | 9-21 | 8-66  | 7-68 | 7-10 | 7-29 |
| Lambs, good handy weights.....     | 7-22 | 7-75 | 7-75 | 8-23   | 8-97 | 9-18  | 7-42  | 6-49 | 6-28  | 6-33 | 5-81 | 6-00 |
| Sheep, good handy weights.....     | 3-50 | 1    | 3-02 | 3-50   | 4-00 | 5-27  | 4-06  | 3-42 | 2-81  | 2-75 | 2-75 | 2-75 |
| <b>Edmonton—</b>                   |      |      |      |        |      |       |       |      |       |      |      |      |
| Steers, up to 1,050 lb., good..... | 5-33 | 5-30 | 6-28 | 7-52   | 7-75 | 7-66  | 5-91  | 5-33 | 5-66  | 5-12 | 5-12 | 5-25 |
| Heifers, good.....                 | 4-25 | 4-37 | 5-25 | 6-04   | 6-63 | 6-72  | 5-01  | 4-57 | 4-60  | 3-72 | 3-90 | 4-45 |
| Calves, veal, good and choice..... | 6-25 | 6-50 | 7-00 | 6-63   | 7-27 | 5-42  | 5-25  | 5-35 | 5-75  | 5-72 | 5-50 | 5-74 |
| Hogs, bacon.....                   | 7-37 | 7-46 | 7-78 | 8-02   | 7-73 | 8-27  | 9-10  | 9-59 | 9-78  | 7-88 | 7-69 | 7-81 |
| Hogs, butchers.....                | 6-86 | 6-95 | 7-31 | 7-52   | 7-24 | 7-77  | 8-62  | 9-08 | 8-68  | 7-49 | 7-20 | 7-29 |
| Lambs, good handy weights.....     | 7-27 | 7-73 | 8-10 | 8-53   | 8-75 | 7-75  | 7-25  | 6-35 | 5-86  | 6-00 | 5-00 | 6-00 |
| Sheep, good handy weights.....     | 3-59 | 4-00 | 4-33 | 4-50   | 4-50 | 3-47  | 3-00  | 2-89 | 2-81  | 3-16 | 3-50 | 3-50 |

1 No sales reported.

**Index Numbers of Agricultural Prices.**—Records of the average prices received by farmers for their crops have been collected annually since 1909 through the crop correspondents of the Census and Statistics Office or the Dominion Bureau of Statistics. From these records, annual index numbers of prices have been calculated for each crop and for the field crops as a whole. The results of these calculations using the year 1926 as the base period, are presented in Table 37. In addition to the price indexes shown here, index numbers have been calculated of the yields of the various crops from year to year, and, by a combination of the prices and yields, index numbers of the value of all field crops, weighted according to quantities, have been obtained. Indexes of yield and value are not shown here, owing to lack of space, but appear at pp. 30-32 of the Monthly Bulletin of Agricultural Statistics, January, 1938.

## 37.—Index Numbers of Producers' Prices of Agricultural Commodities, for Canada, 1915-37.

NOTE.—Average prices, 1926=100. For the formulas used in the calculation, see Monthly Bulletin of Agricultural Statistics, January, 1937, p. 28.

| Field Crop.           | Average Price 1926.1 | Index Numbers. |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------|----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                       |                      | 1915.          | 1916. | 1917. | 1918. | 1919. | 1920. | 1921. | 1922. | 1923. | 1924. | 1925. |       |
| Wheat.....            | \$                   | 1-09           | 83-5  | 120-2 | 178-0 | 185-3 | 217-4 | 148-6 | 74-3  | 78-0  | 61-5  | 111-9 | 112-8 |
| Oats.....             | 0-48                 | 75-0           | 106-3 | 143-8 | 163-5 | 166-7 | 110-4 | 70-8  | 79-2  | 68-8  | 102-1 | 87-5  | 87-5  |
| Barley.....           | 0-52                 | 100-0          | 158-8 | 207-7 | 192-3 | 230-5 | 159-6 | 90-4  | 83-5  | 80-8  | 134-6 | 101-9 | 101-9 |
| Rye.....              | 0-77                 | 100-0          | 142-9 | 210-4 | 193-5 | 181-1 | 172-7 | 93-5  | 75-3  | 68-6  | 126-6 | 100-0 | 94-3  |
| Peas.....             | 1-75                 | 94-3           | 126-9 | 202-3 | 170-9 | 163-4 | 138-3 | 112-0 | 105-1 | 98-3  | 100-0 | 94-3  | 94-3  |
| Beans.....            | 2-64                 | 115-5          | 204-5 | 282-2 | 204-9 | 169-7 | 147-0 | 109-8 | 103-0 | 100-8 | 104-9 | 97-7  | 97-7  |
| Buckwheat.....        | 0-87                 | 86-2           | 123-0 | 167-8 | 181-6 | 172-4 | 147-1 | 102-3 | 96-6  | 96-6  | 102-3 | 97-7  | 97-7  |
| Mixed grains.....     | 0-66                 | 86-4           | 133-3 | 175-8 | 172-7 | 206-1 | 136-4 | 93-8  | 90-9  | 89-4  | 107-6 | 96-8  | 96-8  |
| Flaxseed.....         | 1-62                 | 98-2           | 125-9 | 163-6 | 193-2 | 254-9 | 119-8 | 83-9  | 106-2 | 109-3 | 119-8 | 114-2 | 114-2 |
| Corn for husking..... | 1-00                 | 71-0           | 107-0 | 184-0 | 175-0 | 134-0 | 116-0 | 83-0  | 83-0  | 92-0  | 119-0 | 94-0  | 94-0  |
| Potatoes.....         | 1-47                 | 68-0           | 91-8  | 115-0 | 110-9 | 107-5 | 110-2 | 87-1  | 61-2  | 69-4  | 57-8  | 140-1 | 140-1 |
| Turnips, etc.....     | 0-60                 | 80-0           | 130-0 | 153-3 | 141-7 | 163-3 | 138-3 | 111-7 | 90-9  | 98-3  | 73-3  | 80-0  | 80-0  |
| Hay and clover.....   | 12-13                | 118-4          | 95-6  | 85-2  | 134-0 | 170-8 | 215-2 | 194-2 | 111-0 | 90-4  | 91-3  | 85-3  | 85-3  |
| Grain hay.....        | 10-11                | 1              | 1     | 1     | 1     | 286-6 | 327-6 | 1     | 127-3 | 34-5  | 91-5  | 91-5  | 91-5  |
| Alfalfa.....          | 13-30                | 95-3           | 80-4  | 87-1  | 134-1 | 164-3 | 178-8 | 150-0 | 96-0  | 87-1  | 88-0  | 95-6  | 95-6  |
| Sodder corn.....      | 4-38                 | 100-8          | 109-3 | 105-3 | 126-0 | 141-8 | 158-8 | 144-5 | 101-8 | 94-7  | 104-9 | 82-6  | 82-6  |
| Sugar beets.....      | 6-45                 | 85-3           | 96-1  | 104-7 | 158-9 | 168-4 | 198-4 | 100-8 | 122-2 | 100-5 | 105-3 | 94-2  | 94-2  |
| All Field Crops.....  | -                    | 83-7           | 106-7 | 138-7 | 158-5 | 178-7 | 149-3 | 101-1 | 86-6  | 72-4  | 102-3 | 102-1 | 102-1 |

1 Prices quoted are per bushel, except for potatoes and turnips, etc., which are per cwt., and the last five items, which are per ton. For details of index numbers by provinces, see Monthly Bulletin of Agricultural Statistics, January, 1938, pp. 30-37.

2 Not available.

### 37.—Index Numbers of Producers' Prices of Agricultural Commodities, for Canada, 1915-37—concluded.

| Field Crop.           | 1926. | 1927. | 1928. | 1929. | 1930. | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. <sup>1</sup> | 1937. <sup>2</sup> |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|--------------------|
| Wheat.....            | 100-0 | 91-7  | 73-4  | 96-3  | 44-9  | 34-9  | 32-1  | 44-9  | 56-0  | 56-0  | 86-2               | 91-7               |
| Oats.....             | 100-0 | 106-3 | 97-9  | 122-9 | 50-0  | 50-0  | 39-6  | 54-2  | 66-7  | 50-0  | 89-6               | 89-6               |
| Barley.....           | 100-0 | 126-9 | 107-7 | 113-5 | 38-5  | 50-0  | 44-2  | 57-7  | 90-4  | 55-8  | 132-7              | 98-1               |
| Rye.....              | 100-0 | 106-5 | 102-6 | 109-1 | 26-0  | 36-4  | 35-1  | 49-3  | 63-6  | 35-1  | 90-9               | 94-8               |
| Pens.....             | 100-0 | 100-6 | 105-7 | 117-7 | 84-0  | 48-0  | 48-6  | 57-1  | 60-0  | 62-3  | 92-6               | 96-0               |
| Beans.....            | 100-0 | 87-9  | 135-2 | 125-0 | 86-0  | 26-1  | 20-8  | 37-5  | 50-4  | 55-3  | 77-3               | 46-6               |
| Buckwheat.....        | 100-0 | 102-3 | 106-9 | 108-0 | 74-7  | 57-5  | 49-4  | 57-6  | 60-9  | 58-6  | 81-6               | 81-6               |
| Mixed grains.....     | 100-0 | 109-0 | 107-8 | 115-2 | 63-6  | 56-1  | 50-0  | 60-6  | 62-1  | 54-5  | 84-8               | 77-3               |
| Flaxseed.....         | 100-0 | 95-7  | 98-1  | 146-9 | 58-0  | 48-8  | 38-3  | 74-1  | 71-0  | 73-5  | 88-9               | 93-2               |
| Corn for husking..... | 100-0 | 99-0  | 112-0 | 106-0 | 87-0  | 42-0  | 45-0  | 59-0  | 65-0  | 45-0  | 70-0               | 61-0               |
| Potatoes.....         | 100-0 | 79-6  | 54-4  | 108-2 | 56-5  | 29-2  | 42-9  | 52-4  | 34-0  | 54-4  | 77-6               | 43-5               |
| Turnips, etc.....     | 100-0 | 76-7  | 78-3  | 88-3  | 73-3  | 46-7  | 45-0  | 56-7  | 51-7  | 53-3  | 58-3               | 55-0               |
| Hay and clover.....   | 100-0 | 85-8  | 85-5  | 96-0  | 81-0  | 62-8  | 58-5  | 72-3  | 96-9  | 62-8  | 63-1               | 61-6               |
| Grain hay.....        | 100-0 | 100-0 | 99-7  | 95-0  | 66-6  | 60-6  | 58-8  | 67-9  | 70-4  | 60-5  | 63-4               | 61-6               |
| Alfalfa.....          | 100-0 | 90-5  | 86-5  | 94-1  | 91-1  | 78-0  | 64-5  | 69-5  | 95-3  | 51-8  | 69-1               | 60-5               |
| Fodder corn.....      | 100-0 | 91-6  | 96-1  | 106-2 | 101-0 | 81-4  | 56-4  | 67-2  | 84-4  | 68-0  | 69-3               | 63-1               |
| Sugar beets.....      | 100-0 | 120-8 | 112-4 | 119-2 | 106-5 | 94-9  | 96-6  | 93-6  | 87-4  | 84-3  | 80-0               | 92-9               |
| All Field Crops.....  | 100-0 | 96-5  | 84-6  | 104-9 | 57-8  | 46-9  | 43-1  | 55-7  | 67-4  | 55-9  | 89-9               | 76-5               |

<sup>1</sup> Most of the figures for 1936 have been revised since the publication of the 1937 Year Book.

<sup>2</sup> Subject to revision.

The general index number fell from 1924 to 1928, especially from 1926 to 1928, recovered strongly in 1929 but declined rapidly to reach the record low of 43.1 for the 1932 crops. All the crops contributed to this sharp decline, although the grain crops dependent upon overseas markets suffered the most. The forage crops and sugar beets, which are used within the country, held up well in price, partly owing to the fact that climatic conditions did not favour high yields in these years.

During the next two years there was considerable improvement in the prices of these field crops. Fodder and hay prices rose materially because of short crops and good demand. The general index rose from 43.1 in 1932 to 67.4 in 1934. The decline to 55.9 in 1935 was mainly due to increased production and consequent lower prices of coarse grains and forage crops, while sharply increased prices, especially for the grain crops, brought the index up to 80.9 for 1936, the highest point since 1929.

#### Subsection 9.—Agricultural Statistics of the Census.

A summary of the more important agricultural statistics compiled from the Census of 1931 was published at pp. 295-301 of the 1934-35 edition of the Year Book. The review included statistics of tenure of farms; farm values; mortgage indebtedness; farm expenditures; farm population; farm workers; and cost of labour, farm machinery, and facilities. In the 1937 edition of the Year Book, further statistics were presented at pp. 270-273 which showed for the Prairie Provinces, comparative figures of population, farm holdings, areas, and values, the condition of farm land, the numbers of live stock, and the acreages of the principal crops, for each of the census years 1936, 1931, 1926, 1921, and 1911.

#### Subsection 10.—Miscellaneous Agricultural Statistics.

**Agricultural Irrigation.**—*Alberta.*\*—The surface waters in Alberta are vested in the Crown and are administered by the Water Resources Office under the Water Resources Act. All matters affecting the control of water supply generally, as well as the inspection and authorization of works for the use of water for domestic, municipal, industrial, irrigation, and other purposes, and the granting of licences

\* Revised by L. C. Charlesworth, Director of Water Resources, Edmonton, Alberta.

for such purposes are dealt with thereunder. The Director of Water Resources at Edmonton is responsible for all field administration. The Irrigation Districts Act of Alberta (R.S.A., 1922, c. 114) and amending statutes provide for the formation of irrigation districts, and authorize the raising of loans under by-laws adopted by the voters of the district. Table 38 gives statistics of the larger irrigation projects in Alberta for the years 1935 and 1936.

38.—Major Irrigation Projects in Southern Alberta, 1935 and 1936.

| Project.                 | Source of Supply.   | 1935.           |                   |                         | 1936.           |                   |                         |
|--------------------------|---------------------|-----------------|-------------------|-------------------------|-----------------|-------------------|-------------------------|
|                          |                     | Irrigable Area. | Length of Canals. | Area Irrigated in 1935. | Irrigable Area. | Length of Canals. | Area Irrigated in 1936. |
|                          |                     | acres.          | miles.            | acres.                  | acres.          | miles.            | acres.                  |
| C.P.R. Western.....      | Bow river.....      | 218,980         | 1,566             | 19,109                  | 218,980         | 1,347             | 44,614                  |
| C.P.R. Lethbridge.....   | St. Mary river..... | 100,000         | 196               | 70,000                  | 100,000         | 196               | 75,274                  |
| Canada Land.....         | Bow river.....      | 130,000         | 453               | 22,694                  | 130,000         | 453               | 24,453                  |
| Taber.....               | St. Mary river..... | 21,499          | 96                | 19,471                  | 21,499          | 96                | 19,123                  |
| Lethbridge Northern..... | Oldman river.....   | 96,871          | 600               | 73,022                  | 96,777          | 600               | 62,700                  |
| United.....              | Belly river.....    | 34,166          | 175               | 12,000                  | 34,166          | 175               | 18,000                  |
| New West.....            | Bow river.....      | 4,563           | 24                | 2,066                   | 4,563           | 24                | 2,207                   |
| Magrath.....             | St. Mary river..... | 6,975           | 90                | 4,000                   | 6,975           | 90                | 4,000                   |
| Raymond.....             | St. Mary river..... | 15,130          | 16                | 13,000                  | 15,130          | 16                | 13,000                  |
| Mountain View.....       | Belly river.....    | 3,500           | 22                | 3,000                   | 3,500           | 22                | 2,900                   |
| Little Bow.....          | Highwood river..... | 3,093           | 2.5               | 300                     | 3,093           | 2.5               | 200                     |
| Eastern.....             | Bow river.....      | 250,000         | 1,904             | 143,997                 | 250,000         | 1,904             | 111,751                 |

The Canadian Pacific Railway Co. has constructed three large projects known as the Eastern, Western, and Lethbridge sections, the last-named being the oldest irrigation project in Alberta. In 1935 the interests of the Company in the Eastern project were transferred to the water contract holders, who are now operating under the name of the Eastern Irrigation District. By agreement with the Canadian Pacific Railway Co., the Taber, Magrath, and Raymond irrigation districts procure their water supply from the main canal of the Lethbridge section, a further 43,603 acres being served by the canals of these districts.

The total irrigable area served by the Canada Land and Irrigation Co.'s project is 130,000 acres, while the New West Irrigation District, by agreement with the Canada Land and Irrigation Co., receives a water supply for a further irrigable area of 4,563 acres.

In addition to the irrigated tracts enumerated in the foregoing table, there are approximately 360 privately-owned projects in Alberta, with a possible irrigable area of 56,724 acres.

*British Columbia.\**—The surface waters of British Columbia are vested in the Crown in the right of the province and are administered by the Water Rights Branch of the Department of Lands under the Water Act, the Drainage Dyking and Development Act and the Ditches and Watercourses Act. The administration of the Acts is vested in the Comptroller of Water Rights and the Water Board, the latter comprising a Chairman, the Comptroller of Water Rights and the Chief Engineer of the Branch.

Licences to use water for irrigation are issued by the Comptroller of Water Rights, and since 1858, when the first right to use water was given, upwards of 9,000 irrigation licences have been issued.

\* Revised by J. C. MacDonald, Comptroller of Water Rights, Department of Lands, Victoria, British Columbia.

There are several forms of organization operating irrigation systems in British Columbia, and Table 39 gives statistics of the larger irrigation projects for the year 1937.

39.—Major Irrigation Projects in British Columbia, 1937.

| Project.  | Source of Supply.                          | Irrigable Area. | Irrigated Area. | Locality.                    |
|---|--|-----------------|-----------------|------------------------------|
|   |  | acres.          | acres.          |                              |
| <b>PROVINCIAL.</b>                                |  |                 |                 |                              |
| South Okanagan.....                               | Okanagan river.....                        | 6,000           | 3,520           | Oliver,<br>Okanagan valley.  |
| <b>MUNICIPAL.</b>                                 |  |                 |                 |                              |
| Pentiction municipality....                       | Pentiction and Ellis creeks                | 2,576           | 2,464           | Okanagan valley.             |
| Summerland municipality..                         | Trout and Eneas creeks..                   | 5,000           | 3,300-6         | Okanagan valley.             |
| <b>IRRIGATION DISTRICTS<br/>(CO-OPERATIVE).</b>   |  |                 |                 |                              |
| Black Mountain.....                               | Belgo creek.....                           | 4,607           | 3,685-46        | Okanagan valley.             |
| Cawston.....                                      | Similkameen river.....                     | 900             | 203-53          | Similkameen valley.          |
| East Creston.....                                 | Arrow creek.....                           | 1,700           | 1,113-6         | South end, Kootenay<br>lake. |
| Girouard.....                                     | Swan Lake creek.....                       | 134             | 110             | Okanagan valley.             |
| Glenmore.....                                     | Kelowna creek.....                         | 2,524           | 1,836           | Okanagan valley.             |
| Grand Forks.....                                  | Kettle river.....                          | 2,733           | 2,090-5         | Kettle valley.               |
| Hedley Creek.....                                 | Hedley creek and N.<br>Thompson river..... | 2,700           | 1,390           | N. Thompson valley.          |
| Kaloden.....                                      | Marron creek.....                          | 543             | 376             | Okanagan valley.             |
| Keremeos.....                                     | Ashnola river and Kere-<br>meos creek..... | 1,000           | 762             | Similkameen valley.          |
| Malcolm Horie.....                                | Joseph creek.....                          | 300             | 158-8           | Near Cranbrook.              |
| Marble Canyon.....                                | Pavilion creek.....                        | 1,360           | 920-2           | Pavilion.                    |
| Naramata.....                                     | Lequint and<br>Robinson creeks.....        | 1,061           | 887-09          | Okanagan valley.             |
| Okanagan Falls.....                               | Shuttleworth creek.....                    | 194             | 194             | Okanagan valley.             |
| Oyama.....  | Oyama creek.....                           | 391             | 353-83          | Okanagan valley.             |
| Peachland.....                                    | Peachland creek.....                       | 738             | 331-4           | Okanagan valley.             |
| Robson.....                                       | Pass creek.....                            | 261             | 250             | Lower Arrowlake.             |
| Sooty Creek.....                                  | Sooty creek.....                           | 879             | 650-5           | Okanagan valley.             |
| S. B. Kelowna.....                                | Hydraulic creek.....                       | 4,626           | 2,275           | Okanagan valley.             |
| Trout Creek.....                                  | Trout creek.....                           | 354             | 276-16          | Okanagan valley.             |
| Vernon.....                                       | Jones and Coldstream<br>creeks.....        | 12,161          | 6,000           | Okanagan valley.             |
| Vinsulla.....                                     | N. Thompson river.....                     | 553             | 425             | N. Thompson valley.          |
| Westbank.....                                     | Powers creek.....                          | 726             | 556-14          | Okanagan valley.             |
| Winfield and<br>Okanagan Centre.....              | Vernon creek.....                          | 2,000           | 1,814-03        | Okanagan valley.             |
| Wynadel.....                                      | Duck creek.....                            | 625             | 151             | South end, Kootenay<br>lake. |
| <b>WATER-USERS' COMMUNITY<br/>(CO-OPERATIVE).</b> |  |                 |                 |                              |
| Benvoulin.....                                    | Mission creek.....                         | 476             | 476             | Okanagan valley.             |
| Brent Davis<br>Canyon.....                        | Mission creek.....                         | 415-7           | 415-7           | Okanagan valley.             |
|   | Camp Run and<br>Association creeks.....    | 656             | 361-9           | Near Creston.                |
| Dog Creek.....                                    | Dog creek.....                             | 319             | 288-9           | Upper Fraser valley.         |
| Guisachan.....                                    | Mission creek.....                         | 332-5           | 332-5           | Okanagan valley.             |
| Kelowna.....                                      | Mission creek.....                         | 60              | 60              | Okanagan valley.             |
| Mission Creek.....                                | Mission creek.....                         | 594             | 436             | Okanagan valley.             |
| Okanagan Mission (South).....                     | Bellevue creek.....                        | 179             | 179             | Okanagan valley.             |
| Powers Creek.....                                 | Powers creek.....                          | 200             | 144             | Okanagan valley.             |
| Sawmill Creek.....                                | Bellevue creek.....                        | 132-5           | 132-5           | Okanagan valley.             |
| Smithson-Alphonse.....                            | Mission creek.....                         | 327             | 419-08          | Okanagan valley.             |
| South Vernon.....                                 | Mission creek.....                         | 192             | 192             | Okanagan valley.             |
| Trepanier.....                                    | Long Lake creek.....                       | 207-6           | 207-6           | Okanagan valley.             |
| Trouson.....                                      | Trepanier creek.....                       | 99-2            | 99-2            | Okanagan valley.             |
| Upper Bankhead.....                               | Long Lake creek.....                       | 127-5           | 127-5           | Okanagan valley.             |
|   | Mission and Kelowna<br>creeks.....         | 108-8           | 108-8           | Okanagan valley.             |

## 39.—Major Irrigation Projects in British Columbia, 1937—concluded.

| Project.                                 | Source of Supply.                        | Irrigable Area. | Irrigated Area. | Locality.        |
|--|--|-----------------|-----------------|------------------|
|  |  | acres.          | acres.          |                  |
| IRRIGATION COMPANIES.                    |  |                 |                 |                  |
| B.C. Fruitland Co.....                   | Jamieson creek and N. Thompson river.... | 6,000           | 2,627-37        | Near Kamloops.   |
| Columbia V. Irrigated Fruitlands Co..... | Bruce creek.....                         | 3,780           | 1               | Columbia valley. |
| Edgewater Irrigated Farms, Ltd.....      | Vermilion creek.....                     | 940             | 1               | Columbia valley. |
| Okanagan Development and Orchard Co..... | Kelowna creek.....                       | 907             | 651-2           | Okanagan valley. |
| Woods Lake Water Co.....                 | Oyama creek.....                         | 2,100           | 792-03          | Okanagan valley. |

<sup>1</sup> Not reported.

**Average Values of Farm Lands.**—Statistics showing the average values of farm lands in Canada in 1910 and from 1919 to 1937, are given in Table 40. The values are as estimated by crop correspondents and show the rise in land values between 1910 and 1920, the general decline with moderate fluctuations from 1920 to 1929, and the rapid fall since 1929 to a point below the 1910 level for the country as a whole.

40.—Average Values per Acre of Occupied Farm Lands<sup>1</sup> in Canada, as Estimated by Crop Correspondents, 1910 and 1919-37.

| Province.  | 1910 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924            | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 |
|------------|------|------|------|------|------|------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|            | \$   | \$   | \$   | \$   | \$   | \$   | \$              | \$   | \$   | \$   | \$   | \$   | \$   | \$   | \$   | \$   | \$   | \$   | \$   | \$   |
| P.E.I..... | 31   | 51   | 49   | 46   | 45   | 51   | 40              | 45   | 46   | 41   | 44   | 43   | 42   | 34   | 31   | 32   | 34   | 31   | 31   | 34   |
| N.S.....   | 25   | 41   | 43   | 35   | 34   | 31   | 33              | 37   | 36   | 37   | 34   | 36   | 30   | 29   | 28   | 26   | 27   | 31   | 35   | 32   |
| N.B.....   | 19   | 32   | 35   | 28   | 32   | 32   | 27              | 34   | 31   | 30   | 31   | 35   | 28   | 26   | 24   | 24   | 24   | 25   | 28   | 26   |
| Que.....   | 43   | 72   | 70   | 59   | 58   | 56   | 53              | 54   | 53   | 57   | 54   | 55   | 48   | 40   | 37   | 36   | 34   | 41   | 38   | 40   |
| Ont.....   | 48   | 66   | 70   | 63   | 64   | 64   | 65              | 67   | 62   | 65   | 62   | 60   | 52   | 46   | 38   | 38   | 41   | 42   | 44   | 46   |
| Man.....   | 29   | 35   | 39   | 35   | 32   | 28   | 28              | 29   | 29   | 27   | 27   | 26   | 22   | 18   | 16   | 16   | 17   | 17   | 16   | 17   |
| Sask.....  | 22   | 32   | 32   | 29   | 28   | 24   | 24 <sup>1</sup> | 24   | 25   | 26   | 27   | 25   | 22   | 19   | 10   | 16   | 16   | 17   | 15   | 15   |
| Alta.....  | 24   | 29   | 32   | 28   | 24   | 24   | 25              | 26   | 26   | 26   | 28   | 28   | 24   | 20   | 17   | 16   | 16   | 16   | 16   | 16   |
| B.C.....   | 74   | 174  | 175  | 122  | 120  | 100  | 96              | 88   | 80   | 89   | 90   | 90   | 76   | 74   | 65   | 65   | 60   | 58   | 60   | 58   |
| Totals...  | 33   | 46   | 48   | 40   | 40   | 37   | 37              | 38   | 37   | 38   | 38   | 37   | 32   | 28   | 24   | 24   | 23   | 24   | 24   | 24   |

<sup>1</sup> Orchards and fruit lands, 1937, with 1936 in parentheses: Nova Scotia \$96 (\$94); Ontario \$39 (\$38); British Columbia \$261 (\$266).

<sup>2</sup> Actual returns were not collected from crop correspondents in Saskatchewan for 1924, and the estimate of 1924 is interpolated.

## Subsection 11.—International Agricultural Statistics.

**World Production of Cereals and Potatoes.**—Table 41, constructed from data published by the International Institute of Agriculture, shows the areas and yields of wheat, oats, barley, rye, corn, and potatoes for the years 1936 and 1937 in countries of the Northern Hemisphere, and for the years 1936-37 and 1937-38 in countries of the Southern Hemisphere. The annual average acreages and yields are also given for the five-year period, 1931-35 (1931-32 to 1935-36), and the areas and yields of 1937 (1937-38) are compared in percentages with those of the five-year period.

41.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1936 and 1937, with Five-Year Averages for 1931-35.

| Crop and Country.                       | Acreages.          |             |                  |                         | Yields.            |          |                  |                          |
|---|--------------------|-------------|------------------|-------------------------|--------------------|----------|------------------|--------------------------|
|   | 1936. <sup>1</sup> | 1937.       | Average 1931-35. | 1937 in p.c. of Average | 1936. <sup>1</sup> | 1937.    | Average 1931-35. | 1937 in p.c. of Average. |
|   | '000 acres.        | '000 acres. | '000 acres.      | p.c.                    | '000 bu.           | '000 bu. | '000 bu.         | p.c.                     |
| <b>Wheat—</b>                           |                    |             |                  |                         |                    |          |                  |                          |
| <b>NORTHERN HEMISPHERE.</b>             |                    |             |                  |                         |                    |          |                  |                          |
| <b>EUROPE.</b>                          |                    |             |                  |                         |                    |          |                  |                          |
| Albania.....                            | 90                 | 87          | 99               | 94.9                    | 1,129              | 1,293    | 1,684            | 76.8                     |
| Austria.....                            | 624                | 642         | 554              | 116.0                   | 14,040             | 14,469   | 13,327           | 108.6                    |
| Belgium.....                            | 424                | 423         | 391              | 108.4                   | 16,153             | 15,550   | 15,424           | 100.8                    |
| Bulgaria.....                           | 2,955              | 2,861       | 3,023            | 94.6                    | 60,350             | 56,492   | 50,985           | 110.8                    |
| Czechoslovakia.....                     | 2,291              | 2,086       | 2,213            | 94.8                    | 55,582             | 51,265   | 56,011           | 91.5                     |
| Denmark.....                            | 296                | 319         | 272              | 117.3                   | 11,267             | 13,593   | 12,023           | 113.1                    |
| Estonia.....                            | 162                | 168         | 140              | 120.4                   | 2,432              | 2,787    | 2,330            | 118.8                    |
| Finland.....                            | 215                | 242         | 99               | 245.0                   | 5,442              | 6,320    | 2,515            | 251.2                    |
| France.....                             | 12,712             | 12,772*     | 13,270           | —                       | 254,616            | 247,270  | 316,685          | 78.1                     |
| Germany.....                            | 5,151              | 4,879       | 5,471            | 89.2                    | 162,559            | 161,192  | 176,664          | 91.2                     |
| Great Britain and Northern Ireland..... | 1,895              | 1,835       | 1,617            | 113.5                   | 55,265             | 56,186   | 55,811           | 100.7                    |
| Greece.....                             | 2,065              | 2,118       | 1,755            | 120.7                   | 19,537             | 32,373   | 21,908           | 147.8                    |
| Hungary.....                            | 4,029              | 3,784       | 3,932            | 96.2                    | 87,788             | 69,834   | 76,483           | 91.4                     |
| Irish Free State.....                   | 255                | 230         | 70               | 314.0                   | 7,839              | —        | 2,817            | —                        |
| Italy.....                              | 12,693             | 12,820      | 12,260           | 104.6                   | 224,568            | 296,009  | 267,140          | 110.8                    |
| Latvia.....                             | 319                | 339         | 295              | 114.6                   | 5,272              | 6,302    | 5,995            | 105.1                    |
| Lithuania.....                          | 485                | 516         | 507              | 101.6                   | 7,942              | 7,991    | 9,304            | 85.9                     |
| Luxembourg.....                         | 45                 | 45          | 34               | 131.2                   | 1,070              | 1,190    | 863              | 138.0                    |
| Malta.....                              | 10                 | 9           | 9                | 99.3                    | 236                | 326      | 274              | 119.0                    |
| Netherlands.....                        | 374                | 320         | 315              | 101.6                   | 15,575             | 12,059   | 13,922           | 93.1                     |
| Norway.....                             | 75                 | 79          | 38               | 205.6                   | 2,094              | 2,524    | 1,034            | 244.1                    |
| Poland.....                             | 4,305              | 4,183       | 4,353            | 96.5                    | 78,857             | 67,007   | 72,580           | 93.1                     |
| Portugal.....                           | 1,157              | 1,093       | 1,370            | 79.4                    | 8,651              | 14,540   | 19,773           | 73.5                     |
| Romania.....                            | 8,481              | 8,618       | 7,803            | 109.2                   | 128,716            | 136,001  | 96,579           | 140.8                    |
| Russia (U.S.S.R.).....                  | 96,114             | 101,678     | 87,437           | 116.3                   | —                  | —        | 953,256          | —                        |
| Spain.....                              | 10,768             | —           | 11,261           | —                       | 121,490            | —        | 160,337          | —                        |
| Sweden.....                             | 695                | 726         | 701              | 103.0                   | 21,524             | 26,495   | 23,773           | 111.5                    |
| Switzerland.....                        | 172                | 174         | 149              | 117.1                   | 4,470              | 6,162    | 4,963            | 124.2                    |
| Yugoslavia.....                         | 5,463              | 5,269       | 5,112            | 103.1                   | 107,421            | 86,252   | 78,048           | 110.5                    |
| <b>AMERICA.</b>                         |                    |             |                  |                         |                    |          |                  |                          |
| Canada.....                             | 25,289             | 25,570      | 25,630           | 99.8                    | 229,218            | 182,505  | 346,876          | 52.6                     |
| Mexico.....                             | 1,263              | 1,273       | 1,229            | 103.6                   | 13,606             | 11,216   | 11,933           | 94.0                     |
| United States.....                      | 48,893             | 64,400      | 51,894           | 124.2                   | 626,766            | 873,993  | 679,636          | 128.6                    |
| <b>ASIA.</b>                            |                    |             |                  |                         |                    |          |                  |                          |
| China.....                              | 50,333             | 42,617      | 49,569           | 86.0                    | 847,948            | 636,446  | 813,040          | 78.3                     |
| Chosen.....                             | 818                | 839         | 800              | 104.9                   | 8,078              | 11,041   | 9,118            | 121.1                    |
| Cyprus.....                             | 190                | 155         | 176              | 105.2                   | 1,842              | 2,140    | 1,838            | 116.4                    |
| India.....                              | 33,639             | 33,222      | 33,825           | 98.2                    | 351,680            | 366,165  | 350,448          | 104.5                    |
| Iraq.....                               | 3,000              | —           | 2,417            | —                       | 19,658             | —        | 12,401           | —                        |
| Japan.....                              | 1,686              | 1,770       | 1,440            | 122.9                   | 45,194             | 50,410   | 40,365           | 124.0                    |
| Manchoukuo.....                         | 2,682              | 3,005       | 3,102            | 96.9                    | 30,675             | 37,345   | 37,960           | 99.7                     |
| Syria and Lebanon.....                  | 1,316              | 1,349       | 1,253            | 107.0                   | 15,704             | 17,210   | 14,467           | 119.0                    |
| Turkey.....                             | 8,843              | 8,323       | 7,983            | 104.3                   | 138,496            | 140,311  | 92,384           | 151.1                    |
| <b>AFRICA.</b>                          |                    |             |                  |                         |                    |          |                  |                          |
| Algeria.....                            | 4,287              | 4,062       | 3,907            | 104.0                   | 26,773             | 33,995   | 32,789           | 103.7                    |
| Egypt.....                              | 1,464              | 1,421       | 1,549            | 91.8                    | 45,701             | 45,376   | 43,522           | 103.5                    |
| Eritrea.....                            | 40                 | —           | 14               | —                       | 414                | —        | 86               | —                        |
| French Morocco.....                     | 3,194              | 2,743       | 3,019            | 90.9                    | 12,234             | 18,372   | 20,255           | 62.8                     |
| Kenya.....                              | 66                 | 66          | 41               | 161.3                   | 740                | 780      | 419              | 186.0                    |
| Libya.....                              | 80                 | 85          | 46               | 156.6                   | 418                | 661      | 249              | 265.6                    |
| Tunis.....                              | 1,221              | 2,429       | 2,019            | 120.3                   | 8,083              | 17,637   | 14,255           | 123.7                    |
| <b>SOUTHERN HEMISPHERE.<sup>4</sup></b> |                    |             |                  |                         |                    |          |                  |                          |
| Argentina.....                          | 17,503             | 18,900      | 17,954           | 105.3                   | 249,190            | 191,953  | 225,766          | 85.0                     |
| Australia.....                          | 12,351             | 13,735      | 13,982           | 98.2                    | 180,106            | 161,984  | 171,898          | 94.2                     |
| Chile.....                              | 1,917              | 1,898       | 1,826            | 103.9                   | 28,702             | —        | 20,450           | —                        |
| New Zealand.....                        | 225                | 188         | 273              | 68.9                    | 7,169              | 5,730    | 8,293            | 69.1                     |
| Union of South Africa.....              | 2,133              | 1,751       | 1,763            | 99.3                    | 16,077             | 10,867   | 14,470           | 75.1                     |
| Uruguay.....                            | 950                | 1,259       | 1,116            | 112.8                   | 9,246              | 15,037   | 11,421           | 131.7                    |

<sup>1</sup> Most of the figures for 1936 have been revised since the publication of the 1937 Year Book.  
<sup>2</sup> Winter crop only. <sup>3</sup> Not available. <sup>4</sup> In the Southern Hemisphere the annual statistics are for the crop years 1936-37 and 1937-38, and the averages are for the period 1931-32 to 1935-36.

41.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1936 and 1937, with Five-Year Averages for 1931-35—continued.

| Crop and Country.                       | Acreages.          |             |                  |                         | Yields.            |           |                  |                          |
|---|--------------------|-------------|------------------|-------------------------|--------------------|-----------|------------------|--------------------------|
|   | 1936. <sup>1</sup> | 1937.       | Average 1931-35. | 1937 in p.c. of Average | 1936. <sup>1</sup> | 1937.     | Average 1931-35. | 1937 in p.c. of Average. |
|   | '000 acres.        | '000 acres. | '000 acres.      | p.c.                    | '000 bu.           | '000 bu.  | '000 bu.         | p.c.                     |
| <b>Oats—</b>                            |                    |             |                  |                         |                    |           |                  |                          |
| <b>NORTHERN HEMISPHERE.</b>             |                    |             |                  |                         |                    |           |                  |                          |
| <b>EUROPE.</b>                          |                    |             |                  |                         |                    |           |                  |                          |
| Albania.....                            | 25                 | 24          | 24               | 100.7                   | 595                | 565       | 730              | 77.4                     |
| Austria.....                            | 713                | 696         | 755              | 92.4                    | 29,439             | 28,488    | 26,687           | 99.3                     |
| Belgium.....                            | 534                | 521         | 648              | 80.5                    | 38,111             | 35,839    | 47,049           | 75.2                     |
| Bulgaria.....                           | 299                | 260         | 299              | 90.1                    | 9,368              | 8,544     | 6,890            | 124.0                    |
| Czechoslovakia.....                     | 1,888              | 1,920       | 1,972            | 97.4                    | 83,938             | 94,547    | 91,028           | 102.8                    |
| Denmark.....                            | 933                | 928         | 943              | 98.4                    | 57,616             | 60,583    | 60,123           | 100.7                    |
| Estonia.....                            | 341                | 358         | 350              | 102.3                   | 7,842              | 9,000     | 9,706            | 102.0                    |
| Finland.....                            | 1,087              | 1,122       | 1,142            | 98.3                    | 44,864             | 46,159    | 46,295           | 99.7                     |
| France.....                             | 8,134              | 7,962       | 8,312            | 95.7                    | 290,354            | 313,989   | 329,620          | 95.3                     |
| Germany.....                            | 6,806              | 7,000       | 7,791            | 90.2                    | 357,074            | 404,364   | 422,261          | 95.7                     |
| Great Britain and Northern Ireland..... | 2,514              | 2,298       | 2,632            | 87.3                    | 138,652            | 112,280   | 140,382          | 75.2                     |
| Greece.....                             | 335                | 415         | 336              | 123.2                   | 6,502              | 9,755     | 7,013            | 139.1                    |
| Hungary.....                            | 529                | 572         | 560              | 102.3                   | 18,049             | 10,201    | 18,914           | 85.7                     |
| Irish Free State.....                   | 559                | 573         | 617              | 92.8                    | 36,188             | 2         | 41,283           | —                        |
| Italy.....                              | 1,075              | 1,069       | 1,093            | 97.9                    | 32,952             | 42,591    | 38,015           | 112.0                    |
| Latvia.....                             | 838                | 828         | 784              | 105.7                   | 15,595             | 27,903    | 24,401           | 114.4                    |
| Lithuania.....                          | 833                | 861         | 867              | 96.4                    | 22,845             | 26,800    | 25,856           | 103.9                    |
| Luxembourg.....                         | 65                 | 65          | 69               | 94.1                    | 2,612              | 2,887     | 3,132            | 92.2                     |
| Netherlands.....                        | 353                | 358         | 339              | 105.7                   | 21,836             | 29,438    | 19,615           | 150.1                    |
| Norway.....                             | 210                | 211         | 231              | 91.4                    | 11,797             | 13,314    | 11,983           | 111.1                    |
| Poland.....                             | 5,372              | 5,672       | 5,458            | 103.9                   | 181,887            | 166,055   | 172,675          | 96.2                     |
| Portugal.....                           | 657                | 723         | 442              | 138.6                   | 5,770              | 7,376     | 6,132            | 120.3                    |
| Romania.....                            | 1,981              | 1,906       | 2,035            | 95.7                    | 58,362             | 26,211    | 45,144           | 58.7                     |
| Russia (U.S.S.R.).....                  | 43,325             | 43,103      | 42,460           | 101.7                   | 2                  | 1,030,389 | —                | —                        |
| Spain.....                              | 1,358              | 2           | 1,917            | —                       | 38,070             | 2         | 46,169           | —                        |
| Sweden.....                             | 1,651              | 1,641       | 1,629            | 100.7                   | 85,291             | 80,476    | 80,484           | 107.4                    |
| Switzerland.....                        | 26                 | 27          | 35               | 77.5                    | 1,375              | 1,005     | 2,022            | 79.4                     |
| Yugoslavia.....                         | 890                | 816         | 902              | 93.8                    | 22,942             | 20,517    | 20,394           | 98.2                     |
| <b>AMERICA.</b>                         |                    |             |                  |                         |                    |           |                  |                          |
| Canada.....                             | 13,118             | 13,019      | 13,468           | 96.9                    | 288,764            | 291,622   | 370,342          | 98.7                     |
| United States.....                      | 33,370             | 35,079      | 37,553           | 93.4                    | 785,506            | 1,146,000 | 969,044          | 118.3                    |
| <b>ASIA.</b>                            |                    |             |                  |                         |                    |           |                  |                          |
| China.....                              | 2,628              | 2,428       | 2,497            | 97.3                    | 62,129             | 58,732    | 59,941           | 98.0                     |
| Syria and Lebanon.....                  | 28                 | 27          | 30               | 87.6                    | 752                | 741       | 868              | 85.4                     |
| Turkey.....                             | 1,099              | 554         | 433              | 127.7                   | 14,840             | 16,583    | 11,611           | 142.8                    |
| <b>AFRICA.</b>                          |                    |             |                  |                         |                    |           |                  |                          |
| Algeria.....                            | 473                | 477         | 476              | 100.3                   | 12,090             | 8,957     | 9,160            | 97.8                     |
| French Morocco.....                     | 80                 | 94          | 66               | 142.4                   | 1,328              | 2,894     | 1,552            | 188.5                    |
| Tunis.....                              | 62                 | 91          | 65               | 141.5                   | 689                | 1,963     | 1,502            | 130.7                    |
| <b>SOUTHERN HEMISPHERE.*</b>            |                    |             |                  |                         |                    |           |                  |                          |
| Argentina.....                          | 3,158              | 3,254       | 3,434            | 94.8                    | 54,564             | 48,915    | 59,566           | 82.1                     |
| Chile.....                              | 282                | 289         | 202              | 143.2                   | 6,894              | 2         | 6,144            | —                        |
| New Zealand.....                        | 316                | 286         | 371              | 77.0                    | 4,407              | 3,187     | 4,096            | 77.8                     |
| Union of South Africa.....              | 614                | 2           | 479              | —                       | 7,325              | 7,280     | 7,990            | 91.1                     |
| Uruguay.....                            | 180                | 204         | 181              | 112.9                   | 1,999              | 3,838     | 2,628            | 146.1                    |

<sup>1</sup> Most of the 1936 figures have been revised since the publication of the 1937 Year Book. <sup>2</sup> Not available. <sup>3</sup> In the Southern Hemisphere the annual statistics are for the crop years 1936-37 and 1937-38, and the averages are for the period 1931-32 to 1935-36.



# 41.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1936 and 1937, with Five-Year Averages for 1931-35—continued.

| Crop and Country.                       | Acreages.          |             |                  |                         | Yields.            |          |                  |                          |
|---|--------------------|-------------|------------------|-------------------------|--------------------|----------|------------------|--------------------------|
|   | 1936. <sup>1</sup> | 1937.       | Average 1931-35. | 1937 in p.c. of Average | 1936. <sup>1</sup> | 1937.    | Average 1931-35. | 1937 in p.c. of Average. |
|   | '000 acres.        | '000 acres. | '000 acres.      | p.c.                    | '000 bu.           | '000 bu. | '000 bu.         | p.c.                     |
| <b>Barley—</b>                          |                    |             |                  |                         |                    |          |                  |                          |
| <b>NORTHERN HEMISPHERE.</b>             |                    |             |                  |                         |                    |          |                  |                          |
| <b>EUROPE.</b>                          |                    |             |                  |                         |                    |          |                  |                          |
| Albania.....                            | 11                 | 11          | 12               | 83.7                    | 198                | 226      | 295              | 76.4                     |
| Austria.....                            | 463                | 397         | 415              | 95.6                    | 12,771             | 11,469   | 12,757           | 89.8                     |
| Belgium.....                            | 74                 | 61          | 86               | 71.1                    | 3,642              | 3,823    | 4,199            | 83.6                     |
| Bulgaria.....                           | 537                | 530         | 500              | 93.2                    | 14,810             | 14,675   | 13,426           | 100.3                    |
| Czechoslovakia.....                     | 1,565              | 1,658       | 1,680            | 98.7                    | 46,797             | 51,214   | 55,354           | 92.5                     |
| Denmark.....                            | 912                | 906         | 860              | 105.4                   | 41,255             | 50,064   | 45,823           | 109.3                    |
| Estonia.....                            | 250                | 230         | 263              | 83.7                    | 3,989              | 3,765    | 4,750            | 79.3                     |
| Finland.....                            | 324                | 324         | 312              | 103.7                   | 8,676              | 7,992    | 8,245            | 96.9                     |
| France.....                             | 1,837              | 1,765       | 1,795            | 98.3                    | 46,807             | 45,758   | 48,993           | 93.4                     |
| Germany.....                            | 4,011              | 4,235       | 3,958            | 107.0                   | 156,122            | 162,886  | 149,063          | 108.8                    |
| Great Britain and Northern Ireland..... | 894                | 908         | 959              | 94.7                    | 34,150             | 30,567   | 36,649           | 82.7                     |
| Greece.....                             | 511                | 566         | 536              | 106.0                   | 7,053              | 10,341   | 8,892            | 116.3                    |
| Hungary.....                            | 1,161              | 1,180       | 1,152            | 102.4                   | 30,298             | 21,692   | 28,818           | 75.3                     |
| Irish Free State.....                   | 130                | 131         | 124              | 105.7                   | 5,707              | —        | 5,908            | —                        |
| Italy.....                              | 482                | 483         | 510              | 94.7                    | 8,845              | 10,728   | 10,300           | 104.2                    |
| Latvia.....                             | 468                | 449         | 458              | 98.0                    | 7,580              | 10,032   | 9,202            | 109.0                    |
| Lithuania.....                          | 529                | 529         | 501              | 105.5                   | 10,693             | 11,353   | 11,185           | 101.5                    |
| Luxembourg.....                         | 5                  | 5           | 8                | 66.3                    | 134                | 142      | 207              | 68.7                     |
| Malta.....                              | 5                  | —           | 6                | —                       | 173                | —        | 236              | —                        |
| Netherlands.....                        | 106                | 122         | 69               | 177.7                   | 5,559              | 6,439    | 3,573            | 180.2                    |
| Norway.....                             | 149                | 149         | 143              | 103.8                   | 5,278              | 5,967    | 5,042            | 118.3                    |
| Poland.....                             | 2,933              | 3,016       | 2,903            | 101.8                   | 64,367             | 60,169   | 66,447           | 90.6                     |
| Portugal.....                           | 193                | 191         | 171              | 113.2                   | 1,603              | 31,994   | 1,992            | 101.7                    |
| Romania.....                            | 3,980              | 3,780       | 4,411            | 85.7                    | 74,033             | 39,732   | 60,270           | 65.7                     |
| Russia (U.S.S.R.).....                  | 20,150             | 21,571      | 18,869           | 114.3                   | —                  | —        | 303,007          | —                        |
| Spain.....                              | 4,528              | —           | 4,683            | —                       | 78,523             | —        | 109,968          | —                        |
| Sweden.....                             | 255                | 255         | 270              | 94.2                    | 9,175              | 8,970    | 9,889            | 90.7                     |
| Switzerland.....                        | 10                 | 11          | 15               | 70.3                    | 322                | —        | 528              | 71.4                     |
| Yugoslavia.....                         | 1,051              | 1,030       | 1,013            | 98.7                    | 19,421             | 17,500   | 18,665           | 94.2                     |
| <b>AMERICA.</b>                         |                    |             |                  |                         |                    |          |                  |                          |
| Canada.....                             | 4,432              | 4,331       | 3,741            | 115.8                   | 71,922             | 85,969   | 71,846           | 110.7                    |
| United States.....                      | 8,372              | 9,959       | 10,596           | 94.0                    | 147,475            | 219,635  | 210,785          | 104.2                    |
| <b>ASIA.</b>                            |                    |             |                  |                         |                    |          |                  |                          |
| China.....                              | 16,162             | 14,721      | 16,329           | 90.1                    | 373,756            | 292,042  | 361,551          | 80.9                     |
| Chosen.....                             | 2,616              | 2,685       | 2,451            | 108.2                   | 40,442             | 62,734   | 47,038           | 133.4                    |
| Cyprus.....                             | 110                | 109         | 107              | 102.4                   | 1,881              | 2,237    | 1,618            | 138.3                    |
| Iraq.....                               | 2,000              | —           | 1,270            | —                       | 25,292             | —        | 13,435           | —                        |
| Japan.....                              | 1,918              | 1,866       | 1,979            | 94.3                    | 68,955             | 72,349   | 75,688           | 95.6                     |
| Syria and Lebanon.....                  | 727                | 795         | 766              | 103.7                   | 14,151             | 15,019   | 13,170           | 114.0                    |
| Turkey.....                             | 4,484              | 4,408       | 3,762            | 117.2                   | 105,810            | 104,949  | 68,522           | 153.2                    |
| <b>AFRICA.</b>                          |                    |             |                  |                         |                    |          |                  |                          |
| Algeria.....                            | 3,120              | 2,951       | 3,240            | 91.1                    | 29,480             | 26,015   | 34,347           | 75.7                     |
| Egypt.....                              | 282                | 271         | 308              | 88.0                    | 10,825             | 10,571   | 10,098           | 104.7                    |
| Eritrea.....                            | 91                 | —           | 56               | —                       | 910                | —        | 689              | —                        |
| French Morocco.....                     | 4,104              | 4,201       | 3,684            | 114.0                   | 70,108             | 34,907   | 52,444           | 66.6                     |
| Libya.....                              | 179                | 243         | 407              | 59.7                    | 543                | 1,837    | 2,124            | 86.5                     |
| Tunis.....                              | 741                | 1,532       | 1,240            | 123.5                   | 3,445              | 9,180    | 10,472           | 87.7                     |
| <b>SOUTHERN HEMISPHERE.</b>             |                    |             |                  |                         |                    |          |                  |                          |
| Argentina.....                          | 1,925              | 1,942       | 1,746            | 111.2                   | 29,855             | 24,803   | 28,530           | 86.9                     |
| Chile.....                              | 178                | 213         | 161              | 132.7                   | 4,519              | —        | 4,987            | —                        |
| New Zealand.....                        | 26                 | 30          | 27               | 111.6                   | 778                | 865      | 937              | 135.6                    |
| Union of South Africa.....              | 73                 | —           | 76               | —                       | 1,337              | 1,434    | 1,313            | 100.3                    |
| Uruguay.....                            | 24                 | 45          | 18               | 241.6                   | 309                | 590      | 268              | 219.8                    |

<sup>1</sup> Most of the figures for 1936 have been revised since the publication of the 1937 Year Book. <sup>2</sup> Not available. <sup>3</sup> In the Southern Hemisphere the annual statistics are for the crop years 1936-37 and 1937-38, and the averages are for the period 1931-32 to 1935-36.

41.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1936 and 1937, with Five-Year Averages for 1931-35—continued.

| Crop and Country.                       | Acreages.          |                |                     |                               | Yields.            |             |                     |                                |
|---|--------------------|----------------|---------------------|-------------------------------|--------------------|-------------|---------------------|--------------------------------|
|   | 1936. <sup>1</sup> | 1937.          | Average<br>1931-35. | 1937<br>in p.c. of<br>Average | 1936. <sup>1</sup> | 1937.       | Average<br>1931-35. | 1937<br>in p.c. of<br>Average. |
|   | '000<br>acres.     | '000<br>acres. | '000<br>acres.      | p.c.                          | '000<br>bu.        | '000<br>bu. | '000<br>bu.         | p.c.                           |
| <b>Rye—</b>                             |                    |                |                     |                               |                    |             |                     |                                |
| <b>NORTHERN HEMISPHERE.</b>             |                    |                |                     |                               |                    |             |                     |                                |
| <b>EUROPE.</b>                          |                    |                |                     |                               |                    |             |                     |                                |
| Albania.....                            | 7                  | 8              | 7                   | 115.7                         | 116                | 114         | 132                 | 86.4                           |
| Austria.....                            | 921                | 891            | 947                 | 94.1                          | 18,608             | 16,830      | 23,447              | 71.8                           |
| Belgium.....                            | 385                | 378            | 470                 | 78.9                          | 14,060             | 13,583      | 18,944              | 71.7                           |
| Bulgaria.....                           | 480                | 456            | 517                 | 88.1                          | 8,188              | 8,203       | 8,714               | 95.2                           |
| Czechoslovakia.....                     | 2,494              | 2,390          | 2,512               | 95.2                          | 56,549             | 58,447      | 69,374              | 84.2                           |
| Denmark.....                            | 327                | 343            | 350                 | 98.1                          | 7,842              | 9,448       | 9,804               | 96.4                           |
| Estonia.....                            | 338                | 368            | 363                 | 101.4                         | 6,044              | 8,100       | 7,507               | 108.0                          |
| Finland.....                            | 503                | 598            | 570                 | 105.0                         | 12,755             | 16,209      | 13,871              | 117.5                          |
| France.....                             | 1,634              | 1,636          | 1,712               | 95.0                          | 28,150             | 29,152      | 32,218              | 90.5                           |
| Germany.....                            | 11,151             | 10,270         | 11,050              | 92.9                          | 290,793            | 266,217     | 305,945             | 87.0                           |
| Greece.....                             | 160                | 170            | 178                 | 98.7                          | 1,654              | 2,579       | 2,267               | 113.8                          |
| Hungary.....                            | 1,607              | 1,516          | 1,568               | 96.7                          | 28,115             | 22,945      | 28,532              | 80.4                           |
| Irish Free State.....                   | 2                  | 2              | 3                   | 66.2                          | 68                 | 2           | 85                  | —                              |
| Italy.....                              | 261                | 250            | 285                 | 91.0                          | 5,204              | 5,701       | 6,281               | 90.8                           |
| Latvia.....                             | 637                | 713            | 637                 | 113.8                         | 11,260             | 16,592      | 12,385              | 134.0                          |
| Lithuania.....                          | 1,216              | 1,259          | 1,231               | 102.3                         | 21,313             | 23,658      | 22,407              | 105.6                          |
| Luxemburg.....                          | 19                 | 19             | 19                  | 101.3                         | 449                | 392         | 451                 | 81.4                           |
| Netherlands.....                        | 554                | 557            | 449                 | 124.0                         | 19,069             | 19,511      | 10,371              | 119.2                          |
| Norway.....                             | 15                 | 15             | 15                  | 94.9                          | 425                | 405         | 443                 | 104.9                          |
| Poland.....                             | 14,410             | 14,141         | 14,160              | 99.9                          | 250,541            | 229,518     | 251,701             | 91.2                           |
| Portugal.....                           | 388                | 560            | 376                 | 151.1                         | 3,466              | 4,642       | 4,569               | 101.0                          |
| Roumania.....                           | 1,041              | 1,000          | 939                 | 112.9                         | 17,842             | 16,097      | 12,613              | 132.4                          |
| Russia (U.S.S.R.).....                  | 2                  | 2              | 62,627              | —                             | 2                  | 2           | 863,667             | —                              |
| Spain.....                              | 1,471              | 2              | 1,466               | —                             | 18,033             | 2           | 21,697              | —                              |
| Sweden.....                             | 530                | 519            | 547                 | 94.8                          | 13,891             | 16,984      | 16,770              | 101.3                          |
| Switzerland.....                        | 88                 | 37             | 42                  | 80.1                          | 1,077              | 1,213       | 1,881               | 87.8                           |
| Yugoslavia.....                         | 628                | 627            | 615                 | 102.1                         | 8,002              | 8,239       | 8,202               | 100.5                          |
| <b>AMERICA.</b>                         |                    |                |                     |                               |                    |             |                     |                                |
| Canada.....                             | 635                | 894            | 712                 | 125.0                         | 4,281              | 5,749       | 6,456               | 89.0                           |
| United States.....                      | 2,774              | 3,589          | 3,021               | 127.1                         | 25,319             | 40,449      | 33,977              | 145.5                          |
| <b>ASIA.</b>                            |                    |                |                     |                               |                    |             |                     |                                |
| Turkey.....                             | 909                | 875            | 670                 | 130.6                         | 17,660             | 18,822      | 10,400              | 161.0                          |
| <b>AFRICA.</b>                          |                    |                |                     |                               |                    |             |                     |                                |
| Algeria.....                            | 4                  | 4              | 3                   | 114.4                         | 29                 | 41          | 31                  | 134.0                          |
| French Morocco.....                     | 7                  | 2              | 3                   | —                             | 35                 | 2           | 22                  | —                              |
| <b>SOUTHERN HEMISPHERE.<sup>2</sup></b> |                    |                |                     |                               |                    |             |                     |                                |
| Argentina.....                          | 2,204              | 2,184          | 1,731               | 126.2                         | 7,480              | 4,527       | 10,047              | 45.1                           |
| <b>CORN—</b>                            |                    |                |                     |                               |                    |             |                     |                                |
| <b>NORTHERN HEMISPHERE.</b>             |                    |                |                     |                               |                    |             |                     |                                |
| <b>EUROPE.</b>                          |                    |                |                     |                               |                    |             |                     |                                |
| Albania.....                            | 207                | 219            | 195                 | 112.4                         | 4,549              | 4,514       | 4,327               | 104.3                          |
| Austria.....                            | 158                | 150            | 158                 | 100.4                         | 6,727              | 7,134       | 5,340               | 133.6                          |
| Bulgaria.....                           | 1,053              | 1,053          | 1,757               | 94.1                          | 34,810             | 33,200      | 35,629              | 92.7                           |
| Czechoslovakia.....                     | 403                | 456            | 365                 | 124.9                         | 12,361             | 13,511      | 8,347               | 161.9                          |
| France.....                             | 844                | 839            | 844                 | 99.4                          | 20,914             | 21,557      | 20,065              | 107.3                          |
| Greece.....                             | 639                | 652            | 614                 | 106.1                         | 11,297             | 9,035       | 8,244               | 110.2                          |
| Hungary.....                            | 2,810              | 2,956          | 2,812               | 105.1                         | 102,086            | 105,977     | 72,033              | 145.1                          |
| Italy.....                              | 3,626              | 3,632          | 3,590               | 101.2                         | 120,117            | 133,853     | 104,828             | 128.1                          |
| Poland.....                             | 218                | 228            | 232                 | 98.2                          | 4,132              | 2           | 3,684               | —                              |
| Portugal.....                           | 1,057              | 2              | 1,014               | —                             | 12,084             | 2           | 13,778              | —                              |
| Roumania.....                           | 12,999             | 12,705         | 12,124              | 105.8                         | 220,936            | 166,734     | 211,299             | 78.9                           |
| Spain.....                              | 2                  | 2              | 1,076               | —                             | 2                  | 2           | 27,926              | —                              |
| Switzerland.....                        | 2                  | 2              | 2                   | —                             | 83                 | 2           | 93                  | —                              |
| Yugoslavia.....                         | 6,683              | 6,520          | 6,215               | 105.1                         | 203,949            | 209,951     | 155,561             | 135.0                          |

<sup>1</sup> Most of the figures for 1936 have been revised since the publication of the 1937 Year Book.<sup>2</sup> Not available.<sup>3</sup> In the Southern Hemisphere the annual statistics are for the crop years 1930-37 and 1937-38 and the averages are for the period 1931-32 to 1935-36.

41.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1936 and 1937, with Five-Year Averages for 1931-35—concluded.

| Crop and Country.                            | Acreages.          |             |                  |                         | Yields.            |           |                  |                          |
|--|--------------------|-------------|------------------|-------------------------|--------------------|-----------|------------------|--------------------------|
|  | 1936. <sup>1</sup> | 1937.       | Average 1931-35. | 1937 in p.c. of Average | 1936. <sup>1</sup> | 1937.     | Average 1931-35. | 1937 in p.c. of Average. |
|  | '000 acres.        | '000 acres. | '000 acres.      | p.c.                    | '000 bu.           | '000 bu.  | '000 bu.         | p.c.                     |
| <b>Corn—concluded.</b>                       |                    |             |                  |                         |                    |           |                  |                          |
| AMERICA.                                     |                    |             |                  |                         |                    |           |                  |                          |
| Canada.....                                  | 164                | 166         | 145              | 113.9                   | 6,083              | 6,492     | 6,025            | 107.8                    |
| United States.....                           | 93,020             | 93,810      | 102,079          | 91.9                    | 1,507,089          | 2,645,000 | 2,334,271        | 113.3                    |
| ASIA.  |                    |             |                  |                         |                    |           |                  |                          |
| China.....                                   | 11,506             | 2           | 11,185           | —                       | 241,333            | 2         | 248,140          | —                        |
| Manchoukuo.....                              | 3,199              | 3,506       | 2,736            | 128.1                   | 83,522             | 81,880    | 68,416           | 119.7                    |
| Syria and Lebanon.....                       | 37                 | 48          | 59               | 80.7                    | 719                | 1,052     | 1,045            | 100.7                    |
| Turkey.....                                  | 1,041              | 988         | 987              | 100.2                   | 27,000             | 23,349    | 19,059           | 122.5                    |
| AFRICA.                                      |                    |             |                  |                         |                    |           |                  |                          |
| Algeria.....                                 | 16                 | 16          | 21               | 76.9                    | 137                | 140       | 225              | 62.3                     |
| Egypt.....                                   | 1,579              | 1,597       | 1,829            | 87.3                    | 62,806             | 64,624    | 68,147           | 94.8                     |
| Eritrea.....                                 | 20                 | 2           | 24               | —                       | 161                | 2         | 382              | —                        |
| French Morocco.....                          | 1,124              | 1,087       | 911              | 119.4                   | 11,865             | 5,236     | 6,148            | 85.2                     |
| Kenya.....                                   | 91                 | 118         | 136              | 87.3                    | 3,084              | 3,997     | 3,307            | 120.8                    |
| Tunis.....                                   | 44                 | 67          | 48               | 139.3                   | 138                | 236       | 232              | 101.7                    |
| SOUTHERN HEMISPHERE. <sup>2</sup>            |                    |             |                  |                         |                    |           |                  |                          |
| Argentina.....                               | 15,973             | 15,185      | 16,266           | 93.4                    | 359,621            | 2         | 334,718          | —                        |
| Chile.....                                   | 121                | 2           | 121              | —                       | 2,670              | 2         | 2,717            | —                        |
| Union of South Africa.....                   | 5,808              | 2           | 5,839            | —                       | 88,618             | 2         | 60,609           | —                        |
| <b>Potatoes—</b>                             |                    |             |                  |                         |                    |           |                  |                          |
| NORTHERN HEMISPHERE.                         |                    |             |                  |                         |                    |           |                  |                          |
| EUROPE.                                      |                    |             |                  |                         |                    |           |                  |                          |
| Austria.....                                 | 519                | 538         | 496              | 103.3                   | 87,032             | 118,313   | 94,648           | 125.0                    |
| Belgium.....                                 | 396                | 392         | 413              | 95.1                    | 118,512            | 113,567   | 132,086          | 88.0                     |
| Bulgaria.....                                | 39                 | 43          | 35               | 123.7                   | 3,996              | 4,946     | 3,074            | 160.9                    |
| Czechoslovakia.....                          | 1,870              | 1,906       | 1,824            | 104.5                   | 393,215            | 397,428   | 326,687          | 121.7                    |
| Denmark.....                                 | 187                | 200         | 179              | 111.7                   | 47,843             | 49,236    | 44,808           | 109.9                    |
| Estonia.....                                 | 183                | 187         | 172              | 108.4                   | 37,898             | 35,663    | 32,122           | 104.4                    |
| Finland.....                                 | 215                | 230         | 197              | 116.7                   | 48,596             | 49,162    | 41,531           | 118.7                    |
| France.....                                  | 3,513              | 3,512       | 3,487            | 100.7                   | 560,367            | 540,941   | 577,444          | 93.0                     |
| Germany.....                                 | 6,901              | 7,136       | 7,043            | 101.3                   | 1,702,072          | 2,032,250 | 1,636,908        | 117.9                    |
| Great Britain and North-<br>ern Ireland..... | 732                | 715         | 760              | 94.1                    | 171,309            | 151,125   | 180,435          | 81.1                     |
| Greece.....                                  | 48                 | 58          | 42               | 137.7                   | 4,740              | 5,831     | 3,475            | 167.8                    |
| Hungary.....                                 | 733                | 731         | 715              | 102.2                   | 90,668             | 98,497    | 61,522           | 155.2                    |
| Irish Free State.....                        | 334                | 327         | 343              | 95.4                    | 90,387             | 2         | 93,829           | —                        |
| Italy.....                                   | 979                | 965         | 1,004            | 96.1                    | 87,368             | 105,517   | 85,524           | 119.2                    |
| Latvia.....                                  | 296                | 314         | 266              | 118.2                   | 59,210             | 65,470    | 49,101           | 133.3                    |
| Lithuania.....                               | 450                | 456         | 435              | 104.9                   | 76,259             | 92,196    | 73,532           | 125.4                    |
| Luxembourg.....                              | 41                 | 41          | 41               | 100.0                   | 7,352              | 8,173     | 6,950            | 117.6                    |
| Malta.....                                   | 10                 | 2           | 7                | —                       | 931                | 2         | 902              | —                        |
| Netherlands.....                             | 322                | 336         | 384              | 87.5                    | 92,099             | 91,858    | 111,113          | 82.7                     |
| Norway.....                                  | 127                | 128         | 120              | 106.5                   | 34,753             | 33,514    | 38,092           | 101.3                    |
| Poland.....                                  | 7,150              | 7,360       | 6,821            | 107.9                   | 1,250,601          | 1,388,889 | 1,140,984        | 121.7                    |
| Portugal.....                                | 78                 | 2           | 79               | —                       | 18,985             | 2         | 21,791           | —                        |
| Roumania.....                                | 535                | 533         | 490              | 108.8                   | 71,370             | 2         | 62,500           | —                        |
| Spain.....                                   | 2                  | 2           | 1,087            | —                       | 2                  | 2         | 182,022          | —                        |
| Sweden.....                                  | 330                | 329         | 328              | 100.3                   | 67,098             | 64,925    | 68,753           | 94.4                     |
| Switzerland.....                             | 117                | 121         | 114              | 105.7                   | 20,868             | 29,949    | 27,633           | 108.4                    |
| Yugoslavia.....                              | 648                | 2           | 612              | —                       | 59,818             | 2         | 52,654           | —                        |
| AMERICA.                                     |                    |             |                  |                         |                    |           |                  |                          |
| Canada.....                                  | 496                | 531         | 543              | 97.7                    | 65,057             | 71,055    | 73,744           | 96.4                     |
| United States.....                           | 3,058              | 3,177       | 3,513            | 90.4                    | 329,997            | 391,159   | 379,068          | 103.2                    |
| ASIA.  |                    |             |                  |                         |                    |           |                  |                          |
| Syria and Lebanon.....                       | 18                 | 19          | 18               | 103.3                   | 1,467              | 1,680     | 1,478            | 113.7                    |
| Turkey.....                                  | 130                | 2           | 108              | —                       | 6,593              | 2         | 4,460            | —                        |
| AFRICA.                                      |                    |             |                  |                         |                    |           |                  |                          |
| Algeria.....                                 | 41                 | 38          | 43               | 88.4                    | 4,257              | 2         | 3,371            | —                        |

<sup>1</sup> Most of the figures for 1936 have been revised since the publication of the 1937 Year Book.<sup>2</sup> Not<sup>3</sup> In the Southern Hemisphere the annual statistics are for the crop years 1936-37 and 1937-38, and the averages are for the period 1931-32 to 1935-36.<sup>4</sup> Early potatoes.

**World Exports and Imports of Wheat and Flour.**—Statistics showing the exports and imports of wheat and wheat flour for the principal countries of the world in the crop year ended July 31, 1937, with comparative figures for the previous crop year, are shown in Table 42. This information is taken from data published by the International Institute of Agriculture. During the crop year 1936-37, a total of 670,458,500 bushels of wheat and wheat flour expressed in bushels of wheat is shown as exported, as compared with 598,736,000 bushels in the previous year.

**42.—Exports of Wheat and Flour from the Principal Wheat-Exporting Countries and Imports of Wheat and Flour into the Principal Wheat-Importing Countries, crop years ended July 31, 1936 and 1937.**

| Wheat.                                     | Twelve Months<br>Aug. 1-July 31. |                | Flour.                                     | Twelve Months<br>Aug. 1-July 31. |               |
|--|----------------------------------|----------------|--|----------------------------------|---------------|
|  | 1935-36. <sup>1</sup>            | 1936-37.       |  | 1935-36. <sup>1</sup>            | 1936-37.      |
|  | '000 bu.                         | '000 bu.       |  | '000 bbl.                        | '000 bbl.     |
| <b>Exports—</b>                            |                                  |                | <b>Exports—</b>                            |                                  |               |
| United States.....                         | 272                              | 5,287          | United States.....                         | 3,435                            | 3,892         |
| Canada.....                                | 232,020                          | 174,858        | Canada.....                                | 4,979                            | 4,526         |
| Argentina.....                             | 65,689                           | 155,767        | Argentina.....                             | 898                              | 1,095         |
| Australia.....                             | 73,224                           | 73,627         | Australia.....                             | 6,197                            | 5,645         |
| Hungary.....                               | 14,333                           | 21,868         | India.....                                 | 294                              | 436           |
| Bulgaria.....                              | 1,139                            | 7,708          | Hungary.....                               | 636                              | 690           |
| Yugoslavia.....                            | 613                              | 17,977         | Japan.....                                 | 1,881                            | 848           |
| Other countries.....                       | 92,628                           | 101,060        | Other countries.....                       | 8,174                            | 7,685         |
| <b>Totals.....</b>                         | <b>479,918</b>                   | <b>558,782</b> | <b>Totals.....</b>                         | <b>26,461</b>                    | <b>24,817</b> |
| <b>Imports—</b>                            |                                  |                | <b>Imports—</b>                            |                                  |               |
| Germany.....                               | 3,564                            | 31,016         | Germany.....                               | 16                               | 244           |
| Belgium.....                               | 40,529                           | 43,744         | Austria.....                               | 386                              | 261           |
| France.....                                | 26,850                           | 14,331         | Denmark.....                               | 111                              | 82            |
| Great Britain and<br>Northern Ireland..... | 190,664                          | 184,460        | Finland.....                               | 350                              | 245           |
| Irish Free State.....                      | 14,588                           | 12,300         | Great Britain and<br>Northern Ireland..... | 4,801                            | 4,842         |
| Italy.....                                 | 15,240                           | 68,018         | Irish Free State.....                      | 81                               | 71            |
| Netherlands.....                           | 18,942                           | 18,996         | Norway.....                                | 451                              | 466           |
| Sweden.....                                | 1,633                            | 1,914          | Netherlands.....                           | 616                              | 726           |
| Switzerland.....                           | 16,670                           | 17,727         | Czechoslovakia.....                        | 12                               | 5             |
| Czechoslovakia.....                        | 2,170                            | 321            | Egypt.....                                 | 53                               | 25            |
| Japan.....                                 | 12,806                           | 6,579          | Other countries.....                       | 6,983                            | 5,105         |
| Other countries.....                       | 84,057                           | 134,319        |  |                                  |               |
| <b>Totals.....</b>                         | <b>427,742</b>                   | <b>533,625</b> | <b>Totals.....</b>                         | <b>13,920</b>                    | <b>12,072</b> |

<sup>1</sup> Most of the figures for 1935-36 have been revised since the publication of the 1937 Year Book.

**World Live Stock.**—The statistics of Table 43, compiled from data published by the International Institute of Agriculture, show as nearly as possible the world situation with regard to live stock about 1935. For many countries, the figures are the result of careful enumeration, while for others they represent only approximate estimates. In the cases of Mexico, Argentina, Chile, and Kenya, the figures are for 1930, as are also those for horses in Uruguay, the Union of South Africa, and Santo Domingo, those for swine in Uruguay and Santo Domingo and those for cattle in the latter country. Earlier figures are: Peru (1929); Bulgaria (1926); Venezuela (swine, 1925; cattle, 1922; horses and sheep, 1921); Santo Domingo (sheep, 1924); Siam (swine, 1921).

**43.—Numbers of Live Stock in Principal Countries, circa 1935.**

| Continent and Country. | Horses.              | Cattle.                | Sheep.    | Swine.    |
|------------------------|----------------------|------------------------|-----------|-----------|
| <b>Europe—</b>         |                      |                        |           |           |
| Austria.....           | 261,200              | 2,348,627              | 263,400   | 2,822,966 |
| Belgium.....           | 231,400 <sup>1</sup> | 1,837,500              | 187,400   | 1,284,500 |
| Bulgaria.....          | 482,200              | 1,817,437              | 8,739,500 | 1,002,100 |
| Czechoslovakia.....    | 695,000              | 4,283,100 <sup>1</sup> | 547,000   | 2,744,700 |
| Denmark.....           | 520,500              | 3,071,700              | 174,500   | 3,050,500 |
| Finland.....           | 360,600              | 1,822,000              | 1,024,500 | 509,900   |

For footnotes, see end of table, p. 280.

43.—Numbers of Live Stock in Principal Countries, *circa* 1935—concluded.

| Continent and Country.                     | Horses.                | Cattle.                 | Sheep.                  | Swine.                 |
|--|------------------------|-------------------------|-------------------------|------------------------|
| <b>Europe—concluded.</b>                   |                        |                         |                         |                        |
| France.....                                | 2,810,000 <sup>4</sup> | 15,609,700              | 9,558,100               | 7,043,300              |
| Germany.....                               | 3,389,900 <sup>4</sup> | 18,937,900              | 3,927,700               | 22,826,600             |
| Great Britain and Northern Ireland.....    | 1,120,400              | 8,658,900               | 25,061,700              | 4,531,500              |
| Greece.....                                | 361,400                | 957,200                 | 8,185,100               | 623,800                |
| Hungary.....                               | 806,600                | 1,749,000               | 1,227,500               | 3,175,800              |
| Irish Free State.....                      | 420,000                | 4,019,500               | 3,041,700               | 1,087,700              |
| Italy.....                                 | 816,300 <sup>4</sup>   | 7,235,500               | 8,802,500               | 3,205,700              |
| Latvia.....                                | 384,400                | 1,374,900               | 1,840,700               | 809,100                |
| Lithuania.....                             | 558,100                | 1,168,800               | 627,900                 | 1,201,100              |
| Netherlands.....                           | 288,000                | 2,639,500               | 680,200                 | 1,528,800              |
| Norway <sup>1</sup> .....                  | 182,600                | 1,338,200               | 1,736,700               | 1,410,000              |
| Poland.....                                | 3,760,000 <sup>4</sup> | 9,759,300 <sup>4</sup>  | 2,802,400               | 6,722,500              |
| Portugal.....                              | 90,300                 | 905,200                 | 3,274,000               | 1,206,000              |
| Romania.....                               | 2,166,600 <sup>4</sup> | 4,327,200               | 11,836,300              | 2,970,400              |
| Spain.....                                 | 568,100                | 3,569,800               | 19,093,319              | 5,411,535              |
| Sweden.....                                | 611,200                | 2,918,900               | 443,800                 | 1,293,100              |
| Switzerland.....                           | 139,500                | 1,590,000               | 175,400                 | 1,088,300              |
| Russia (U.S.S.R.).....                     | 15,881,300             | 49,255,600              | 54,228,100              | 22,550,100             |
| Yugoslavia.....                            | 1,200,800 <sup>1</sup> | 3,982,400 <sup>2</sup>  | 9,211,100 <sup>3</sup>  | 2,931,000 <sup>4</sup> |
| <b>Northern and Central America—</b>       |                        |                         |                         |                        |
| Canada.....                                | 2,961,300              | 8,820,600               | 3,399,100               | 3,549,200              |
| Cuba.....                                  | 568,700                | 4,515,170               | 193,800                 | 951,779                |
| Santo Domingo (Dominican Republic).....    | 150,000                | 900,000                 | 161,000                 | 1,100,000              |
| Mexico.....                                | 1,887,500              | 10,088,600              | 3,672,800               | 3,698,200              |
| United States <sup>5</sup> .....           | 11,035,000             | 67,968,000              | 52,922,000              | 42,837,000             |
| <b>South America—</b>                      |                        |                         |                         |                        |
| Argentina.....                             | 9,868,100              | 30,867,900              | 39,329,781              | 3,768,700              |
| Brazil.....                                | 6,131,700              | 40,863,900              | 13,040,100              | 24,773,600             |
| Chile.....                                 | 441,000                | 2,387,900               | 6,263,500               | 331,200                |
| Colombia.....                              | 972,000                | 8,337,100               | 872,400                 | 1,621,600              |
| Peru.....                                  | 432,100                | 1,805,900               | 11,209,200              | 888,700                |
| Uruguay.....                               | 622,900                | 7,372,400               | 15,405,007              | 307,900                |
| Venezuela.....                             | 167,700                | 2,278,000               | 118,400                 | 512,100                |
| <b>Asia—</b>                               |                        |                         |                         |                        |
| British India.....                         | 2,344,400              | 160,365,700             | 43,846,500              | <sup>12</sup>          |
| Formosa.....                               | 500                    | 84,700                  | 800                     | 1,873,200              |
| Lado-China.....                            | 90,500                 | 1,977,200               | 15,600                  | 3,544,000              |
| Iraq..... <sup>12</sup>                    | <sup>12</sup>          | <sup>12</sup>           | 4,384,700               | <sup>12</sup>          |
| Japan.....                                 | 1,464,300              | 1,614,800               | 36,000                  | 980,700                |
| Korea.....                                 | 52,600                 | 1,679,500               | 9,400                   | 1,616,400              |
| Netherlands East Indies <sup>6</sup> ..... | 642,000                | 4,515,600               | 1,803,678               | 964,918                |
| Philippines.....                           | 391,000                | 1,483,300               | 135,900                 | 2,976,500              |
| Siam.....                                  | 355,100                | 5,314,200               | <sup>12</sup>           | 864,200                |
| Syria and Lebanon.....                     | 66,800                 | 367,600                 | 2,055,600               | 5,500                  |
| Turkey in Europe and Asia.....             | 600,600                | 5,370,200               | 12,436,800              | <sup>12</sup>          |
| <b>Africa—</b>                             |                        |                         |                         |                        |
| Algeria.....                               | 180,800                | 840,000                 | 6,416,000               | 56,000                 |
| Egypt <sup>4</sup> .....                   | 33,500                 | 853,100                 | 1,429,600               | 13,800                 |
| French Morocco <sup>7</sup> .....          | 221,000                | 2,074,600               | 9,283,600               | 90,000                 |
| French West Africa <sup>8</sup> .....      | 178,000                | 3,337,900               | 8,494,400               | 89,100                 |
| Kenya.....                                 | 2,400                  | 5,192,900               | 3,227,700               | 14,600 <sup>9</sup>    |
| Madagascar.....                            | 2,300                  | 5,559,100 <sup>10</sup> | 207,200                 | 498,100                |
| Nigeria <sup>10</sup> .....                | 184,300                | 2,688,135               | 1,600,100               | 49,400                 |
| Southern Rhodesia.....                     | 2,800                  | 2,460,900               | 312,400                 | 100,200                |
| Territory of South West Africa.....        | 20,900                 | 665,900                 | 1,024,400               | 8,100                  |
| Tanganyika.....                            | 100                    | 4,793,000               | 4,478,000 <sup>11</sup> | 8,300                  |
| Tunis.....                                 | 101,900                | 441,200                 | 3,210,000               | 26,500                 |
| Union of South Africa.....                 | 867,600                | 10,575,000              | 35,996,200              | 965,000                |
| <b>Oceania—</b>                            |                        |                         |                         |                        |
| Australia.....                             | 1,767,800              | 14,048,700              | 113,048,000             | 1,158,300              |
| New Zealand.....                           | 278,000                | 4,293,500               | 29,076,800              | 762,800                |

<sup>1</sup> On farms only. <sup>2</sup> Cattle and buffaloes. <sup>3</sup> In rural districts only. <sup>4</sup> Exclusive of animals belonging to the Army. <sup>5</sup> Animals owned by natives only. <sup>6</sup> Exclusive of animals belonging to the British Army. <sup>7</sup> Number registered for fiscal purposes. <sup>8</sup> Incomplete figures. <sup>9</sup> Swine belonging to Europeans only. <sup>10</sup> Includes only northern provinces of Nigeria and Northern Cameroons. <sup>11</sup> Sheep and goats. <sup>12</sup> Not available.

## CHAPTER IX.—FORESTRY.\*

NOTE.—A short article on "Physiography, Geology and Climate as Affecting the Forests" was published at pp. 311-313 of the 1934-35 Year Book.

### Section 1.—Forest Regions.

The forests of Canada cover a vast region in the north temperate climatic zone, reaching from the Atlantic ocean to the Pacific; they extend northward from the International Boundary to beyond the Arctic Circle. Wide variations in climatic, physiographic, and soil conditions cause marked differences in the character of the forests in different parts of the country, hence more or less well-defined forest regions may be recognized. The following principal regions are described separately: Acadian, Great Lakes-St. Lawrence, Deciduous, Boreal, Sub-Alpine, Columbia, Montane, and Coast. For descriptive purposes, it is convenient to consider two sections of the Boreal Region as separate entities, and they are described hereunder as the Northern Transition, and the Aspen Grove Sections.

**The Acadian Forest Region.**—This region includes all of the provinces of Nova Scotia and Prince Edward Island, and all but the northwest corner of New Brunswick. Its climate is characteristic of maritime regions, and is highly favourable to tree growth. Annual precipitation averages about 40 inches. Topography and geology are widely varied. In northern New Brunswick the maximum altitude is 2,700 feet above sea-level, and northern Cape Breton island and parts of Nova Scotia are fairly rough. The surface of the remainder of the region varies from level to gently rolling.

There is a general coniferous character to the region, especially in the northern parts of New Brunswick and Cape Breton island. Mixed forests, interspersed by so-called "hardwood ridges", are common, however, occurring more frequently in the southern parts of New Brunswick and Nova Scotia.

Among the coniferous species red spruce is the characteristic dominant, and is usually associated with balsam fir. White and black spruce, and white and red pine, are widely distributed. Jack pine occurs in pure stands on sandy plains. Hemlock, which is still to be found in most parts of the region, is believed to have been much more important in previous times. Other characteristic conifers are cedar and tamarack.

Yellow birch, maple, and beech occur in fairly large quantities and usually occupy well-drained ridges. White birch and poplar are found in association with the coniferous species. Among the other hardwoods are oak, butternut, basswood, ash, and elm.

**The Great Lakes-St. Lawrence Forest Region.**—This forest, centring on the Great Lakes system, and extending eastward down the St. Lawrence valley, is of an irregular character. It occupies a middle position between predominantly coniferous forests to the north and the deciduous forests to the south. Precipitation varies from an annual average of 25 inches in the west to 45 inches in the east, and

\* Material in this chapter has been prepared by R.G. Lewis, B.Sc. F., Chief of the Forestry Branch of the Dominion Bureau of Statistics, in co-operation with Roland D. Craig, F.E., of the Dominion Forest Service of the Department of Mines and Resources. Section 1 is based on Dominion Forest Service Bulletin No. 85, "A Forest Classification for Canada", by W. E. D. Halliday. The Forestry Branch of the Bureau of Statistics collects and compiles statistics relating to forest production and publishes four annual printed reports covering the lumber industry, the pulp and paper industry, and the wood-using and paper-using industries of Canada. These printed reports are usually preceded by a number of preliminary mimeographed reports, one for each important industry or group of industries. For detailed list of publications, see Chapter XXIX.

the growing season is from 100 to 150 days. Good forest soils of sedimentary origin are common, but southward extensions of the granitic areas of the Canadian Shield are also included within the boundaries of the region.

The characteristic species are white pine, red pine, and hemlock, associated with the maples, yellow birch, and, in some sections, beech and basswood. Aspen, cedar, and jack pine are widely distributed, and spruce and balsam fir are common in certain localities. Among the less widely distributed hardwood species are white birch, elm, hickories, white and black ash, oak, ironwood, butternut, and black walnut.

The pine forests of the Ottawa valley and Algonquin areas have been famous as one of the greatest of Canada's lumbering areas. Elsewhere in the region, forests of mixed type predominate, with a considerable proportion of pure hardwood stands in the more favoured locations towards the south.

**The Deciduous Forest Region.**—This region in Canada consists of a small northerly intrusion from the great forest of the same type in the United States, and occupies the southwestern portion of what is commonly referred to as the Ontario peninsula. It enjoys very favourable climatic and soil conditions which permit of the growth of a number of tree species not found elsewhere in Canada. Because of its fertile soil, the area is completely settled, and the forests are now represented only by woodlots, parks, and small wooded areas on the lighter soils.

Among the characteristic trees are beech and sugar maple, together with basswood, red maple, and several oaks. Coniferous species are largely represented by scattered specimens of white pine, hemlock, and juniper.

Among the less common hardwoods, which occur singly or in small groups, are hickories, black walnut, chestnut, tulip tree, magnolia, mulberry, sycamore, sassafras, black gum, Kentucky coffee tree, and a number of other species which find their northern limit in this region.

**The Boreal Forest Region.**—This region covers the greater part of the land area of Canada. It stretches unbrokenly from the Atlantic coast of Quebec westward to Alaska. Along its southern side it follows the limits of the Great Lakes-St. Lawrence Region, then skirts the open grasslands of the Prairie Provinces, and is terminated in the west in the foothills of the Rocky mountains. To the north it is bounded by the limits of tree growth.

The principal trees of the region are white and black spruce, balsam fir, poplars, white birch, and jack pine. Near the foothills of the Rocky mountains the latter species is replaced by lodgepole pine. In Quebec and Ontario, and as far west as a line running from lake Winnipeg to lake Athabaska in the Prairie Provinces, the region is, for the most part, underlain by granitic rocks of the Precambrian formations known as the Canadian Shield. Within the area described there are extensive tracts of good soil, formed from glacial or sedimentary deposits, but a larger portion of the region is characterized by shallow soils. Very considerable areas of bare rock testify to the disastrous results of forest fires followed by erosion. The forests of this part of the region are mainly coniferous, with black spruce and balsam fir as dominants, and are valuable chiefly for pulpwood.

West of lake Winnipeg the same tree species are in evidence but in different proportions. Here the soil is deep and relatively fertile, and the characteristic forest is a mixture of poplar and white spruce.

The climate of the region is severe, and precipitation ordinarily varies from 15 to 30 inches annually, although these amounts are exceeded in eastern Quebec.

*The Northern Transition Section.*—This area is a part of the Boreal Region, but is described separately because none of its forests is of commercial value although of considerable local economic value. It represents a transition from the merchantable forests of the south to the treeless wastes of the far north. White and black spruce, larch, and birch are the principal tree species, and these are usually of stunted growth because of the severity of the climate. In river valleys and other protected sites occasional clumps of trees of fair size are to be found. The principal economic value of the forests probably consists in the habitat which they provide for fur-bearing animals, and the wood they furnish for fuel and buildings for the scattered inhabitants of the region.

*The Aspen Grove Section.*—This section, which lies entirely within the Prairie Provinces, is also a part of the Boreal Region, but has very special characteristics. It is a zone of transition between the true forest region to the north and the open grasslands to the south. Aspen is the dominant tree, and is in sole possession of most of the area. In southern Manitoba stands of bur oak are found, and elm and ash occur singly or in small groups in river bottoms. Most of the area is farmed and much of the forest is now in the form of woodlots.

*The Sub-Alpine Forest Region.*—This is essentially a coniferous forest extending from the grasslands of the prairies and the western border of the Boreal Region up the east slopes of the Rockies to timber-line. This same type of forest reappears in a narrow strip extending northwesterly from the International Boundary between the plateaux of the Montane Region and the non-forested tundra formation of the mountain tops of the Coast ranges.

In general, this forest formation occupies areas from 3,500 to 6,000 feet above sea-level. Rainfall is moderate, temperatures are low, and the growing season is short. The topography is mountainous with steep-sided valleys, and the soils are mostly derived from glacial and other residual material. The dominant tree species are Englemann spruce and alpine fir, lodgepole pine, and aspen. Less widely distributed are mountain hemlock, alpine larch, and white-barked pine.

*The Columbia Forest Region.*—This region, often referred to as the Interior Wet Belt of British Columbia, supports forests which are somewhat similar in composition to those of the Coast Region.

The forests properly attributable to the Columbia Region comprise stands in the valleys of the Columbia and other rivers which lie between elevations of 2,500 feet and 4,000 feet above sea-level. Below this range occurs the Montane Region, and above it the Sub-Alpine. The climate is intermediate between those of the Coast and Montane Regions. The precipitation varies from 30 to 60 inches. The region should actually be mapped as a series of 'islands' and 'stringers' surrounded by patches of Sub-Alpine forest; but it is impracticable to do this on so small a scale as is used for the map facing page 284.

Some authorities consider the Columbia Region to be merely an extension of the Coast Forest Region. Because of the complete physical separation of the two regions in Canada, and also because of important differences in environmental conditions, the division made here has been adopted.

The principal species in this region are Englemann spruce, western red cedar, western hemlock, and Douglas fir. Among other species of considerable importance are alpine and grand firs, western white pine, and western larch. Lodgepole pine commonly replaces stands destroyed by fires. Black cottonwood is found on rich alluvial soils.



**The Montane Forest Region.**—This region forms part of what is often termed the Interior Dry Belt of British Columbia. It occupies an extensive series of plateaux, valleys, and ranges in the interior of the province, which extends northward from the International Boundary to the valley of the Skeena river. The climate is relatively dry, with low summer rainfall, and moderate to high temperatures. The dryest conditions are found in the lower river valleys, where the forest gives way to open grassland.

The principal tree species are ponderosa pine, Douglas fir, lodgepole pine, and aspen. Towards the northern limits of the region ponderosa pine disappears and associations of Douglas fir and lodgepole pine become dominant. Towards the north and east, stands of Engelmann spruce and alpine fir grade into the forests of the Sub-Alpine and Columbia Regions. Aspen is an important constituent of the northern parts of this forest.

**The Coast Forest Region.**—This region includes the western slope of the Coast and Cascade mountains and the insular system, the higher elevations of which form Vancouver island, the Queen Charlotte group and other islands along the coast.

The climate in this region is mild and equable, with heavy precipitation varying from 40 to 200 inches per annum, about 70 p.c. of which falls during the autumn and winter months. These conditions are conducive to the luxurious growth of coniferous forests, and produce the largest trees and the heaviest stands in the Dominion.

The dominant trees are western hemlock and western red cedar. Associated with these are Douglas fir in the south and Sitka spruce in the north. All four of these species, of which the most important commercially is Douglas fir, grow to large sizes, and occasionally are found in stands running up to 100,000 ft. b.m. per acre. Other conifers which occur in the region but are of much less importance include yellow cedar; mountain hemlock; amabilis, grand, and alpine firs; and western white pine. Of the broad-leaved trees, several alders are widely distributed, and Garry oak and madrona are found in the vicinity of the straits of Georgia. Broad-leaved maple and vine maple occur at low elevations in the southern sections, and black cottonwood, which is perhaps the most important hardwood from the commercial point of view, is found on alluvial soils in the valleys.

## Section 2.—Important Tree Species.

In Canada there are approximately 125 species or distinct varieties of trees. Only 33 of these are conifers commonly known as "softwoods", but they comprise over 80 p.c. of the standing timber and 70 p.c. of the wood utilized for all purposes. While the number of deciduous-leaved or "hardwood" species is large, only about a dozen are of a commercial importance comparable with that of about two dozen species of conifers.

For descriptions of the individual tree species, the reader is referred to pp. 283-286 of the Canada Year Book, 1936, where the chief tree species were covered, and to Dominion Forest Service Bulletin No. 61, "Native Trees of Canada", published by the Department of Mines and Resources, where the subject is treated in detail.

## Section 3.—Forest Resources.

**Areas.**—The total land area of Canada, revised according to the latest surveys, is estimated at 3,466,556 square miles, of which 549,700 square miles is considered as being suitable for agricultural or pastoral purposes. About 254,873 square

miles of this agricultural land is occupied and of this 213,236 square miles is classified as improved and under pasture and 41,637 square miles as forested.

On p. 60, the area of forested lands is shown in detail. It will be seen that the total area covered by existing forests is 1,223,522 square miles, including 41,637 square miles of occupied agricultural land still forested. Most of this will, no doubt, be left under forest cover in the form of farmers' woodlots. There is also a considerable area of forest land which is of agricultural value and will eventually be cleared, but it is estimated that 1,100,000 square miles is essentially forest land which can best be utilized for forest production. The accessible and productive forest area is estimated to be 769,463 square miles, of which 360,548 square miles carries timber of merchantable size and on 408,915 square miles there is young growth which, if protected from fire, will eventually produce merchantable timber. The remaining area of 454,059 square miles carries forests of value either because of their influence on water control, climatic conditions, game conservation, or by reason of their attraction to tourists and their value as a source of wood for local use. On account of their geographical location or because of unfavourable growth conditions these forests at present are considered as non-productive from a commercial viewpoint.

As a result of the constant and inevitable improvement in conditions affecting profitable exploitation, such as the extension of settlement and transportation facilities, the increasing world scarcity of forest products, and the ever-increasing demand for these products, due to the development of industry, the discovery of new uses for wood, and the improvements in the methods, equipment and machinery used in logging and manufacturing forest products, some of this inaccessible timber will eventually become commercially exploitable. It is estimated that of the accessible forest area 442,354 square miles is producing softwood or coniferous timber, 221,138 square miles mixed softwoods and hardwoods, and 105,971 square miles hardwood or broad-leaved species.

In Canada as a whole about 10.5 p.c. of the total forest area has been permanently dedicated to forest production. The distribution of Dominion forest experimental areas, provincial forests, provincial parks and national parks, by provinces, is shown in the following statement.

FOREST RESERVES AND PARKS IN CANADA, 1938.

| Province.                 | Dominion<br>Forest<br>Experi-<br>mental<br>Areas. | Provincial<br>Forest<br>Reserves. | Provincial<br>Parks. | National<br>Parks.    | Total.     |
|---------------------------|---|-----------------------------------|----------------------|-----------------------|------------|
|                           | sq. miles.  | sq. miles.                        | sq. miles.           | sq. miles.            | sq. miles. |
| Prince Edward Island..... | Nil   | Nil                               | Nil                  | 7-60                  | 7-60       |
| Nova Scotia.....          | Nil   | Nil                               | Nil                  | 455-00                | 455-00     |
| New Brunswick.....        | 35-00   | Nil                               | Nil                  | Nil                   | 35-00      |
| Quebec.....               | 7-25  | 31,319-60                         | 5,099-00             | Nil                   | 36,425-85  |
| Ontario.....              | 97-10   | 19,606-00                         | 4,248-00             | 11-70                 | 23,962-80  |
| Manitoba.....             | 35-95   | 3,775-14                          | Nil                  | 1,148-04              | 4,959-13   |
| Saskatchewan.....         | Nil   | 10,042-93 <sup>1</sup>            | 258-38               | 1,869-00              | 12,170-31  |
| Alberta.....              | 62-60   | 14,347-09                         | 2-27                 | 7,316-00 <sup>2</sup> | 21,727-96  |
| British Columbia.....     | Nil   | 24,803-00                         | 2,727-47             | 1,715-00              | 29,245-47  |
| Totals.....               | 237-00  | 103,893-76                        | 12,335-12            | 12,523-34             | 128,992-12 |

<sup>1</sup> Of this area 286-39 square miles have been placed under provincial park regulations. <sup>2</sup> Not including the Wood Buffalo Park, partly in Alberta and partly in the Northwest Territories, and the Tar Sands Reserve.

Of the total forest area, 8.5 p.c. has been permanently alienated, being owned in fee simple by private individuals or corporations. The Crown still holds title to 12.9 p.c. of the area, but has alienated the right to cut timber thereon under lease or licence. So far 78.6 p.c. has not been alienated in any way. It may be said that 91.5 p.c. of Canada's forest area is still owned by the Crown in the right either of the Dominion or the provinces and, subject only to certain temporary privileges granted to limit-holders, may at any time be placed under forest management and dedicated to forest production.

**Volume of Standing Timber.**—In 1935, the total stand of timber in Canada was estimated to be approximately 273,656 million cubic feet, of which 222,076 million cubic feet was of coniferous species and 51,580 million cubic feet of broad-leaved species.

During the ten years 1926-35, the average annual depletion due to use was approximately 2,034 million cubic feet of conifers and 547 million cubic feet of hardwoods. The average annual loss from fire was estimated at 241 million cubic feet of conifers and 26 million cubic feet of hardwoods. The loss from attacks of insects and fungi can only be estimated in a broad way, but it is placed at 700 million cubic feet annually for the ten-year period. In Nova Scotia, in 1931, the balsam suffered severely from "gout" induced, it is believed, by minute sucking insects of the genus *Dreyfusia*, previously undescribed. In the Gaspé peninsula the spruce saw-fly has become a serious menace, spreading to New Brunswick and as far west as Ontario. The total annual depletion during the ten-year period was, therefore, estimated to have been about 3,558 million cubic feet. To what extent this loss has been replaced by growth increment is not known but, considering the preponderance of the younger age classes in the reproduction, it is believed there has been a considerable net depletion in the merchantable age classes.

Another real difficulty is the division of the existing stand into merchantable timber and that which is inaccessible or unprofitable, since merchantability depends not only on the location but on the density of the stand, the demands of the market for certain species or qualities of product, and the regulations as to cutting. Light stands covering large areas may in the aggregate carry very large amounts of timber and still not be exploitable at a profit. For some species, such as aspen and white birch, which comprise three-quarters of the hardwoods, there is very little demand, and therefore these cannot properly be classed as merchantable, though accessible as far as location is concerned.

In June, 1929, a conference of the Dominion and provincial forest authorities was held in Ottawa and it was decided to undertake a national inventory of the forest resources of Canada, each authority conducting the necessary stock-taking surveys on the land under its jurisdiction. In connection with the inventory, data are being secured regarding the depletion due to use, fire, insect damage, etc., and the increment accruing. The Forest Service of the Department of Mines and Resources acts as a clearing-house for the national inventory, and in addition to collecting and compiling the data furnished by the provincial authorities has conducted the inventorial work in the Prairie Provinces and the Maritime Provinces. The inventories for Manitoba and New Brunswick have been completed. The Dominion Service is also carrying on extensive surveys to determine the increment taking place in the forests and conducting more intensive silvicultural research at forest experiment stations located in New Brunswick, Quebec, Ontario, Manitoba, and Alberta.

Under present conditions it is estimated that 133,290 million cubic feet of conifers and 36,853 million cubic feet of hardwoods can be considered as accessible.

1.—*Estimate of Total Accessible Stand of Timber in Canada, Classified by Type and Merchantable Size, by Provinces and Regions, with Estimate of Grand Total Stand, 1937.*

| Province and Region.                  | Conifers.         |                  |                                      | Broad-Leaved.     |                 |                                      | Totals.           |                  |                                      |
|---------------------------------------|-------------------|------------------|--------------------------------------|-------------------|-----------------|--------------------------------------|-------------------|------------------|--------------------------------------|
|                                       | Saw Material.     | Small Material.  | Total Equivalent in Standing Timber. | Saw Material.     | Small Material. | Total Equivalent in Standing Timber. | Saw Material.     | Small Material.  | Total Equivalent in Standing Timber. |
|                                       | million feet b.m. | '000 cords.      | million cubic feet.                  | million feet b.m. | '000 cords.     | million cubic feet.                  | million feet b.m. | '000 cords.      | million cubic feet.                  |
| <b>Accessible.</b>                    |                   |                  |                                      |                   |                 |                                      |                   |                  |                                      |
| Prince Edward Island.....             | 100               | 700              | 104                                  | 20                | 100             | 14                                   | 120               | 800              | 118                                  |
| Nova Scotia.....                      | 4,354             | 23,182           | 3,775                                | 1,170             | 5,805           | 808                                  | 6,024             | 28,987           | 4,563                                |
| New Brunswick.....                    | 5,557             | 48,070           | 6,863                                | 3,944             | 15,737          | 2,359                                | 9,601             | 63,807           | 9,222                                |
| Quebec.....                           | 52,175            | 277,309          | 43,871                               | 8,565             | 88,750          | 10,307                               | 60,740            | 366,050          | 54,177                               |
| Ontario.....                          | 23,620            | 251,175          | 34,500                               | 9,640             | 108,820         | 12,163                               | 33,260            | 356,995          | 46,724                               |
| <b>TOTALS, EASTERN PROVINCES.....</b> | <b>88,406</b>     | <b>600,437</b>   | <b>89,173</b>                        | <b>22,339</b>     | <b>216,312</b>  | <b>25,651</b>                        | <b>109,748</b>    | <b>816,659</b>   | <b>114,824</b>                       |
| Manitoba.....                         | 1,045             | 9,645            | 1,337                                | 1,620             | 10,110          | 2,170                                | 2,655             | 28,755           | 3,528                                |
| Saskatchewan.....                     | 4,055             | 12,865           | 2,400                                | 2,825             | 46,260          | 5,013                                | 6,010             | 59,125           | 7,413                                |
| Alberta.....                          | 7,000             | 74,400           | 10,233                               | 2,080             | 36,000          | 3,876                                | 9,680             | 110,400          | 14,113                               |
| <b>TOTALS, PRAIRIE PROVINCES.....</b> | <b>12,100</b>     | <b>96,910</b>    | <b>13,969</b>                        | <b>6,525</b>      | <b>101,370</b>  | <b>11,059</b>                        | <b>18,655</b>     | <b>158,280</b>   | <b>25,054</b>                        |
| British Columbia.....                 | 116,508           | 61,470           | 30,123                               | 405               | 790             | 143                                  | 116,913           | 62,260           | 30,266                               |
| <b>Totals, Accessible.....</b>        | <b>215,044</b>    | <b>788,907</b>   | <b>133,291</b>                       | <b>30,269</b>     | <b>318,372</b>  | <b>36,853</b>                        | <b>215,313</b>    | <b>1,107,179</b> | <b>170,144</b>                       |
| <b>Totals, Inaccessible.....</b>      | <b>171,673</b>    | <b>503,268</b>   | <b>88,785</b>                        | <b>8,264</b>      | <b>136,192</b>  | <b>14,727</b>                        | <b>179,937</b>    | <b>639,466</b>   | <b>103,512</b>                       |
| <b>Grand Totals.....</b>              | <b>386,717</b>    | <b>1,292,075</b> | <b>222,076</b>                       | <b>38,533</b>     | <b>454,564</b>  | <b>51,580</b>                        | <b>425,250</b>    | <b>1,746,639</b> | <b>273,656</b>                       |

## Section 4.—Forest Administration.

### Subsection 1.—Administration of Dominion and Provincial Timber-Lands.

In Canada the general policy of both the Dominion Government and the Provincial Governments has been to dispose of the timber by means of licences to cut, rather than to sell timber-land outright. Under this system the State retains the ownership of the land and control of the cutting operations. Revenue is derived in the form of stumpage bonuses (either in lump sums or in payments made as the timber is cut), annual ground rent, and royalty dues collected as and when the wood is removed. Both ground rent and royalty dues may be adjusted at the discretion of the Governments so that the public may share in any increase in stumpage values or reductions may be made in the rates if conditions demand them.

The Maritime Provinces did not adopt this policy to the same extent as did the rest of Canada. In Prince Edward Island practically all the forest land has been alienated and is in small holdings, chiefly farmers' woodlots. In Nova Scotia 87 p.c. of the forest land is privately owned; nearly half of this is in holdings exceeding 1,000 acres. In New Brunswick over 50 p.c. has been sold, and 20 p.c. is in holdings exceeding 1,000 acres. The percentage of privately-owned forest land in the other provinces exclusive of National Parks and Indian reserves is as follows: Quebec, 8 p.c.; Ontario, 3.3 p.c.; Manitoba, 9.1 p.c.; Saskatchewan, 7.6 p.c.; Alberta, 7.7 p.c.; and British Columbia, 8.4 p.c. In all cases timber-lands are now

administered by the provinces in which they lie. As new regions are explored their lands are examined and the agricultural land disposed of. Absolute forest land is usually set aside for timber production, and the policy of disposing of the title to lands fit only for the production of timber has been virtually abandoned in every province in Canada. The ownership of forests by towns and communities, so common in Europe, is now beginning in Canada. Efforts are being made, especially in Quebec and Ontario, to encourage the establishment and maintenance of forests on this basis.

The administration of forest lands under Dominion control and those under the control of each of the provinces is reviewed below.

**Forest Lands Under Dominion Control.**—The forests under Dominion control are administered by the Department of Mines and Resources. The National Parks Bureau has charge of the National Parks, the Lands Registry Office administers the timber in Yukon and the Northwest Territories, and the Indian Affairs Branch administers, in trust for the Indians, the timber within their reservations. The Dominion Forest Service has charge of the Forest Experiment Stations.

**Forest Lands Under Provincial Control.**—*Nova Scotia.*—In this province, 10,473 square miles, about 87 p.c. of the forest land, is privately owned. The Crown timber is administered by the Minister of Lands and Forests, with a Chief Forester in charge of protection, surveys, etc. Timber-cutting leases are granted by special agreements.

*New Brunswick.*—The Forest Service, under the Department of Lands and Mines, administers the forests in New Brunswick. At present timber-lands are disposed of as in the other provinces, but in the past several grants of forest land were made to railway companies, private concerns, and individuals, who now own in fee simple about 11,100 square miles of forest land.

*Quebec.*—The Forest Service of the Department of Lands and Forests administers the timber-lands in Quebec. Its powers include classification of land, disposal of timber and regulation of cutting operations. Since 1924 forest protection has been under a separate organization, the Forest Protective Service. Licences are granted after public competition and are renewable from year to year, subject to changes in royalty by the Government at any time. Grants of land in fee simple, made in some cases under the French *régime* in Quebec, are responsible for the private ownership of about 31,048 square miles of forest land. Forest reserves cover 31,320 square miles and provincial parks 5,099 square miles.

*Ontario.*—Forest administration is carried out in Ontario by the Department of Lands and Forests, under a Minister, Deputy Minister, and Provincial Forester.

In recent years the sale of saw timber has been by tender after examination, with conditions covering the removal within a specified period, disposal of debris, etc. Much of the merchantable timber is at present held under licences granted in the past and renewable indefinitely. Pulpwood areas are usually disposed of by individual agreements for longer periods than in the case of saw timber. The licensees usually undertake to erect a pulp-mill or a paper-mill within the province, the type and size of mill being stipulated in the agreement. In this province about 7,972 square miles of forest land have been disposed of outright. Provincial forest reserves cover 19,606 square miles, and the provincial parks 4,248 square miles.

*Manitoba.*—The Forest Service of the Department of Mines and Natural Resources has administered the forests of Manitoba since 1930. A provincial Air Service is operated under the direction of the Provincial Forester, and is mainly

used for purposes of forest fire protection. Six forest reserves, containing 3,775 square miles, are permanently reserved for the production of forest products. Timber is disposed of by licence or timber sale, and large numbers of timber permits, covering small quantities of wood, are issued annually to settlers and others. One pulp and paper mill is in operation in the province. The area of privately-owned forest land is estimated to be 8,500 square miles.

*Saskatchewan.*—The forests of Saskatchewan are administered by the Department of Natural Resources. The organization is unique in Canada, because the different resources are not controlled by different branches of the Department. Instead, each field officer handles matters pertaining to all resources within his district. Forestry affairs of the Department are controlled by the Director of Forests. Timber disposal is carried out under licence, sale, and permit. An Air Service is maintained, mainly for forest protection purposes. Forest reserves occupy 10,043 square miles and provincial parks 258 square miles. Privately-owned forest land is estimated to be 6,250 square miles.

*Alberta.*—The Forest Service of the Department of Lands and Mines administers and protects the provincial forests. Timber is disposed of through licences and permits except on forest reserves, where timber sales are disposed of but licensed berths are not. The area in forest reserves is 14,347 square miles, and 10,044 square miles of forest land are privately owned.

*British Columbia.*—In the province of British Columbia, the Forest Branch of the Department of Lands has administered timber-lands since 1912. All unalienated lands in the province which are found to be better suited to forest than to agricultural production are dedicated to the former purpose, and all timber-lands carrying over a specified quantity of timber are withdrawn from disposal until examined by the Forest Branch. During the past few years 24,803 square miles have been set aside permanently for forest purposes. Provincial parks include 2,727 square miles. The present practice is to sell cutting rights for a stated period by public competition but licences to cut, which are renewable annually in perpetuity, have been granted for a large proportion of the accessible timber. The royalties are adjusted periodically on the basis of prevailing industrial conditions. About 15,000 square miles of timber-land are privately owned.

#### Subsection 2.—Forest Fire Protection.

The protection of forests from fire is undoubtedly the most urgent and most important part of the work of the different agencies administering forest lands in Canada. Except for the forests of the National Parks, the Forest Experiment Stations, and the Northwest Territories and Yukon, which remain under Dominion control, the administration of forest lands now rests with the provinces. Up to the end of the fire season of 1930, the Forest Service of the former Dominion Department of the Interior was responsible for fire protection in the prairie provinces of Manitoba, Saskatchewan, and Alberta, and the Railway Belt of British Columbia. However, by reason of the transfer of natural resources from Dominion to provincial control, their administration is now a matter of provincial concern.

Each of the Provincial Governments, except that of Prince Edward Island, maintains a fire protection organization co-operating with owners and licensees for the protection of all timbered areas, the cost being in part distributed or covered by special taxes on timber-lands. In each province, with the exception just mentioned, provincial legislation regulates the use of fire for clearing and other legitimate

purposes, and provides for close seasons during dangerous periods. An interesting development in this connection in the province of Quebec is the organization of a number of co-operative protective associations among lessees of timber limits. These associations have their own staffs which co-operate with those of the Board of Railway Commissioners and the Provincial Government. The latter contributes money grants and also pays for the protection of vacant Crown lands lying within the area of the associations' activities.

In the matter of forest fire protection along railway lines, the provincial services are assisted by the Dominion Railway Act administered by the Board of Railway Commissioners. This Act gives to that body wide powers relating to fire protection along railway lines under its jurisdiction in Canada. Certain officers of the various forest authorities are appointed *ex officio* officers of the Board of Railway Commissioners. These officers co-operate with the railway fire-ranging staffs employed by the various railway companies, the compulsory control of all lines coming under the jurisdiction of the Board being one of the requirements of the Dominion Railway Act.

The most important single development of late years in forest fire protection has been the use of aircraft for the detection and suppression of incipient forest fires. Where lakes are numerous, flying boats can be used for detection and for the transportation of fire fighters and their equipment to fires in remote areas. Specially developed aircraft equipped with wireless are employed on forest fire-protection operations; these enable the observer to report the location of a fire as soon as it has been detected. Aircraft are now being used extensively for exploring remote areas and mapping forest lands by means of aerial photography. Waste lands and the various forest types can be mapped more accurately and more economically by this means than by ground surveys. As a general rule, aircraft are used in the more remote districts, while lookout towers, connected by telephone lines or equipped with wireless, are established in the more settled and more travelled forest areas. While these agencies have to a large extent supplanted the old canoe, horseback, and foot patrol for the detection of fires, a large ground staff with its equipment stored at strategic points will always be necessary for the fighting of larger fires. A ground staff is also necessary for the maintenance in the forest of fire lanes, fire guards, and systems of communication and transportation.

The most important improvement in forest fire-fighting equipment has been the portable gasoline pump. These pumps, each of which weighs from 45 to a little over 100 pounds, can be carried to a fire by canoe, motor boat, automobile, aircraft, pack-saddle or back-pack. They can deliver efficient water pressure as far as seven thousand feet from a water supply and, when used in relays, to a much greater distance. Small hand pumps supplied by 5-gallon portable containers are also used effectively in many cases.

In addition to these improved measures, the enactment of legislation has tended to reduce the fire menace. The establishment of close seasons for brush burning, and seasons during which permits are required for setting out fires and for travel in the forest during dangerous dry periods, have been of enormous value as preventive measures.

Since its beginning in 1900, the Canadian Forestry Association has played an important part in securing popular co-operation in reducing the fire hazard. By means of its magazine which has a circulation of over 16,000, by railway lecture cars and motor trucks provided with motion picture equipment, and by co-operation with radio broadcasting stations and the press, the Association reaches a large proportion of the population of the Dominion. Special efforts are made through the

schools, by specially appointed junior forest wardens and other means, to educate the younger generation as to the value of the forests, the devastation caused by fire and the means of preventing such destruction.

Prepared lectures illustrated by slides and films are distributed to volunteer lecturers and other educational work is carried on in schools and at public meetings. The various governmental forest authorities also carry on forest conservation publicity work independently and in co-operation with the Canadian Forestry Association.

Another important advance in forest protection is the development by the Dominion Forest Service of methods for the daily measurement of the actual degree of forest fire hazard which is expressed in the form of an index computed from the weather factors. In the forest types and regions in which the necessary research has been completed the forest authorities are able, not only to gauge the trend of increasing hazard at any given time, but, by the aid of weather forecasts, they can anticipate the trend one or two days in advance and so regulate their activities to meet hazardous conditions as they develop.

### Subsection 3.—Scientific Forestry.

Up to the present, the practice of forestry in Canada has consisted chiefly in the administration and protection of existing forest areas. About 35 square miles is now being planted out annually, largely in connection with farmers' woodlots, shelter belts, and reclamation work, while several commercial reforestation projects have been carried on by paper companies and by Provincial Governments on denuded Crown lands. The great forestry problem in Canada, however, is the management of Crown forests, first under provisional and later more intensive working plans, so as to ensure a sustained yield. To this end, forest research activities are now assuming great importance. Silvicultural investigations are receiving marked attention both from the Dominion services and some of the provincial services.

About 400 technically-trained foresters are employed by the Dominion or provincial forest services or by paper and lumber companies. In addition to administrative work, these men carry on forest surveys either for the estimation of timber stands and making of maps, or to determine natural growth and reproduction conditions and factors. A considerable number of foresters are actively engaged in commercial logging operations.

**Dominion Forest Service.**—The activities of the Dominion Government in forest research are centred in the Dominion Forest Service, which is a bureau of the Lands, Parks, and Forests Branch of the Department of Mines and Resources. Until the time of transfer of the natural resources of the Prairie Provinces, and the Railway Belt and Peace River Block in British Columbia, to provincial control in 1930, the Forest Service was primarily concerned with the administration of forest reserves and the protection from fire of all forests on Crown lands. In addition silvicultural research work had been carried on at the Petawawa Experiment Station in the Ottawa valley since 1918. Since the transfer of the resources, the Service has been entirely devoted to investigations in the fields of forest economics, silvicultural research, forest protection research, and forest products research.

In co-operation with the provincial forest authorities, the Forest Service assembles the available information respecting the forest resources of the Dominion in order to prepare a national forest inventory. Such material is revised every five years and published in reports entitled "The Forests of Canada", which are submitted to the quinquennial British Empire Forestry Conferences. Besides



giving assistance to certain provinces in the preparation of their inventories, the Service is developing improved methods in interpreting the valuable forestry data contained in aerial photographs. The Economics Division also assembles data and issues reports on forest revenues and expenditures, the production of forest industries, the employment of labour, and trade in forest products.

Five forest experiment stations, where investigations of the underlying principles governing the growth of forests can be made, and where practical methods of management can be tested, are now in operation. Besides the original station at Petawawa, new establishments, opened since 1930, include the Acadia station near Fredericton, N.B.; the Valcartier station near Quebec; the Duck Mountain station in Manitoba; and the Kananaskis station in the foothills west of Calgary. The total area of the five stations is approximately 238 square miles. These stations, or experimental areas, are used for forest fire-hazard research as well as for silvicultural work, and also form centres from which investigations can be conducted in other areas in the regions in which they are located.

One of the principal problems now exercising the minds of all who are interested in the future welfare of our forest resources concerns the present condition and future prospects of forest areas which have been cut or burned. The Forest Service is conducting a special series of investigations into this question in co-operation with the provinces and timber owners.

**Forest Products Laboratories.**—In order to promote the more efficient use of the forest resources of Canada and at the same time assist the wood-using industries in the more technical problems encountered in their manufacturing operations, the Forest Products Laboratories of Canada were organized in 1913 under the Forest Service of the former Department of the Interior. The need for them was felt because of the influence of the establishment of such laboratories in other important timber-growing countries. Besides, on account of Canada's large exports of timber and timber products, it became increasingly apparent that, in order to meet world competition in the timber trade, it was necessary that Canada keep fully abreast of other countries in scientific developments in wood utilization.

For several years the Laboratories carried on all their work in Montreal, under an arrangement with McGill University. The subsequent development of their work has necessitated the establishment of a branch laboratory in Vancouver in a building provided by the University of British Columbia, the transfer of the main Laboratories to Ottawa, and the establishment of the Pulp and Paper Division of the Laboratories in Montreal in a building erected by the Canadian Pulp and Paper Association. In this building are also housed the executive offices of the Association and certain laboratories of McGill University devoted to research in cellulose and related products. The Pulp and Paper Association, in addition to providing accommodation for the Laboratories, makes a yearly grant to the Laboratories to assist in financing the work, and through a Joint Administrative Committee, consisting of representatives of the Government and the Association, takes an active part in formulating and forwarding the work of the Division. Close co-operation is also maintained with McGill University.

The main Laboratories in Ottawa carry out work in timber mechanics, wood fabrication, wood preservation, lumber seasoning, timber pathology, wood structure, wood identification, wood chemistry and general wood utilization; they also co-operate with other Government Departments and industrial organizations in timber marketing problems. In addition, the Ottawa Laboratories carry out many investigations in connection with logging problems of the pulp and paper industry.

The Vancouver Laboratory devotes attention to special problems relating to Pacific Coast timbers which require local treatment and which cannot be carried out to advantage in the main Laboratories on account of distance or for other reasons.

A research committee of the Canadian Lumbermen's Association was set up several years ago to effect liaison between the industry and the Laboratories and make as effective as possible the application of researches carried out by the Laboratories in the problems of the lumber industry.

Since the Laboratories were established, many advances have been made in the technique of wood utilization. Improvements have been made in treating railway ties, telephone poles, mining timbers, and other structural timbers with creosote, water-soluble salts, and other chemicals. This has enhanced the value of wood as a permanent structural material and permitted its use for a variety of purposes for which it is otherwise unsuitable. The work carried out in the treatment of hardwoods, especially birch, beech, and maple, has been of particular value. Reductions in the cost of manufacture of pulp and paper, and improvements in quality of products have resulted from researches of the Laboratories. Of particular interest has been the development in the Pulp and Paper Laboratory of the Canadian Standards Freeness Tester and the Johnston Fibre Classifier. Valuable work has also been carried out in the manufacture of groundwood pulp and in the pulping of resinous woods and hardwoods.

The study of the significance of discolouration in timber, as for example in jack pine, red cedar, and Douglas fir, has been responsible to a considerable degree in curtailing rejection of such material. Researches carried out in the spraying or dipping of timber, notably the sapwood of the pines, with chemicals which are toxic to wood-staining organisms have assisted in curtailing losses on this account, which in some years amounted to as high as one million dollars.

Through researches carried out in the Laboratories and at wood-working plants important advances have been made in seasoning both in the open air and in experimental dry-kilns. This work has been particularly valuable in both Eastern and Western Canada in connection with export markets which are becoming increasingly critical of specifications. The work carried out has been of significance to exporters of both softwoods and hardwoods.

Mechanical and physical tests have been carried out on nearly all important Canadian commercial species of timber according to practices which have been adopted by laboratories of countries of the British Empire and the United States. A great deal of work has also been carried out on large structural timbers. This information has been widely used by Canadian engineers and has formed the basis for the revision of city building codes. It has also been made the basis for Canadian standard grades for all species of Canadian woods of structural importance which have been set up by the Canadian Engineering Standards Association.

Close co-operation is maintained between the Laboratories and the Commercial Intelligence Service of the Department of Trade and Commerce through its Trade Commissioners. The Laboratories also co-operate closely with the Dominion Department of Public Works in all its timber structures and with other Dominion Departments, notably Agriculture, National Defence, and Transport; also with Canadian railway companies and other large public utility organizations.

**Universities and Other Agencies.**—Education in forestry and opportunities for research are offered by four Canadian universities. The University of Toronto, the University of New Brunswick, and the University of British Columbia provide four-year courses leading to a professional degree. The School of Forestry and

Surveying in connection with Laval University at Quebec provides, in the French language, a combined course of four years duration leading to diplomas in both sciences. The Government of Quebec has established a school in paper-making at Three Rivers in the heart of the paper industry; several agricultural colleges provide short courses in farm forestry and a school for forest rangers has been established at Duchesnay by the Quebec Forest Service.

A provincial forest experiment station of six square miles is maintained by the Quebec Forest Service at Duchesnay, near Quebec city, and the British Columbia Forest Branch has four such stations, totalling fourteen square miles and located at Aleza lake, Campbell river, Cowichan lake, and Green Timbers.

The practice of forestry by individuals and private concerns is encouraged by the furnishing of expert advice by Dominion and provincial services and by the distribution of tree-planting material. The Dominion Department of Agriculture maintains two nurseries in Saskatchewan, one at Indian Head and the other at Sutherland, near Saskatoon. Over 7,000,000 trees are distributed annually to farmers and ranchers in the Prairie Provinces for planting woodlots and windbreaks. If certain conditions are fulfilled, the material and instructions are provided free except for transportation charges. A total of over 125,000,000 trees has been distributed.

The province of Ontario provides material under similar conditions and distributes to woodlot owners at least 7,000,000 trees annually from its five nurseries. As many more are being provided for the creation of county forests, demonstration forests and plantations on denuded Crown lands. To encourage the establishment of communal forests by towns and other municipalities, the Provincial Government undertakes to plant, free of charge, any area purchased by the municipality for this purpose. The Government also assists counties that purchase areas of not less than 1,000 acres of land for forest purposes. As a result of these inducements there are at present, scattered throughout the province, 50 communal forests (owned by municipalities) and eight of the larger county forests. Farm land used for forestry purposes, while so used, is exempt from taxation up to 10 p.c. of the total farm area but not exceeding a total of 20 acres.

In Quebec, a forest nursery at Berthierville serves as a demonstration station for the School of Forestry. It provides trees for sale and distribution in the province, comprising seedlings and transplants for forest planting and larger trees for ornamental purposes. The capacity of the nursery is about 10,000,000 trees. Provision is made by legislation for the creation of communal forests and there are now 76 of these, covering 594,059 acres.

## Section 5.—Forest Utilization.

A short historical sketch of forest utilization in Canada appears at p. 325 of the 1934-35 Year Book and an article on "The History of the Canadian Lumber Trade", by A. R. M. Lower, M.A., will be found at pp. 318-323 of the 1925 edition of the Canada Year Book.

### Subsection 1.—Woods Operations.

Differences in forest conditions throughout Canada give rise to differences in logging methods. Generally speaking, throughout Eastern Canada the climate is such that the cutting and hauling of logs can be carried on most economically during the fall and winter months. The trees are felled and the logs hauled to the nearest stream or lake, where they are piled on the ice or sloping banks. The presence of

connected systems of lakes and streams makes it possible in most cases to float the logs from the forest to the mill at a minimum cost during the annual spring freshets. The logging industry east of the Rocky mountains is, therefore, almost entirely seasonal. In many cases lumbermen co-operate in river-driving operations and improvement companies, financed by the logging operators, build river improvements to facilitate the passage of the floating logs, the logs being finally sorted and delivered to their respective owners. In British Columbia the scarcity of drivable streams and the greater average size of the logs give rise to entirely different logging methods. Logs are assembled by cable systems operated by donkey engines and are transported to the mills or to water chiefly by logging railways but in some cases by motor trucks. These operations are more or less independent of frost, snow, or freshet and are carried on in most cases throughout the entire year.

In Eastern Canada logging operations are usually carried on by the mill owners or licensees of timbered lands, often through the medium of contractors, subcontractors and jobbers. In the better-settled parts of the country a considerable quantity of lumber is sawn by custom sawmills or small mills purchasing logs from the farmers. Unmanufactured pulpwood, poles, ties and other forest products have a market value, but sawlogs, being as a rule the property of the mill owner, are not generally marketed as such in Eastern Canada. In British Columbia logging is carried on more frequently as a separate enterprise by limit-holders, who cut and sell logs on the market. In many cases mill operators are not limit-holders but buy their entire supplies of raw material from logging concerns.

In connection with operations in the woods it should be borne in mind that the forests not only provide the raw material for the sawmills, pulp-mills, wood distillation, charcoal, excelsior, and other plants but that they also provide logs, pulpwood, and bolts for export in the unmanufactured state, and fuel, poles, railway ties, posts and fence rails, mining timber, piling, and other primary products, which are finished in the woods ready for use or exportation. There are also a number of minor forest products, such as Christmas trees, maple sugar and syrup, balsam gum, resin, cascara, moss, and tanbark, which all go to swell the total.

Table 2 gives the total values of the products of woods operations in Canada for the years 1931 to 1935, inclusive. The exports and imports of forest products in the fiscal years ended Mar. 31, 1934-37, are shown in Tables 12 and 13 of the chapter on External Trade.

2.—Values of Woods Operations, by Products, 1931-35.

| Product.                    | 1931.       | 1932.      | 1933.      | 1934.       | 1935.       |
|-----------------------------|-------------|------------|------------|-------------|-------------|
|                             | \$          | \$         | \$         | \$          | \$          |
| Logs and bolts.....         | 32,889,204  | 18,029,769 | 23,158,381 | 29,115,515  | 34,077,938  |
| Pulpwood.....               | 51,973,243  | 36,780,610 | 33,213,973 | 35,302,807  | 41,195,871  |
| Firewood.....               | 44,237,948  | 30,627,632 | 31,141,104 | 31,459,524  | 31,884,500  |
| Hewn railway ties.....      | 4,144,169   | 1,353,654  | 1,370,750  | 1,541,901   | 3,183,651   |
| Poles.....                  | 3,057,546   | 1,411,209  | 963,951    | 1,091,046   | 1,859,736   |
| Round mining timber.....    | 958,681     | 809,700    | 841,932    | 954,059     | 997,357     |
| Fence posts.....            | 1,388,074   | 990,568    | 909,291    | 988,884     | 976,402     |
| Wood for distillation.....  | 266,080     | 251,281    | 342,107    | 286,847     | 274,767     |
| Fence rails.....            | 451,205     | 253,077    | 215,521    | 266,519     | 266,233     |
| Miscellaneous products..... | 1,754,780   | 1,628,452  | 1,556,082  | 1,506,630   | 1,260,274   |
| Totals.....                 | 141,133,930 | 92,106,252 | 93,773,142 | 105,539,732 | 115,461,779 |

It has been estimated that operations in the woods in Canada in 1935 involved the investment of \$131,000,000 in logging equipment, gave employment for a part of the year equivalent to 79,000 man-years, and distributed over \$60,000,000 in wages

and salaries. In estimating the annual drain on our forest resources, certain converting factors have been used. Each of these factors represents in cubic feet the quantity of standing timber that must be cut in the forest to produce one unit of the material in question, based on the total cubic contents of the tree. By the use of these factors it has been estimated that the total drain on our forest resources in 1935, due to consumption for use, amounted to 2,440,809,000 cu. ft. of standing timber. To this total must be added the volume of material destroyed by fire, insects, and fungi, which would bring the average annual depletion to more than four billion cubic feet of standing timber. Table 3 gives the reported or estimated quantities of wood cut, by chief products, together with the respective converting factor, the equivalent in standing timber and the estimated value in each case for 1935, with totals 1924-35. Table 4 shows the extent of the drain on our forest resources in 1934 and 1935, by provinces.

**3.—Quantities of Wood Cut in Operations in the Woods in Canada, Equivalents in Standing Timber, and Total Values, by Chief Products, 1935, with Comparative Totals, 1924-35.**

| Product.                         | Quantity Reported or Estimated. | Converting Factor. | Equivalent Volume in Standing Timber. | Total Value.       |
|----------------------------------|---------------------------------|--------------------|---------------------------------------|--------------------|
|                                  |                                 |                    | '000 cu. ft.                          | \$                 |
| Totals, 1924.....                | -                               | -                  | 2,508,506                             | 213,146,710        |
| Totals, 1925.....                | -                               | -                  | 2,829,138                             | 209,276,561        |
| Totals, 1926.....                | -                               | -                  | 2,838,106                             | 204,436,325        |
| Totals, 1927.....                | -                               | -                  | 2,865,303                             | 204,937,750        |
| Totals, 1928.....                | -                               | -                  | 2,988,038                             | 212,950,799        |
| Totals, 1929.....                | -                               | -                  | 3,090,615                             | 219,570,129        |
| Totals, 1930.....                | -                               | -                  | 3,036,930                             | 206,555,494        |
| Totals, 1931.....                | -                               | -                  | 2,306,114                             | 141,123,936        |
| Totals, 1932.....                | -                               | -                  | 1,882,228                             | 92,106,252         |
| Totals, 1933.....                | -                               | -                  | 2,027,714                             | 93,773,142         |
| Totals, 1934.....                | -                               | -                  | 2,299,547                             | 105,539,732        |
| <b>1935.</b>                     |                                 |                    |                                       |                    |
| Logs and bolts..... M ft. b.m.   | 3,349,102                       | 219                | 733,453                               | 34,077,938         |
| Pulpwood..... cord               | 6,095,016                       | 117                | 713,117                               | 41,165,871         |
| Firewood..... "                  | 8,791,000                       | 95                 | 835,145                               | 31,804,500         |
| Hewn ties..... No.               | 5,857,187                       | 12                 | 70,288                                | 3,183,051          |
| Poles..... "                     | 141,793                         | 13                 | 5,354                                 | 1,350,736          |
| Round mining timber..... cu. ft. | 5,422,041                       | 1-3                | 7,050                                 | 997,357            |
| Posts..... No.                   | 14,234,363                      | 2                  | 28,467                                | 976,402            |
| Wood for distillation..... cord  | 48,772                          | 123                | 5,999                                 | 274,797            |
| Fence rails..... No.             | 4,895,280                       | 3                  | 14,687                                | 266,253            |
| Miscellaneous products..... cord | -                               | -                  | 27,251                                | 1,260,274          |
| <b>Totals, 1935.....</b>         | -                               | -                  | <b>2,440,809</b>                      | <b>115,461,779</b> |

**4.—Equivalent Volumes of Standing Timber Cut in Canada and Values of Products of Woods Operations, by Provinces, 1934 and 1935.**

| Province.                 | Equivalent Volumes in Standing Timber. |                  | Totals, Value.     |                    |
|---------------------------|--|------------------|--------------------|--------------------|
|                           | 1934.                                  | 1935.            | 1934.              | 1935.              |
|                           | '000 cu. ft.                           | '000 cu. ft.     | \$                 | \$                 |
| Prince Edward Island..... | 12,147                                 | 12,213           | 502,392            | 506,954            |
| Nova Scotia.....          | 122,892                                | 122,105          | 5,857,594          | 6,006,233          |
| New Brunswick.....        | 152,063                                | 159,319          | 8,155,613          | 8,543,401          |
| Quebec.....               | 809,619                                | 850,443          | 36,312,600         | 41,268,020         |
| Ontario.....              | 466,789                                | 514,481          | 24,726,574         | 27,996,771         |
| Manitoba.....             | 59,029                                 | 63,089           | 1,891,440          | 2,089,487          |
| Saskatchewan.....         | 77,864                                 | 79,216           | 2,001,815          | 2,119,402          |
| Alberta.....              | 96,066                                 | 104,597          | 2,651,620          | 3,073,760          |
| British Columbia.....     | 508,068                                | 535,347          | 21,439,994         | 23,887,151         |
| <b>Totals.....</b>        | <b>2,299,547</b>                       | <b>2,440,809</b> | <b>105,539,732</b> | <b>115,461,779</b> |

### Subsection 2.—The Pulp and Paper Industry.

The manufacture of pulp and paper is a comparatively recent development in Canadian industry. Paper was first manufactured in Canada about a hundred years ago but prior to 1860 no wood-pulp was used or produced. Rags, straw, esparto grass, cotton waste, and other substances were the raw materials used. The first paper-mill was established at St. Andrews in Quebec (then Lower Canada) in 1803 by United States citizens who obtained concessions from the seigneurs. Upper Canada's first mill, which is still in operation, was built in 1813 at Crook's Hollow (now Greenville) near Hamilton, and the Maritime Provinces entered the industry in 1819 with a mill at Bedford Basin near Halifax.

In 1866, Alexander Buntin installed at Valleyfield, Quebec, what is claimed to have been the first wood grinder in America and began the manufacture of wood-pulp by the mechanical process. During the same year Angus Logan and Co. built the first chemical wood-pulp mill in Canada at Windsor Mills in Quebec. During the next decade the use of wood-pulp in paper making was extensively developed and in 1887 Charles Riordon installed the first sulphite mill in Canada at Merriton in the Niagara peninsula; by the beginning of the century the output of the industry had exceeded \$8,000,000. In 1907 the Brompton Pulp and Paper Co. built, at East Angus in Quebec, the first mill in America to manufacture chemical pulp by the sulphate or kraft process.

The gross output of the industry increased rapidly and steadily until the boom years following the Great War, when it jumped to a peak of over \$232,000,000 in 1920. This was followed by a drop in 1921, after which there was a steady recovery, resulting in a second peak in 1929 of \$243,970,761. This was followed by annual decreases down to 1933 and annual increases up to 1936.

The rapid development of this industry up to 1929 was due chiefly to the existence in Canada of abundant water powers adjacent to extensive forest resources of pulpwood species and an increasing demand for newsprint paper in the United States. Summary statistics for the combined pulp and paper industry are given on p. 304.

There are to-day three classes of mills in the industry. These, in 1936, numbered 25 mills making pulp only, 44 combined pulp and paper mills, and 24 mills making paper only.

The industry in Canada includes three forms of industrial activity, the operations in the woods with pulpwood as a product, the manufacture of pulp, and the manufacture of paper. These three stages cannot be treated as entirely distinct nor can they be separated from the different stages of the lumber industry. Some of the important pulp companies operate sawmills to utilize the larger timber on their limits to the best advantage, and many lumber manufacturers divert a proportion of their spruce and balsam logs to pulp-mills. So far as operations in the woods are concerned, it is often impossible to state whether the timber being cut will eventually be made into lumber or into pulpwood.

On account of legislation already referred to, pulpwood cut on Crown lands must, in every province, be manufactured into pulp in Canadian pulp mills except under special permit. The pulpwood which is exported to the United States is, therefore, largely cut from private lands. Table 5 shows the annual production of this commodity from 1926 to 1936, together with the quantities used by Canadian pulp-mills and the quantities exported and imported.

In 1908 almost two-thirds of the pulpwood cut in Canada was exported in the raw or unmanufactured form, but by 1916 the proportion had declined to two-fifths. Since 1930 the proportion exported has been less than one-fifth.

### 5.—Production, Consumption, Exports, and Imports of Pulpwood, calendar years 1926-36.

NOTE.—Figures for the years 1903-25, inclusive, will be found at p. 288 of the 1931 Year Book.

| Year.    | Apparent Total Production of Pulpwood in Canada. |              |                         | Canadian Pulpwood Used in Canadian Pulp-Mills. |                               | Canadian Pulpwood Exported Unmanufactured. <sup>1</sup> |                               | Imported Pulpwood Used in Canada. |                               |
|----------|--|--------------|-------------------------|--|-------------------------------|---|-------------------------------|-----------------------------------|-------------------------------|
|          | Quantity.  | Total Value. | Average Value per cord. | Quantity.                                      | Per cent of Total Production. | Quantity.   | Per cent of Total Production. | Quantity.                         | Per cent of Total Production. |
|          | cords.   | \$           | \$                      | cords.   | p.e.                          | cords.  | p.e.                          | cords.                            | p.e.                          |
| 1926 ... | 5,621,365  | 88,100,303   | 12.11                   | 4,229,567                                      | 75.2                          | 1,391,738   | 24.8                          | 2                                 | 2                             |
| 1927 ... | 5,929,498  | 79,284,805   | 11.85                   | 4,387,687                                      | 74.0                          | 1,541,709   | 26.0                          | 2                                 | 2                             |
| 1928 ... | 6,295,912  | 74,587,843   | 11.85                   | 4,763,646                                      | 75.7                          | 1,532,266   | 24.3                          | 22,674                            | 0.7                           |
| 1929 ... | 6,536,335  | 76,120,063   | 11.65                   | 5,241,340                                      | 80.2                          | 1,294,995   | 19.8                          | 37,082                            | 0.7                           |
| 1930 ... | 5,977,183  | 67,529,622   | 11.30                   | 4,646,717                                      | 77.7                          | 1,330,466   | 22.3                          | 94,632                            | 1.6                           |
| 1931 ... | 5,040,201  | 51,973,242   | 10.30                   | 4,088,988                                      | 81.0                          | 957,303   | 19.0                          | 59,201                            | 1.4                           |
| 1932 ... | 4,222,224  | 36,759,910   | 8.70                    | 3,602,100                                      | 85.3                          | 620,124   | 14.7                          | 45,654                            | 1.1                           |
| 1933 ... | 4,746,383  | 33,213,973   | 7.00                    | 4,027,827                                      | 84.9                          | 718,556   | 15.1                          | 17,049                            | 0.4                           |
| 1934 ... | 5,773,370  | 38,302,807   | 6.63                    | 4,752,685                                      | 82.3                          | 1,021,285   | 17.7                          | 13,919                            | 0.2                           |
| 1935 ... | 6,095,010  | 41,195,871   | 6.76                    | 4,985,143                                      | 81.8                          | 1,109,872   | 18.2                          | 19,940                            | 0.3                           |
| 1936 ... | 7,002,057  | 48,680,200   | 6.95                    | 5,706,303                                      | 82.3                          | 1,235,754   | 17.6                          | 9,591                             | 0.1                           |

<sup>1</sup> Exports of pulpwood in the calendar year 1937 were 1,542,553 cords.

<sup>2</sup> None reported.

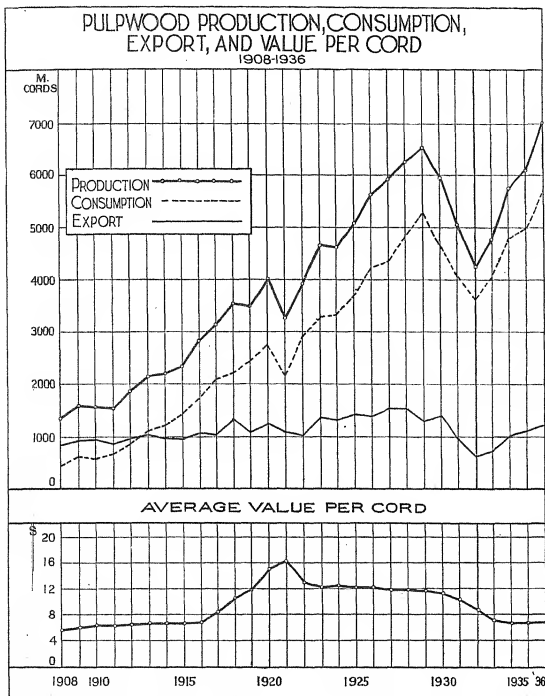
The manufacture of pulp is the second stage in this industry. This is carried on by mills producing pulp alone and also by paper manufacturers operating pulp-mills in conjunction with paper-mills to provide their own raw material. Such mills usually manufacture a surplus of pulp for sale in Canada or for export.

The supply of rags for paper-making is distinctly limited and the material too expensive for the manufacture of cheap paper. Early paper-makers experimented with fibres from the stems, leaves, and other parts of numerous annual plants, but the small proportion of paper-making material recoverable from such sources led to experiments in the use of wood. Different species were tried, and finally spruce and balsam fir were found to be the most suitable for the production of all but the best classes of paper.

The preliminary preparation of pulpwood is frequently carried on at the pulp-mill, but there are in Canada a number of "cutting-up" and "rossing" mills operating on an independent basis, chiefly for the purpose of saving freight on material cut at a distance from the mill or on material intended for exportation. Pulpwood is measured by the cord (4' by 4' by 8' of piled material), which is approximately equivalent to 500 feet board measure or to 90 cubic feet of solid wood.

There are, in Canada, four methods of preparing wood-pulp, one of which is mechanical and three chemical. Detailed descriptions of these processes were given in the 1931 Year Book, pp. 290-291.

**Pulp Production.**—Table 6 shows the total production of pulp in Canada from 1927 to 1936, inclusive, together with the production of groundwood pulp and the production of fibre by the chemical processes described.



The growth of this industry was steady up to 1920, when 1,960,102 tons of pulp were produced. There was a drop in production in 1921, but production in 1922 at 2,150,251 tons, more than overtook the previous year's drop. Following this, with the exception of 1924, each year up to 1929 showed consistent growth in the annual production, 1929 creating a record for the industry with a production of 4,021,229 tons. This was followed by annual decreases down to 1932 since when steady increases have been recorded resulting, in 1936, in a new record of 4,485,445 tons.



**6.—Pulp Production, Mechanical and Chemical, calendar years 1927-36.**

NOTE.—Figures for the years 1908-26, inclusive, will be found at p. 293 of the 1931 Year Book.

| Year.     | Total Production. <sup>1</sup> |             | Mechanical Pulp. <sup>2</sup> |            | Chemical Fibre. <sup>2</sup> |            |
|-----------|--------------------------------|-------------|-------------------------------|------------|------------------------------|------------|
|           | Quantity.                      | Value.      | Quantity.                     | Value.     | Quantity.                    | Value.     |
|           | tons.                          | \$          | tons.                         | \$         | tons.                        | \$         |
| 1927..... | 3,278,978                      | 114,442,550 | 1,922,124                     | 44,174,811 | 1,278,572                    | 69,169,002 |
| 1928..... | 3,608,045                      | 121,184,214 | 2,127,696                     | 47,549,324 | 1,392,755                    | 72,500,188 |
| 1929..... | 4,021,229                      | 129,063,154 | 2,420,774                     | 51,617,360 | 1,501,273                    | 76,198,051 |
| 1930..... | 3,619,345                      | 112,355,872 | 2,283,130                     | 48,317,494 | 1,265,067                    | 63,150,351 |
| 1931..... | 3,167,960                      | 84,780,809  | 2,016,480                     | 37,096,768 | 1,151,480                    | 46,998,988 |
| 1932..... | 2,663,248                      | 64,412,453  | 1,696,021                     | 28,018,451 | 907,227                      | 35,987,294 |
| 1933..... | 2,979,562                      | 64,114,074  | 1,859,049                     | 25,332,444 | 1,120,513                    | 38,781,630 |
| 1934..... | 3,636,335                      | 75,726,058  | 2,304,705                     | 30,875,323 | 1,241,570                    | 44,851,635 |
| 1935..... | 3,865,341                      | 79,722,039  | 2,563,711 <sup>3</sup>        | 32,323,820 | 1,283,743                    | 46,444,144 |
| 1936..... | 4,485,445                      | 92,336,953  | 2,984,282                     | 38,674,492 | 1,480,925                    | 52,701,156 |

<sup>1</sup> Some of these totals include unspecified pulp.<sup>2</sup> Including screenings.<sup>3</sup> Revised since the publication of the 1937 Year Book.

During 1936 there were 25 mills manufacturing pulp only and 44 combined pulp and paper mills. These 69 establishments turned out 4,485,445 tons of pulp, valued at \$92,336,953, as compared with 3,868,341 tons of pulp, valued at \$79,722,039 in 1935. Of the 1936 total for pulp, 3,558,545 tons, valued at \$55,713,784, were made in the combined pulp and paper mills for their own use in manufacturing paper. Of the remainder, 166,838 tons, valued at \$6,137,570, were made for sale in Canada, while 760,062 tons, valued at \$30,485,599, were made for export. As in the case of pulpwood, a part of the product at this stage of the industry provides raw material for the later stages, while the remainder has a definite market value as pulp.

Over 64 p.c. of the production in 1936 was groundwood pulp and 16 p.c. unbleached sulphite fibre, these two being the principal components of newsprint paper. Bleached sulphite, bleached and unbleached sulphate, and soda fibre made up the remainder, with groundwood and chemical screenings, for which a considerable market has developed in recent years in connection with the manufacture of rigid insulating boards. Table 7 shows the production of pulp by provinces in the latest eight years.

**7.—Production of Wood-Pulp in Canada, by Chief Producing Provinces, 1929-36.**

| Year,     | Quebec.   |            | Ontario.  |            | Canada. <sup>1</sup> |             |
|-----------|-----------|------------|-----------|------------|----------------------|-------------|
|           | Quantity. | Value.     | Quantity. | Value.     | Quantity.            | Value.      |
|           | tons.     | \$         | tons.     | \$         | tons.                | \$          |
| 1929..... | 2,174,805 | 60,286,498 | 1,255,010 | 39,963,767 | 4,021,229            | 129,033,154 |
| 1930..... | 1,833,000 | 58,703,067 | 1,043,559 | 31,463,873 | 3,610,345            | 112,355,872 |
| 1931..... | 1,513,658 | 41,884,387 | 858,100   | 22,944,933 | 3,167,960            | 84,780,809  |
| 1932..... | 1,240,442 | 31,124,954 | 786,405   | 18,735,105 | 2,663,248            | 64,412,453  |
| 1933..... | 1,360,704 | 29,860,706 | 867,417   | 18,644,259 | 2,979,562            | 64,114,074  |
| 1934..... | 1,813,096 | 36,837,402 | 999,935   | 21,000,769 | 3,636,335            | 75,726,058  |
| 1935..... | 1,916,382 | 38,235,076 | 1,087,742 | 22,866,369 | 3,868,341            | 79,722,039  |
| 1936..... | 2,236,376 | 44,071,292 | 1,257,000 | 27,005,484 | 4,485,445            | 92,336,953  |

<sup>1</sup> Includes production in British Columbia, Manitoba, New Brunswick, and Nova Scotia.

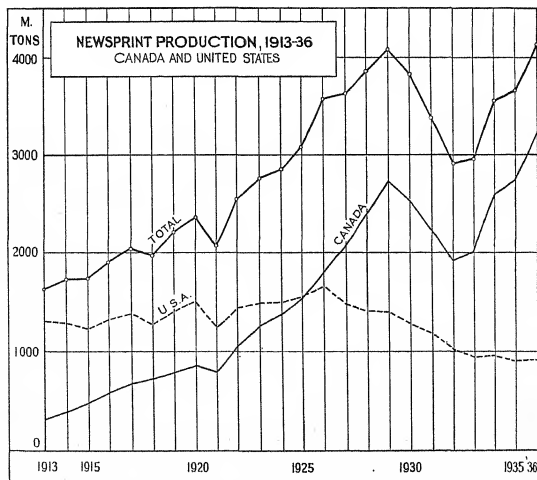
**Pulp Exportation.**—The following table gives the quantities of pulp exported by the principal pulp-producing countries of the world in 1936. Figures for 1913, the year immediately preceding the War, and for 1935 are shown for comparison. Figures of the exports of wood-pulp from Canada in the fiscal years ended Mar. 31, 1934-37, will be found in Table 12 of the chapter on External Trade. In the calendar year 1937 the exports of wood-pulp from Canada were 870,715 tons. The total exports of the eleven principal pulp-exporting countries of the world in 1936 were 6,837,884 short tons, of which Canada contributed about 11 p.c.

## 8.—Exports of Wood-Pulp from Principal Wood-Pulp Producing Countries of the World, calendar years 1913, 1935, and 1936.

| Country.            | Totals, Wood Pulp. |                  |                  | Proportions, 1936. |                  |
|---------------------|--------------------|------------------|------------------|--------------------|------------------|
|                     | 1913.              | 1935.            | 1936.            | Chemical.          | Mechanical.      |
|                     | tons.              | tons.            | tons.            | tons.              | tons.            |
| Sweden.....         | 1,112,313          | 2,676,608        | 2,847,885        | 2,207,356          | 640,529          |
| Finland.....        | 132,674            | 1,783,824        | 1,497,123        | 1,191,124          | 305,999          |
| Norway.....         | 779,025            | 837,295          | 971,615          | 364,415            | 607,200          |
| Canada.....         | 298,169            | 662,474          | 754,496          | 607,605            | 146,891          |
| Germany.....        | 206,042            | 327,661          | 256,908          | 256,057            | 3,041            |
| United States.....  | 19,776             | 171,710          | 193,485          | 192,260            | 1,225            |
| Austria.....        | 112,714            | 170,629          | 184,833          | 169,805            | 14,668           |
| Czechoslovakia..... | 23,935             | 100,811          | 120,933          | 120,849            | 84               |
| Poland.....         | Nil                | 3,988            | 4,060            | 4,060              | Nil              |
| Switzerland.....    | 7,328              | 2,916            | 3,456            | 2,782              | 674              |
| Newfoundland.....   | 57,165             | Nil              | Nil              | —                  | —                |
| <b>Totals.....</b>  | <b>2,749,141</b>   | <b>6,737,916</b> | <b>6,837,884</b> | <b>5,117,273</b>   | <b>1,720,611</b> |

**Paper Production.**—The paper-making stage of the industry involves the consumption of wood-pulp and other paper stock in the manufacture of paper and other pulp products. Accurate annual statistics for this part of the industry are available only for 1917 to 1936. Figures for 1927-36 are given in Table 9.

During 1936 there were 44 combined pulp and paper mills and 24 mills making paper only. These 68 establishments produced 3,807,329 tons of paper, with a total value of \$147,854,652, as compared to 3,280,896 tons, valued at \$129,078,386 in 1935. Newsprint paper now forms nearly 85 p.c. of the annual paper production



in Canada. In 1936, the production was 3,225,386 tons, valued at \$105,214,533, a record production for volume although its value was lower than that of 1929, the record year for value. The preliminary estimate for 1937 is 3,645,809 tons, also a record for volume.

### 9.—Summary of Paper Production in Canada, calendar years 1927-36.

Note.—Comparable figures for the years 1917-26 will be found at p. 334 of the 1934-35 Year Book.

| Year.     | Newsprint Paper. |             | Book and Writing Paper. |            | Wrapping Paper. |            |
|-----------|------------------|-------------|-------------------------|------------|-----------------|------------|
|           | Quantity.        | Value.      | Quantity.               | Value.     | Quantity.       | Value.     |
|           | tons.            | \$          | tons.                   | \$         | tons.           | \$         |
| 1927..... | 2,082,830        | 132,286,729 | 75,072                  | 12,916,469 | 102,707         | 9,607,828  |
| 1928..... | 2,414,393        | 144,146,632 | 79,138                  | 14,008,406 | 111,667         | 10,424,217 |
| 1929..... | 2,725,331        | 150,800,157 | 73,502                  | 13,636,562 | 91,374          | 9,725,576  |
| 1930..... | 2,497,952        | 136,181,883 | 69,468                  | 12,261,659 | 78,320          | 7,880,224  |
| 1931..... | 2,227,052        | 111,419,637 | 59,580                  | 10,154,171 | 77,194          | 7,479,906  |
| 1932..... | 1,910,905        | 85,539,552  | 56,781                  | 8,687,895  | 69,018          | 6,289,293  |
| 1933..... | 2,021,965        | 95,959,501  | 60,683                  | 8,927,408  | 67,780          | 6,441,695  |
| 1934..... | 2,604,973        | 86,811,460  | 64,991                  | 9,681,536  | 79,779          | 7,740,823  |
| 1935..... | 2,765,444        | 91,762,201  | 70,350                  | 10,440,789 | 82,517          | 7,936,783  |
| 1936..... | 3,225,386        | 105,214,533 | 74,940                  | 10,866,346 | 98,545          | 8,876,496  |

| Year.     | Boards.   |            | Tissue and Miscellaneous Paper. |           | Totals, Paper. |                          |
|-----------|-----------|------------|---------------------------------|-----------|----------------|--------------------------|
|           | Quantity. | Value.     | Quantity.                       | Value.    | Quantity.      | Value.                   |
|           | tons.     | \$         | tons.                           | \$        | tons.          | \$                       |
| 1927..... | 101,497   | 8,985,788  | 46,555                          | 4,433,926 | 2,468,601      | 168,445,548 <sup>1</sup> |
| 1928..... | 198,061   | 10,656,200 | 50,940                          | 5,069,950 | 2,819,190      | 184,305,405              |
| 1929..... | 250,061   | 13,539,645 | 56,881                          | 5,287,012 | 3,197,149      | 192,989,252              |
| 1930..... | 235,217   | 12,193,829 | 47,830                          | 4,788,279 | 2,926,787      | 173,626,383 <sup>1</sup> |
| 1931..... | 202,854   | 10,225,732 | 44,545                          | 4,350,356 | 2,611,225      | 143,957,264 <sup>1</sup> |
| 1932..... | 209,968   | 9,821,041  | 35,825                          | 3,735,042 | 2,290,767      | 114,115,570 <sup>1</sup> |
| 1933..... | 232,190   | 10,568,439 | 36,802                          | 3,762,832 | 2,419,420      | 96,689,875               |
| 1934..... | 290,724   | 13,551,475 | 39,049                          | 3,306,331 | 3,009,518      | 130,892,235              |
| 1935..... | 314,849   | 15,051,893 | 47,736                          | 3,856,720 | 3,280,866      | 139,078,880              |
| 1936..... | 361,149   | 17,410,311 | 47,309                          | 4,058,248 | 3,807,329      | 147,854,652 <sup>1</sup> |

<sup>1</sup> Includes some unspecified paper products.

Newsprint made up about 85 p.c. of the total paper production in 1936, with about 9 p.c. of paper boards, 3 p.c. of wrapping paper, 2 p.c. of book and writing paper and about 1 p.c. of tissue and miscellaneous papers.

### 10.—Production of Paper in Canada, by Provinces, 1936.

| Province.                          | Quantity. | Value.      |
|------------------------------------|-----------|-------------|
|                                    | tons.     | \$          |
| Quebec.....                        | 1,960,905 | 79,921,371  |
| Ontario.....                       | 1,161,303 | 48,492,032  |
| British Columbia.....              | 320,555   | 11,807,830  |
| Nova Scotia and New Brunswick..... | 364,566   | 13,633,419  |
| Totals.....                        | 3,807,329 | 147,854,652 |

Quebec produced 51 p.c. of the total quantity, Ontario 31 p.c., British Columbia 8 p.c., and Nova Scotia and New Brunswick the remaining 10 p.c.

**World Production of Newsprint.**—The world production of newsprint in 1936 has been estimated at 8,217,000 short tons, of which North America supplied almost 50 p.c. and Canada alone over 39 p.c. The estimated production in the

leading 24 countries, compared with 1935, and the ten-year averages 1927-36 were as follows:—

**11.—Estimated Quantities of Newsprint Produced in Leading Countries, 1935 and 1936, and the Ten-Year Averages, 1927-36.**

NOTE.—Countries in order of importance according to the 1936 production.

| Country.           | Production—        |                    | Ten-Year Average. | Country.            | Production—      |                  | Ten-Year Average. |
|--------------------|--------------------|--------------------|-------------------|---------------------|------------------|------------------|-------------------|
|                    | 1935.              | 1936.              |                   |                     | 1935.            | 1936.            |                   |
|                    | '000 short tons.   | '000 short tons.   | '000 short tons.  |                     | '000 short tons. | '000 short tons. | '000 short tons.  |
| Canada.....        | 2,753 <sup>1</sup> | 3,192 <sup>1</sup> | 2,449             | Austria.....        | 50               | 57               | 59                |
| Great Britain..... | 970                | 1,064              | 776               | Belgium.....        | 48               | 53               | 48                |
| United States..... | 912                | 921                | 1,148             | Czechoslovakia..... | 41               | 46               | 43                |
| Germany.....       | 404                | 525                | 522               | Switzerland.....    | 45               | 44               | 44                |
| Finland.....       | 329                | 402                | 268               | Poland.....         | 34               | 32               | 26                |
| Japan.....         | 368                | 384                | 301               | Spain.....          | 42               | 18               | 41                |
| France.....        | 358                | 381                | 260               | Chile.....          | 6                | 7                | 2                 |
| Newfoundland.....  | 335                | 328                | 280               | Latvia.....         | 6                | 7                | 5                 |
| Sweden.....        | 298                | 282                | 263               | Estonia.....        | 4                | 7                | 14                |
| Russia.....        | 193                | 217                | 112               | Mexico.....         | 20               | Nil              | 15                |
| Norway.....        | 182                | 200                | 179               | Denmark.....        | 1                | Nil              | 9                 |
| Netherlands.....   | 92                 | 91                 | 84                |                     |                  |                  |                   |
| Italy.....         | 76                 | 69                 | 64                | Totals.....         | 7,628            | 8,217            | 7,000             |

<sup>1</sup> A slight difference in classification accounts for the difference between these figures and those shown in Table 9.

**Exportation of Newsprint Paper.**—In the fiscal year 1908, exports of printing paper were for the first time separately recorded, and valued at \$2,833,535. In the fiscal year 1913, when quantities were first shown, Canada exported 146,792 short tons valued at \$5,692,126. For the fiscal year ended Mar. 31, 1937, our exports of newsprint amounted to 3,144,985 tons valued at \$110,176,448 and ranked second only to wheat among the exports of the Dominion. For exports of newsprint and other paper in the fiscal years ended Mar. 31, 1934-37, see Table 12 of the chapter on External Trade.

As early as 1913 Canada led the world in the exportation of newsprint, and since that date her exports have increased more than nine-fold in quantity. The following table shows the exportation of newsprint from the 12 principal exporting countries in 1913, 1934, 1935, and 1936. Canada contributed to the total over twice as much as the other 11 countries combined in 1936. Canada's exports of newsprint paper for the calendar year 1937 were 3,455,240 tons.

**12.—Exports of Newsprint Paper from Principal Paper-Producing Countries of the World, 1913, 1934, 1935, and 1936.**

NOTE.—Countries arranged in order of importance of exports, 1936.

| Country.            | Years ended Dec. 31— |             |             |             |
|---------------------|----------------------|-------------|-------------|-------------|
|                     | 1913.                | 1934.       | 1935.       | 1936.       |
|                     | short tons.          | short tons. | short tons. | short tons. |
| Canada.....         | 256,661              | 2,414,274   | 2,574,987   | 2,993,039   |
| Finland.....        | 77,213               | 286,993     | 309,066     | 377,032     |
| Newfoundland.....   | 49,765               | 258,902     | 276,036     | 312,879     |
| Sweden.....         | 67,938               | 208,990     | 228,422     | 198,506     |
| Germany.....        | 75,761               | 72,810      | 129,107     | 183,221     |
| Norway.....         | 108,507              | 141,708     | 164,196     | 170,556     |
| United Kingdom..... | 105,183              | 66,406      | 78,935      | 86,182      |
| Austria.....        | 14,855               | 45,125      | 44,708      | 41,769      |
| Japan.....          | 3,270                | 38,370      | 40,932      | 40,203      |
| United States.....  | 43,301               | 28,427      | 22,528      | 14,673      |
| Netherlands.....    | -                    | 12,240      | 11,022      | 1,096       |
| Czechoslovakia..... | -                    | 5,190       | 8,752       | 8,003       |
| Totals.....         | 802,414              | 3,576,135   | 3,883,666   | 4,437,463   |

**Statistics of the Combined Pulp and Paper Industries.\***—The manufacture of pulp, the manufacture of paper and the manufacture of products made of paper may, under certain conditions, be treated as three industries as they are frequently carried on in separate plants by entirely independent companies. For some time, however, it has been the practice of many Canadian concerns to combine the manufacture of pulp and paper in one complete establishment. In more recent years there has been a further tendency to combine in one plant the manufacture of basic stock and the converting of this paper into towels, stationery and other highly processed paper products. In some cases, what might otherwise be considered as three distinct industries, are carried on in one plant as three steps in the production of the finished paper article. This further converting of paper within the pulp and paper industry itself represents only a small part of Canada's production of converted paper and boards, the bulk of which is still made in special converting mills classified in other industrial groups.

The presence of these different combinations in one mill makes it impossible to separate many of the statistics relating to the manufacture of pulp, basic paper, and converted paper products. Including manufacturing operations as far as the paper-making stage, there were altogether 93 mills in operation in 1936. The capital invested amounted to \$539,350,001, the employees numbered 30,054 and their salaries and wages amounted to \$40,063,852. If we disregard the pulp made for their own use in combined pulp and paper mills and the basic paper made for their own use in combined paper and paper-converting mills, we can consider the total of materials and supplies used in the industry as a whole as amounting to \$72,202,983 in 1936 and \$57,995,037 in 1935 and the gross value of production as \$188,144,603 in 1936 as compared to \$162,651,282 in 1935. The net† value of production amounted to \$87,150,666 in 1936 and to \$81,973,352 in 1935.

The pulp and paper industry, one of the leading single manufacturing industries in Canada, has been first in wages and salaries paid since 1922, when it first exceeded the sawmills. It was the leading industry in gross value of production from 1925, when it replaced the flour-mills, until 1935 when it was overtaken by non-ferrous smelting and refining. It has been second to central electric stations in net value of production and capital for some years. Only the manufacturing stages of the industry are considered in these comparisons, no allowance being made for capital invested, men employed, wages paid or primary products sold in connection with the woods operations. These form an important part of the industry as a whole but cannot be separated from woods operations carried on in connection with sawmills and other industries. If the \$8,276,423 worth of exported pulpwood be taken into consideration, the gross total contribution of the pulp and paper industry toward Canada's excess of exports over imports in 1936 amounted to \$143,008,660, representing the difference between exports and imports of pulpwood, pulp, paper, and paper products.

The United States market absorbs annually all but a very small part of Canada's pulpwood exports, about 85 p.c. of her pulp and 77 p.c. of her paper shipments. About half of the paper consumed in the United States is either of Canadian manufacture or is made from wood or wood-pulp imported from Canada.

\* See Chapter XIV—Manufactures—for further particulars regarding the pulp and paper and paper-converting industry.

† This is the net value of production as calculated for years since 1934. It is obtained by deducting cost of power, fuel, and consumable supplies, as well as cost of materials, from gross value of production.

## Subsection 3.—The Lumber Industry.

The manufacture of lumber, lath, shingles, and other products of the sawmill is the second most important industry in Canada depending on the forest for its raw materials. Annual statistics covering this and other forest industries were collected and published by the Forest Service of the former Department of the Interior from 1908 to 1916, since when the work has been carried on by the Dominion Bureau of Statistics, in co-operation with the Forest Service.

The production of sawn lumber in Canada in 1920 reached a total of over four billion feet board measure, the highest cut recorded since 1912. Production in 1921 decreased by over a third and the average value by over \$10 a thousand feet. This was followed, with one exception, by annual increases up to 1929 and then by annual decreases down to 1932. There were increases in 1933, 1934, 1935 and 1936. British Columbia now produces 59 p.c. of the total. Table 13 gives the production of lumber, lath, and shingles in each year from 1926 to 1936.

## 13.—Quantities and Values of Lumber, Shingles and Lath Produced in Canada, calendar years 1926-36.

NOTE.—Figures for the years 1908-25, inclusive, will be found at p. 300 of the 1931 Year Book.

| Year.     | Lumber Cut. |             | Shingles Cut. |            | Lath Cut. |           |
|-----------|-------------|-------------|---------------|------------|-----------|-----------|
|           | Quantity.   | Value.      | Quantity.     | Value.     | Quantity. | Value.    |
|           | M ft. b.m.  | \$          | M             | \$         | M         | \$        |
| 1926..... | 4,135,140   | 101,071,260 | 3,290,397     | 10,521,723 | 1,378,366 | 6,527,060 |
| 1927..... | 4,098,081   | 97,508,786  | 2,837,281     | 8,716,085  | 1,322,605 | 5,003,396 |
| 1928..... | 4,337,253   | 103,590,035 | 2,865,994     | 10,321,341 | 1,138,417 | 4,802,610 |
| 1929..... | 4,741,941   | 113,340,886 | 2,707,235     | 9,423,363  | 835,799   | 3,860,799 |
| 1930..... | 3,980,421   | 87,710,957  | 1,914,836     | 5,388,837  | 398,254   | 1,154,593 |
| 1931..... | 2,497,553   | 45,977,843  | 1,453,277     | 3,331,229  | 228,050   | 576,060   |
| 1932..... | 1,809,884   | 26,851,924  | 1,802,008     | 3,550,823  | 208,321   | 474,889   |
| 1933..... | 1,957,980   | 27,708,908  | 1,939,519     | 4,448,876  | 151,553   | 332,364   |
| 1934..... | 2,578,411   | 40,509,000  | 2,408,616     | 4,422,578  | 177,988   | 412,844   |
| 1935..... | 2,973,109   | 47,911,256  | 3,258,253     | 7,593,765  | 226,854   | 536,087   |
| 1936..... | 3,412,151   | 61,965,540  | 3,019,030     | 6,754,788  | 286,323   | 874,231   |

The total number of sawmills, tie, shingle, lath, veneer, stave, heading and hoop mills, and mills for the cutting-up and barking or rossing of pulpwood reporting in 1936 was 3,638, as compared with 3,698 in 1935. The capital invested in these mills in 1936 was \$78,294,341, employment amounted to 28,786 man-years and wages and salaries amounted to \$21,357,038. The logs, bolts, and other materials of the industry were valued at \$44,360,624 and the gross value of production was \$80,343,291. The net production in 1936 was \$35,982,667.

The production of sawn lumber increased in quantity from 1935 to 1936 by 14.8 p.c. Lath production increased by 26.2 p.c., and shingle production decreased by 7.3 p.c. Quantity decreases were also reported in sawn ties, box shooks, veneer, heading, and a few of the minor products. Total values increased with all but shingles, ties, shooks, staves, and heading. The total gross value of production increased from \$65,905,132 in 1935 to \$80,343,291 in 1936.

**14.—Quantities and Values of Lumber and All Sawmill Products Made in Canada, by Provinces, 1935 and 1936.**

| Province.             | Lumber Production. |            |            |            | Totals, Value. <sup>1</sup> |            |
|-----------------------|--------------------|------------|------------|------------|-----------------------------|------------|
|                       | Quantities.        |            | Values.    |            | 1935.                       | 1936.      |
|                       | 1935.              | 1936.      | 1935.      | 1936.      |                             |            |
|                       | M ft. b.m.         | M ft. b.m. | \$         | \$         | \$                          | \$         |
| P. E. Island.....     | 6,226              | 5,347      | 165,184    | 88,904     | 129,800                     | 118,138    |
| Nova Scotia.....      | 140,236            | 118,402    | 1,865,612  | 1,704,920  | 2,276,841                   | 2,049,412  |
| New Brunswick.....    | 230,751            | 213,564    | 3,794,122  | 3,906,448  | 4,453,221                   | 4,720,350  |
| Quebec.....           | 453,956            | 467,670    | 7,423,881  | 8,859,771  | 9,860,342                   | 11,871,123 |
| Ontario.....          | 351,065            | 411,526    | 8,283,292  | 10,289,514 | 10,696,071                  | 13,068,688 |
| Manitoba.....         | 67,877             | 56,975     | 913,667    | 976,408    | 951,851                     | 1,049,480  |
| Saskatchewan.....     | 34,621             | 28,290     | 555,386    | 489,524    | 625,177                     | 515,224    |
| Alberta.....          | 78,070             | 86,669     | 975,055    | 1,216,215  | 1,198,640                   | 1,404,446  |
| British Columbia..... | 1,610,347          | 2,023,708  | 23,995,057 | 34,433,836 | 35,713,189                  | 45,546,480 |
| Totals.....           | 2,973,169          | 3,412,151  | 47,911,256 | 61,965,516 | 65,905,133                  | 80,343,291 |

<sup>1</sup> Includes all other sawmill products.

British Columbia came first in total production, contributing 59.3 p.c. of the total cut in lumber and 82 p.c. of the shingles in 1936. Quebec followed in second place, Ontario was third and New Brunswick fourth. Douglas fir was the most important kind of lumber sawn, and is produced almost entirely in British Columbia. Spruce is sawn in every province and comes second, with hemlock, white pine, cedar, and balsam fir next in order of importance. Cedar is the most important shingle wood sawn. The conifers usually form about 95 p.c. of the total cut of all kinds of wood in this industry, only 5 p.c. being deciduous-leaved trees or hardwoods.

**Lumber Exportation.**—The square-timber trade reached its maximum development in the '60's; thereafter it declined gradually and has now almost entirely disappeared. Simultaneously with its decline came the increased exportation of deals and other sawn lumber, first to Great Britain and later to the United States. Our trade with the latter country has been from the first largely confined to planks, boards, and dimension stock. During the American Civil War our exports of forest products of all kinds to the United States for the first time exceeded those to Great Britain, but in late years this has become the rule. The total quantity of sawn lumber and square timber exported from Canada changed little from 1900 to 1929, averaging about two billion ft. b.m. per annum, but decreased considerably in the next three years reaching its lowest level in 1932. This was followed by substantial increases in 1933 and 1934, a decrease in 1935 and increases in 1936 and 1937 to 1,857,964 and 1,966,298 M ft. b.m., respectively. Of the 1937 exports 54 p.c. went to the United Kingdom and 12 p.c. to other Empire countries making 66 p.c. to the Empire as a whole. Twenty-seven p.c. went to the United States and 7 p.c. to other foreign countries making 34 p.c. to all foreign countries. The exports of lumber and square timber increased in 1937, but the exports of shingles and lath decreased in quantity, though increasing slightly in value.

## 15.—Canadian Exports of Planks, Boards, and Square Timber, by Countries, calendar years 1934-37.

| Country.                 | 1934.                   |              | 1935.                   |              | 1936.                   |              | 1937.                   |              |
|--------------------------|-------------------------|--------------|-------------------------|--------------|-------------------------|--------------|-------------------------|--------------|
|                          | Quantity.<br>M ft. b.m. | Value.<br>\$ | Quantity.<br>M ft. b.m. | Value.<br>\$ | Quantity.<br>M ft. b.m. | Value.<br>\$ | Quantity.<br>M ft. b.m. | Value.<br>\$ |
| British—                 |                         |              |                         |              |                         |              |                         |              |
| United Kingdom.          | 861,193                 | 16,266,405   | 734,272                 | 14,099,559   | 957,948                 | 19,750,191   | 1,057,249               | 24,303,521   |
| Irish Free State.        | 25,187                  | 465,804      | 4,965                   | 88,485       | 4,130                   | 79,625       | 8,844                   | 139,818      |
| New Zealand.             | 2,999                   | 78,771       | 3,867                   | 96,576       | 6,364                   | 176,720      | 5,871                   | 180,227      |
| Australia.               | 133,905                 | 1,598,933    | 135,544                 | 1,781,639    | 117,069                 | 1,542,487    | 164,296                 | 2,897,141    |
| British South Africa.    | 20,160                  | 355,931      | 18,816                  | 350,751      | 42,282                  | 853,171      | 27,516                  | 723,456      |
| British West Indies.     | 17,156                  | 332,513      | 11,071                  | 221,155      | 15,747                  | 327,730      | 17,834                  | 468,734      |
| Other British countries. | 0,544                   | 249,047      | 17,536                  | 327,107      | 21,839                  | 454,855      | 25,159                  | 605,724      |
| Totals, British....      | 1,066,144               | 19,347,404   | 926,071                 | 16,965,272   | 1,165,388               | 23,184,782   | 1,366,769               | 29,459,621   |
| Foreign—                 |                         |              |                         |              |                         |              |                         |              |
| United States.           | 233,714                 | 5,853,265    | 351,113                 | 8,279,201    | 530,866                 | 12,341,095   | 538,921                 | 15,521,442   |
| China.                   | 103,522                 | 1,209,749    | 74,649                  | 941,704      | 88,968                  | 1,155,068    | 39,256                  | 674,941      |
| Japan.                   | 71,810                  | 985,085      | 49,952                  | 654,132      | 30,155                  | 509,105      | 33,316                  | 623,651      |
| Other foreign countries. | 21,036                  | 446,764      | 28,763                  | 673,575      | 42,587                  | 978,315      | 48,036                  | 1,309,430    |
| Totals, Foreign....      | 430,982                 | 8,494,863    | 504,477                 | 10,548,702   | 692,576                 | 15,484,423   | 659,529                 | 18,129,473   |
| Grand Totals....         | 1,497,126               | 27,842,267   | 1,430,548               | 27,513,974   | 1,857,964               | 38,669,205   | 1,966,298               | 47,589,094   |

## Subsection 4.—Manufactures of Wood and Paper.

Sawmills and pulp-mills draw their raw material directly from the forest in the form of logs and pulpwood, and produce sawn lumber, other sawmill products, and pulp and paper. There are also a number of important industries which use these products as raw material for further manufacture. Some of them produce commodities made almost entirely of wood, wood-pulp or paper, others manufacture articles in which wood is the most important component, and others produce articles in which wood is necessary but forms only a small proportion of the value. There are, in addition, a number of industries which use wood indirectly in the manufacture of articles which do not contain wood as a component part. The first class includes the manufacture of paper, sash, doors, and other millwork, and planing-mill products; boxes, baskets, cooperage and other containers; canoes, boats, and small vessels; kitchen, bakers' and dairy woodenware; wooden pumps, piping, tanks, and silos; spools, handles, dowels, and turnery. The second class includes the manufacture of furniture, vehicles and vehicle supplies, coffins and caskets, etc., and the use of paper in printing and the manufacture of paper boxes, bags, stationery, and paper goods. The third class, where wood has a secondary importance, includes the manufacture of agricultural implements, railway rolling-stock, musical instruments, brooms and brushes, etc. The fourth class can be said to include practically every form of industrial activity, as few, if any, of these are entirely independent of the use of wood, directly or indirectly.

A classification based on the chief component material in the products of each manufacturing establishment is now largely used in compiling manufacturing statistics and for external trade purposes. Under this system most of the forest industries fall in the wood and paper group. In 1936 the gross value of production for all classes of manufactured products amounted to \$3,002,403,814 of which total the wood and paper group contributed \$497,103,666 or over 16 p.c. It was exceeded in this respect only by the vegetable products group with over 19 p.c. Of the ten groups of the industrial census the wood and paper group, which includes the manufacture of lumber, pulp and paper as well as the wood- and paper-using industries, was highest in number of establishments with 3,175, in net value of products with \$261,020,034,\* and in salary and wage distribution with \$141,301,340.

\*See footnote (f) p. 304.



In few industries did manufacture add, in 1936, a higher percentage to the material used than in the wood- and paper-using industries; in the manufacture of pulp and paper this percentage was 121 and in the lumber industry 81. In the manufacture of planing-mill products this percentage was 86 p.c. For the wood and paper group as a whole the value added by manufacture in 1936 was \$261,020,034,\* or 111 p.c. of the value of materials used. Further details are given in Chapter XIV—Manufactures—of the present volume.

The forests of Canada contribute substantially to her export trade values. During the fiscal year ended Mar. 31, 1937, exports of wood and paper products amounted to \$223,918,476 and made up 21.1 p.c. of the total value of exports for the period, amounting to \$1,061,181,906. Exports of wood and paper products were exceeded by those of mineral products, which made up 29.1 p.c. of the total, and agricultural and vegetable products with 45.3 p.c. Wood and paper products are prominent among the individual items of exportation. Newsprint paper is second only to wheat on the list, with planks and boards fifth and wood-pulp eighth. The gross contribution of wood and paper products toward a favourable trade balance for Canada amounted to \$195,271,604 during the same period.

#### Subsection 5.—Forest Depletion and Increment.

**Fire Losses.**—No accurate summing up of forest fire losses in Canada's forests has ever been made, but it has been estimated that more than 60 p.c. of the original forest has been burned, about 14 p.c. has been cut for use and about 25 p.c. remains. Though the loss of merchantable timber has been greatly reduced in recent years by forest protective services and the education of the public, it still constitutes a serious drain on our resources.

Since the historic Miramichi fire, which burned along the valley of the Miramichi river in New Brunswick in 1825, there have been a number of disastrous fires. About the year 1845 vast areas west of lake Superior were burned over. Some years later a very extensive fire burned along the height of land from lake Timiskaming to Michipicoten. In 1871 a fierce fire swept over more than 2,000 square miles of forest from lake Nipissing westward along the north shore of Georgian bay. About the same time the greater part of the Saguenay and Lake St. John district, in Quebec, was swept by one of the most destructive fires on record. During a period of dry years from 1883 to 1893, a series of disastrous fires destroyed immense areas of timber in eastern and northern Manitoba and in northern Saskatchewan. Two other fires in 1891 and 1896 devastated more than 2,000 square miles of country in the southern Algoma district; in Quebec, country along the line of the Quebec and Lake St. John Railway also suffered by a number of disastrous forest fires about this time.

During more recent times a series of disastrous fires swept over northern Ontario. A number of isolated fires around the mining camp of Porcupine culminated, on July 11, 1911, in a conflagration which resulted in the loss of 72 lives and property damage estimated at \$3,000,000. In 1916 fires in the same general region were responsible for the deaths of at least 224 people. In 1922 a third fire destroyed the town of Haileybury and other centres. In 1908 a fire originating in the forest around Fernie, B.C., destroyed that city. Every year thousands of acres are devastated by fires of less individual importance, which in the aggregate are rapidly depleting our forest resources. In 1923 there were unusually disastrous fires, chiefly in Eastern Canada. A total area of over 6,000,000 acres was burned over with a loss of approximately \$46,000,000. The average area burned over for the ten-year

\* See footnote (f) p. 304.

period from 1926 to 1935 was slightly over 2,000,000 acres with an average annual total loss and damage of \$4,500,000.

Speaking generally, there are, annually, two periods in Canada when the forest fire hazard is highest—in the spring, after the disappearance of the snow, when the forest floor is dry and the green underbrush has not yet developed, and again in the fall when the herbaceous growth is dead and the ground covered with dry leaves.

Statistics compiled by the Dominion Forest Service from reports received from the various provincial and private forest protective organizations show that, during the ten-year period from 1926 to 1935, 86 p.c. of all fires reported were due to human agencies and were, therefore, preventable. The remainder were attributed to lightning or other natural causes. Campers, settlers, smokers, and railways are responsible for most of the fires whose origin is determined. Other causes, including lumbering operations, lightning and incendiarism, account for smaller proportions.

**Losses through Insects and Fungi.**—From 1912 to 1923 the spruce bud-worm caused tremendous damage to the spruce and balsam-fir forests in Eastern Canada. In Quebec it was estimated that 100,000,000 cords of pulpwood were destroyed by this insect, and in New Brunswick the loss was placed at 15,000,000 cords. In these regions the active state of the infestation is now practically over, but the insect is causing damage in northern Ontario and Cape Breton island. Other insects, though not as destructive as this one, entail a heavy drain on the forest. The hemlock looper and a new species closely related to the spruce bud-worm are causing considerable damage in eastern coniferous forests. During recent years dusting by aeroplane has been developed on a practical basis by the Entomological Branch of the Department of Agriculture and promises to be effective in the control of certain defoliating insects under certain conditions. Perhaps the most effective means of controlling destructive forest insects is by the introduction of parasites. The Entomological Branch of the Dominion Department of Agriculture has developed this means of attack with marked success in the case of the larch saw-fly and has recently secured from Europe some millions of parasitic insects which are being liberated in the forests infested with the spruce saw-fly. The loss caused by the various forms of rot and other fungous diseases is probably not less than that caused by insects under normal conditions. The butt rot is especially prevalent in balsam fir, and the value of the hardwoods is also greatly decreased by rot.

**Summary of Losses and Increment.**—During the ten years 1926 to 1935 the average annual consumption of standing timber for use amounted to about 2,581,000,000 cubic feet. During the latest ten years, fire has destroyed annually about 267,000,000 cubic feet of merchantable timber and the young growth of various ages on 848,379 acres. The destruction occasioned by insects, fungi, and windfall is not known, but is estimated at 700,000,000 cubic feet per annum. It may be safely estimated that the forests of Canada are being depleted at the rate of about 3,550,000,000 cubic feet per annum. With about 600,000 square miles of accessible timber in a growing condition, an average annual increment of 10 cubic feet per acre would be quite possible under forest management and would cover this depletion. In view of the destruction of young growth which occurs and the deterioration of the forests and the soil, caused by repeated fires, there is little hope that this increment is being produced in merchantable timber at the present time throughout Canada, although particular areas are producing greatly in excess of this quantity. Nevertheless, extensive reproduction and rate-of-growth surveys being conducted by the Dominion Forest Service indicate that the increment is greater than previously estimated.

## CHAPTER X.—FUR RESOURCES AND FUR PRODUCTION.

This chapter is divided into three sections dealing, respectively, with: the fur trade, using that term in the sense which historical association has given it in Canada; fur farming, which follows closely the treatment formerly given the subject in the chapter on agriculture; and fur production and trade statistics, covering the total production and external trade in raw furs.

### Section 1.—The Fur Trade.

**Historical Sketch.**—The place which the fur trade held during the French *régime* in Canada, when for a century and a half it was at once the mainspring of discovery and development and the curse of settled industry, is familiar history. Later, the Hudson's Bay Company may be said with truth to have held the West until the Dominion had grown to absorb it, bequeathing, to the civilization which followed, a native race accustomed to the white man and an example of organization and discipline that was of lasting value. The salient facts in the story are given in the Canada Year Book, 1934-35, pp. 343-344.

**Fur Resources.**—In the early years of the 19th century, the exports of furs from Canada exceeded in value those of any other product. Conditions have greatly changed, but the total output has not seriously declined and Canada may still be regarded as possessing, in her northern regions, one of the great fur preserves of the world. The rapid development of the country and the opening up of the West during the later 19th and earlier 20th centuries, together with improvements in transportation and settlement, meant the exhaustion of the fur resources of the settled parts. The trade, therefore, gradually retreated to less accessible territory. More recently the development of mining on a large scale over the Precambrian Shield has forced the trapper still farther north. Decline in fur resources has, however, been accompanied by increase in demand and higher prices, the encouragement of fur farming, and the introduction of conservation measures. Nevertheless, the belt of northern Canada, which includes the whole of the Northwest Territories, the northern parts of the Prairie Provinces, and extends through northern Ontario and Quebec and into the Maritimes, remains one of the few natural reservoirs for fine furs and the fur resource of this vast area constitutes one of its major assets to-day; in fact, minerals and furs will probably remain the chief resources since much of the area is unsuited to settlement or forest growth.

The fur bearers of Canada are mostly carnivorous animals, but two very valuable rodents are included, *viz.*, beaver and muskrat. The largest fur-bearing animal is the bear—polar, along the Arctic coast and Hudson bay; grizzly, in the Rocky mountains; and black, common in wooded areas generally. Wolves are common and wide-spread—grey, black, and blue are colour varieties of the same species. Fox pelts account for more than half of the fur trade. Fur farms now supply nearly all of the silver fox pelts, while the Arctic regions provide a great number of white skins and a few blue ones. The ermine, or weasel, is fairly plentiful throughout the Dominion and is found as far north as trappers are operating. Otter, beaver, marten, fisher, and mink are furs of exceptional quality and beauty and are secured throughout the whole of the timbered parts of the northern belt. The mink is now being raised extensively on fur farms and the pelt of the ranch-bred mink is regarded as superior to that of the mink taken in the wilds.

Among the rodents, the beaver has the most valuable fur, but this animal has begun to show signs of decreasing and restrictions on the taking of beaver have been made more rigid in consequence. Muskrat is now quite highly prized and, so far as number of pelts taken is concerned, is far in advance of any other species; under the trade name of "Hudson seal", its pelt has become a favourite moderate-priced fur.

**Conservation.\***—The conservation of the fur bearers of Canada is a matter coming under the jurisdiction of the respective Provincial and Territorial Governments. Nevertheless, the Dominion as a whole is concerned in the conservation of fur and of all wild-life resources. It was to co-ordinate the wild-life conservation efforts of the various Dominion Departments that the Advisory Board on Wild Life Protection was organized in 1916. The Board is specially authorized to advise with respect to the administration of the Migratory Birds Convention Act and the Northwest Game Act, but has dealt with many other problems of wild-life conservation. Through conferences of provincial and Dominion officials which were convened for many years by the former Department of the Interior, but are now arranged by the Department of Mines and Resources, uniform and concerted action has been taken and the conservation of Canada's wild-life resources has been advanced. The general policy followed with regard to the fur-bearing animals has been mainly along two lines: first, to so regulate the taking of animals by limitation of catch or close season as to prevent their extinction in districts where natural conditions provide a suitable habitat; and second, to provide sanctuaries in strategic places which serve as reservoirs from which large areas of surrounding wild country may be naturally restocked.

Many of our most valuable fur-bearing animals are subject to marked fluctuations in numbers. The periods of abundance and of scarcity recur in sufficient regularity to be called cycles and they have an important bearing upon the fur trade generally and more particularly upon the well-being of a large percentage of our Indian and Eskimo population who depend upon the wild life for their livelihood. The Department of Mines and Resources, with the assistance of the Bureau of Animal Population, Oxford University, and the Hudson's Bay Company, has commenced an inquiry in the form of an annual questionnaire distributed to a number of Arctic stations with the object of endeavouring to determine the facts about each of these recurring fluctuations. It is necessary to continue this investigation from year to year because the situation is changing continuously, and it is hoped that the work will produce data from which a forecast can be made relating to the expected abundance of each important species. The study might also be suggestive of measures to prevent unnecessary depletion of any species of wild life during the periods of scarcity.

Information on the wild-life conservation activities of the provinces and territories may be secured from the chief game officials listed below: Roy A. Gibson, Deputy Commissioner, Northwest Territories, Ottawa (administers Northwest Game Act); G. A. Jeckell, Controller, Controller's Office, Dawson, Yukon; F. R. Butler, Inspector, Office of the Game Commission, 411 Dunsmuir St., Vancouver, British Columbia; W. H. Wallace, Game Commissioner, Edmonton, Alberta; Edward S. Forsyth, Game Commissioner, Department of Natural Resources, Regina, Saskatchewan; A. G. Cunningham, Director, Game and Fisheries Branch, Department of Mines and Natural Resources, Winnipeg, Manitoba; D. J. Taylor,

\* Prepared under the direction of F. H. H. Williamson, Controller, National Parks Bureau, Department of Mines and Resources, Ottawa, by Hoyes Lloyd, Superintendent of Wild Life Protection.

Deputy Minister of Game and Fisheries, Toronto, 2, Ontario; L. A. Richard, Deputy Minister of Mines, Game and Fisheries, Quebec, Quebec; Lt.-Col. H. H. Ritchie, Chief Game Warden, Department of Lands and Mines, Fredericton, New Brunswick; F. A. Harrison, Chief Clerk, Department of Lands and Forests, Halifax, Nova Scotia; W. R. Shaw, Deputy Minister and Live Stock Superintendent, Department of Agriculture, Charlottetown, Prince Edward Island.

### Section 2.—Fur Farming.\*

Fur farming is now recognized as an industry upon which the fur trade is becoming more and more dependent for its supplies of raw furs. In 1921 the value of pelts of ranch-bred animals accounted for only 3 p.c. of the total value of raw fur production, while in 1936 it had risen to approximately 40 p.c.

**Origin of the Fur-Farming Industry.**—A short account of the origin of the fur-farming industry in Canada was given on p. 249 of the 1929 edition of the Year Book, while a more detailed account of the earlier history of the industry was given in a publication of the Commission of Conservation, Ottawa, entitled "Fur Farming in Canada", by J. Walter Jones, B.A., B.S.A., the second edition of which was published in 1914.

**Fur Farms of Canada.**—The term "fur farm" includes farms devoted entirely to the raising of fur-bearing animals (principally silver foxes), together with parts of farms where the raising of fur-bearing animals is carried on as a branch of the operations. Although the silver fox is of chief importance, other kinds of fur-bearing wild animals are being raised successfully in captivity—mink, raccoon, skunk, marten, fisher, and fitch. The mink in particular thrives in captivity if it receives proper care, and the number of mink farms is accordingly increasing at a rapid rate. In 1936 the value of the silver foxes on the farms represented 85 p.c. of the total amount, and the value of the minks, 13 p.c., leaving 2 p.c. for all other kinds combined. In addition to the farms already mentioned, where animals are raised in rather confined quarters, many areas of marsh, stream, or lake are being operated as muskrat and beaver farms. In the case of these semi-aquatic animals, however, although the animals are usually kept within a carefully fenced area where they are given supplementary food and are protected from predatory enemies, they nevertheless live and breed under natural conditions.

For many years the fox-farming industry was expanding so rapidly, both in Canada and abroad, that the chief source of income of ranches was the sale of live animals for breeding purposes, while the production of pelts was a minor or incidental feature. Thus, in 1925, the value of live silver foxes sold was \$2,755,000, while that of silver fox pelts was only \$736,000. As the number of foxes on fur farms progressively increased, ranchers had to readjust their economy to declining values for both live animals and pelts. The industry appears to be gradually becoming stabilized on a pelt basis rather than on a live animal basis. In the latest year, 1936, the value of live silver foxes sold was only \$542,888, while that of silver fox pelts sold was \$4,950,290, and for all fur farms the sales of pelts represented 87 p.c. of the total revenue. Mink is forging ahead in importance both as to values of animals and pelts sold. For the latest two years shown the increases have been about 7 p.c. and 270 p.c., and 122 p.c. and 102 p.c., for animals and for pelts respectively, whereas over the same period the value of silver fox animals sold from farms has diminished appreciably and that of silver fox pelts has increased by only about 20 p.c. and 12 p.c.

\* Revised by Miss F. A. Brown, Chief of the Fisheries, Fur, and Dairy Statistics Branch, Dominion Bureau of Statistics. This Branch publishes detailed annual reports on fur farms and on the production of raw furs.

Statistics of Fur Farms.—The earliest Dominion-wide statistics of fur farms were collected for the year 1910. Since then annual statistics have been obtained covering the chief phases of the industry. The statistics of 1919 recorded 429 fur farms with 8,326 fur-bearing animals. The wide growth of the industry since then is evident from the statistics of the tables which follow.

Table 1 shows the numbers of farms and capital investment in the industry by provinces.

1.—Numbers of Fur Farms, Values of Land and Buildings and Values of Fur-Bearing Animals, by Provinces, 1934-36.

| Province.             | Fur Farms. |       |       | Values of Land and Buildings. |           |           | Values of Fur-Bearing Animals. |           |           |
|-----------------------|------------|-------|-------|-------------------------------|-----------|-----------|--------------------------------|-----------|-----------|
|                       | 1934.      | 1935. | 1936. | 1934.                         | 1935.     | 1936.     | 1934.                          | 1935.     | 1936.     |
|                       | No.        | No.   | No.   | \$                            | \$        | \$        | \$                             | \$        | \$        |
| P.E. Island.....      | 646        | 771   | 730   | 879,083                       | 884,895   | 876,446   | 1,168,683                      | 1,192,410 | 1,088,647 |
| Nova Scotia.....      | 690        | 853   | 958   | 254,739                       | 314,687   | 337,423   | 1,431,098                      | 557,447   | 608,202   |
| New Brunswick.....    | 991        | 983   | 1,028 | 563,009                       | 508,221   | 531,955   | 941,746                        | 949,101   | 908,215   |
| Quebec.....           | 2,279      | 2,408 | 2,571 | 1,035,942                     | 1,173,107 | 1,226,657 | 1,627,874                      | 1,910,050 | 1,910,821 |
| Ontario.....          | 1,026      | 1,029 | 1,170 | 1,215,022                     | 1,321,913 | 1,401,676 | 1,606,592                      | 1,848,343 | 2,044,800 |
| Manitoba.....         | 352        | 400   | 510   | 592,400                       | 700,403   | 785,072   | 760,546                        | 913,072   | 1,108,779 |
| Saskatchewan.....     | 225        | 308   | 349   | 404,707                       | 413,752   | 567,550   | 490,828                        | 545,552   | 629,447   |
| Alberta.....          | 510        | 493   | 514   | 352,440                       | 605,913   | 972,632   | 1,077,110                      | 1,085,050 | 1,164,737 |
| British Columbia..... | 293        | 272   | 304   | 397,887                       | 356,184   | 367,747   | 314,725                        | 373,916   | 362,640   |
| Yukon.....            | 7          | 8     | 7     | 14,550                        | 11,750    | 17,350    | 8,365                          | 6,275     | 11,825    |
| Totals.....           | 7,019      | 7,495 | 8,141 | 6,209,788                     | 6,599,825 | 7,094,506 | 8,427,567                      | 9,381,825 | 9,837,813 |

Table 2 indicates that the numbers of silver foxes and mink, the two fur-bearing animals which have proved most readily adaptable to domestication, were higher in 1936 than in any previous year. The values of animals on fur farms, on the other hand, have been greatly affected by the decline in prices since 1929.

2.—Numbers of Fur-Bearing Animals on Fur Farms in Canada at Dec. 31, 1928-36.

| Kind of Animal.           | 1928.   | 1929.   | 1930.   | 1931.   | 1932.   | 1933.   | 1934.   | 1935.   | 1936.   |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Silver fox.....           | 72,631  | 97,190  | 105,894 | 95,734  | 92,703  | 103,842 | 125,577 | 141,509 | 151,696 |
| Patch or cross fox.....   | 1,853   | 2,563   | 3,335   | 3,369   | 2,978   | 2,574   | 2,472   | 1,931   | 1,723   |
| Red fox.....              | 1,489   | 2,348   | 3,018   | 2,879   | 2,526   | 2,244   | 2,081   | 1,548   | 1,248   |
| Blue fox.....             | 1,331   | 1,576   | 1,755   | 1,219   | 858     | 689     | 601     | 669     | 649     |
| Silver-blue fox.....      | 6       | Nil     | Nil     | 15      | 5       | 2       | Nil     | Nil     | Nil     |
| White fox.....            | 1       | 4       | 64      | 62      | 39      | 11      | 5       | Nil     | 4       |
| Mink.....                 | 5,028   | 10,436  | 20,726  | 21,062  | 17,212  | 18,640  | 25,435  | 31,946  | 44,631  |
| Raccoon.....              | 1,852   | 2,870   | 3,395   | 3,600   | 3,067   | 2,522   | 1,867   | 1,334   | 930     |
| Skunk.....                | 99      | 78      | 20      | 54      | 20      | 12      | Nil     | 2       | 19      |
| Marten.....               | 152     | 187     | 228     | 272     | 207     | 202     | 154     | 113     | 122     |
| Fisher.....               | 136     | 184     | 195     | 244     | 200     | 183     | 104     | 103     | 126     |
| Opossum.....              | Nil     | Nil     | 3       | Nil     | Nil     | Nil     | Nil     | Nil     | Nil     |
| Coyote.....               | 30      | 73      | 135     | 72      | 44      | 34      | 22      | 18      | 37      |
| Badger.....               | 113     | 726     | 859     | 307     | 119     | 63      | 45      | 22      | 27      |
| Lynx.....                 | 9       | 10      | 13      | 16      | 10      | 1       | Nil     | Nil     | Nil     |
| Otter.....                | 1       | 2       | Nil     | Nil     | Nil     | Nil     | Nil     | Nil     | Nil     |
| Fitch.....                | Nil     | 25      | 150     | 826     | 1,587   | 1,857   | 1,558   | 1,144   | 1,001   |
| Ferret.....               | Nil     | 5       | 1       | Nil     | 3       | 4       | 1       | 6       | Nil     |
| Weasel.....               | Nil     | 11      | 6       | 11      | 17      | 8       | 9       | 8       | 8       |
| Nutria.....               | Nil     | Nil     | 10      | 27      | 56      | 64      | 46      | 72      | 62      |
| Chinchilla rabbit.....    | 3,464   | 1,438   | 1,206   | 239     | 80      | 79      | 79      | 2       | 7       |
| Rabbit, n.e.s.....        | 1,733   | 428     | 475     | 207     | 288     | 291     | 118     | 57      | 40      |
| Karakul sheep.....        | 94      | 96      | 193     | 149     | 108     | 107     | 111     | 102     | 102     |
| Muskra <sup>1</sup> ..... | 168,861 | 711,111 | 425,525 | 119,285 | 132,973 | 65,324  | 35,556  | 20,539  | 17,769  |
| Beaver <sup>1</sup> ..... | 799     | 698     | 1,112   | 806     | 1,118   | 1,029   | 1,010   | 1,180   | 888     |
| Totals.....               | 259,683 | 832,059 | 568,618 | 250,446 | 256,295 | 199,782 | 196,970 | 202,363 | 221,662 |

<sup>1</sup> Based on estimates furnished by the operators of the farms.

3.—Values of Fur-Bearing Animals on Fur Farms in Canada at Dec. 31, 1928-36.

| Kind of Animal.           | 1928.      | 1929.      | 1930.      | 1931.     | 1932.     | 1933.     | 1934.     | 1935.     | 1936.     |
|---------------------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
|                           | \$         | \$         | \$         | \$        | \$        | \$        | \$        | \$        | \$        |
| Silver fox.....           | 14,922,378 | 18,047,124 | 13,386,171 | 7,250,148 | 6,027,501 | 6,849,725 | 7,742,294 | 5,495,351 | 8,345,552 |
| Patch or cross fox.....   | 167,222    | 233,220    | 270,257    | 150,597   | 112,548   | 99,570    | 81,292    | 65,084    | 61,784    |
| Red fox.....              | 46,772     | 91,575     | 77,872     | 45,988    | 33,199    | 27,405    | 23,583    | 10,149    | 13,567    |
| Blue fox.....             | 172,682    | 196,750    | 174,103    | 73,237    | 34,375    | 25,243    | 22,865    | 20,750    | 21,043    |
| Silver-blue fox.....      | 1,520      | Nil        | Nil        | 650       | 200       | 100       | Nil       | Nil       | Nil       |
| White fox.....            | 150        | 400        | 1,700      | 2,410     | 1,310     | 920       | 800       | Nil       | 120       |
| Mink.....                 | 328,998    | 765,333    | 1,286,737  | 642,045   | 328,534   | 349,411   | 451,469   | 695,492   | 1,313,613 |
| Raccoon.....              | 59,672     | 80,801     | 72,242     | 48,040    | 32,033    | 22,996    | 15,844    | 10,658    | 7,889     |
| Skunk.....                | 693        | 341        | 73         | 137       | 126       | 12        | 14        | Nil       | 10        |
| Marten.....               | 14,310     | 17,340     | 20,660     | 17,550    | 10,739    | 10,697    | 8,125     | 6,460     | 7,225     |
| Fisher.....               | 24,325     | 28,585     | 29,810     | 29,170    | 16,995    | 17,190    | 14,745    | 16,425    | 13,885    |
| Opossum.....              | Nil        | Nil        | 25         | Nil       | Nil       | Nil       | Nil       | Nil       | Nil       |
| Coyote.....               | 480        | 850        | 1,592      | 836       | 302       | 356       | 138       | 132       | 280       |
| Badger.....               | 4,445      | 23,350     | 18,812     | 7,125     | 2,601     | 1,357     | 1,040     | 434       | 810       |
| Lynx.....                 | 880        | 825        | 1,600      | 660       | 320       | 20        | Nil       | Nil       | Nil       |
| Otter.....                | 70         | 100        | Nil        | Nil       | Nil       | Nil       | Nil       | Nil       | Nil       |
| Fitch.....                | Nil        | 550        | 5,780      | 13,478    | 16,496    | 11,729    | 6,604     | 4,598     | 3,472     |
| Ferret.....               | Nil        | 25         | 5          | Nil       | 15        | 12        | 2         | 30        | Nil       |
| Weasel.....               | Nil        | 50         | 25         | 28        | 29        | 8         | 10        | 4         | 8         |
| Nutria.....               | Nil        | Nil        | 700        | 1,880     | 2,245     | 2,490     | 945       | 1,065     | 1,320     |
| Chinchilla rabbit.....    | 27,711     | 8,627      | 2,089      | 342       | 194       | 65        | 36        | 5         | 15        |
| Rabbit, n.e.s.....        | 12,575     | 2,428      | 1,623      | 685       | 1,454     | 454       | 234       | 100       | 38        |
| Karakul sheep.....        | 5,348      | 4,300      | 5,334      | 1,650     | 1,255     | 1,000     | 917       | 540       | 500       |
| Muskra <sup>t</sup> ..... | 562,749    | 1,725,391  | 755,800    | 162,889   | 93,473    | 56,088    | 31,025    | 20,852    | 23,194    |
| Beaver <sup>t</sup> ..... | 48,475     | 75,070     | 84,667     | 48,042    | 38,818    | 32,659    | 24,955    | 20,587    | 23,428    |
| Totals.....               | 16,461,453 | 21,393,035 | 16,197,747 | 8,497,237 | 6,751,762 | 7,509,567 | 8,427,667 | 9,381,825 | 9,837,813 |

<sup>t</sup> Based on estimates furnished by the operators of the farms.

The annual revenue of the fur farmer arises from two sources, the sale of animals and the sale of pelts. Table 4 shows the sales of animals by kinds in the years 1923 to 1936 and Table 5 the sales of pelts. During late years the sales of pelts have exceeded the sales of live animals, while in former years the reverse was the case.

4.—Values of Fur-Bearing Animals Sold from Fur Farms in Canada, 1928-36.

| Kind of Animal.           | 1928.     | 1929.     | 1930.     | 1931.   | 1932.   | 1933.   | 1934.   | 1935.   | 1936.   |
|---------------------------|-----------|-----------|-----------|---------|---------|---------|---------|---------|---------|
|                           | \$        | \$        | \$        | \$      | \$      | \$      | \$      | \$      | \$      |
| Silver fox.....           | 3,552,874 | 3,856,158 | 1,405,202 | 358,394 | 193,043 | 301,612 | 488,847 | 562,480 | 542,888 |
| Patch or cross fox.....   | 38,675    | 66,554    | 29,296    | 8,526   | 4,467   | 5,313   | 3,291   | 3,280   | 3,321   |
| Red fox.....              | 12,159    | 22,178    | 10,900    | 5,788   | 2,657   | 2,744   | 2,729   | 2,110   | 1,293   |
| Blue fox.....             | 28,530    | 45,035    | 24,895    | 8,270   | 1,355   | 502     | 825     | 335     | 1,110   |
| Silver-blue fox.....      | 550       | Nil       | Nil       | Nil     | Nil     | Nil     | Nil     | Nil     | Nil     |
| White fox.....            | Nil       | Nil       | 161       | Nil     | 210     | Nil     | Nil     | Nil     | 25      |
| Mink.....                 | 140,889   | 407,570   | 301,754   | 85,728  | 28,581  | 34,802  | 68,708  | 73,402  | 271,225 |
| Raccoon.....              | 18,031    | 17,996    | 13,800    | 4,825   | 2,163   | 2,201   | 1,294   | 779     | 867     |
| Skunk.....                | Nil       | 80        | Nil       | Nil     | Nil     | Nil     | Nil     | Nil     | Nil     |
| Marten.....               | 350       | 1,270     | 2,075     | 905     | 670     | 100     | 155     | 800     | 292     |
| Fisher.....               | 2,375     | 4,325     | 4,399     | 7,495   | 2,090   | 1,200   | 1,325   | 3,255   | 5,930   |
| Coyote.....               | Nil       | 20        | 20        | 124     | Nil     | Nil     | Nil     | Nil     | Nil     |
| Badger.....               | 215       | 4,984     | 2,957     | 485     | 145     | 0       | Nil     | 320     | Nil     |
| Lynx.....                 | Nil       | Nil       | Nil       | Nil     | 20      | Nil     | Nil     | Nil     | Nil     |
| Fitch.....                | Nil       | 100       | 1,720     | 6,724   | 5,565   | 4,025   | 2,436   | 2,377   | 1,160   |
| Ferret.....               | Nil       | 75        | Nil       | Nil     | Nil     | Nil     | 0       | Nil     | Nil     |
| Nutria.....               | Nil       | Nil       | Nil       | 175     | 515     | 675     | 1,040   | 115     | 880     |
| Chinchilla rabbit.....    | 18,355    | 2,499     | 170       | 58      | 438     | Nil     | Nil     | Nil     | 4       |
| Rabbit, n.e.s.....        | 7,851     | 1,071     | 677       | 172     | 642     | 439     | 120     | 4       | Nil     |
| Karakul sheep.....        | 160       | 200       | 1,600     | 70      | 275     | 300     | 212     | 160     | Nil     |
| Muskra <sup>t</sup> ..... | 16,206    | 44,308    | 23,394    | 3,881   | 457     | 8       | 8       | 15      | 590     |
| Beaver.....               | 200       | 50        | 625       | 380     | Nil     | 460     | 1,325   | Nil     | Nil     |
| Totals.....               | 3,537,420 | 4,474,953 | 1,828,545 | 492,096 | 243,193 | 354,462 | 573,051 | 649,432 | 829,585 |

5.—Values of Pelts Sold from Fur Farms in Canada, 1928-36.

| Kind of Animal.    | 1928.     | 1929.     | 1930.     | 1931.     | 1932.     | 1933.     | 1934.     | 1935.     | 1936.     |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                    | \$        | \$        | \$        | \$        | \$        | \$        | \$        | \$        | \$        |
| Silver fox.....    | 2,278,611 | 2,195,253 | 2,921,885 | 2,835,470 | 2,821,593 | 3,441,020 | 3,690,431 | 4,437,301 | 4,050,290 |
| Patch or cross fox | 54,307    | 43,122    | 75,676    | 84,993    | 93,018    | 95,522    | 84,503    | 75,273    | 65,182    |
| Red fox.....       | 21,774    | 18,535    | 21,549    | 20,445    | 21,824    | 23,652    | 17,788    | 14,301    | 12,734    |
| Blue fox.....      | 13,516    | 19,144    | 25,318    | 12,758    | 9,032     | 9,325     | 12,250    | 9,179     | 11,071    |
| White fox.....     | Nil       | Nil       | 25        | 792       | 135       | 65        | 75        | 80        | 80        |
| Mink.....          | 8,910     | 12,471    | 34,538    | 99,033    | 87,604    | 127,241   | 145,680   | 323,263   | 652,424   |
| Raccoon.....       | 1,502     | 3,027     | 2,618     | 4,445     | 5,096     | 4,738     | 5,248     | 4,410     | 3,519     |
| Skunk.....         | 23        | 48        | 11        | 4         | 10        | Nil       | Nil       | 6         | Nil       |
| Marten.....        | 30        | Nil       | 100       | 79        | 313       | 262       | 175       | 194       | 830       |
| Fisher.....        | 112       | 320       | 405       | 145       | 1,129     | 1,576     | 963       | 626       | 1,512     |
| Coyote.....        | Nil       | 349       | 691       | 718       | 395       | 610       | 530       | 322       | 1,187     |
| Badger.....        | 28        | 1,646     | 3,925     | 3,101     | 1,395     | 629       | 408       | 296       | 108       |
| Lynx.....          | 45        | Nil       | 100       | Nil       | Nil       | 66        | Nil       | Nil       | Nil       |
| Fitch.....         | Nil       | Nil       | Nil       | 341       | 568       | 2,616     | 3,184     | 2,010     | 1,738     |
| Weasel.....        | Nil       | Nil       | 7         | Nil       | 34        | 30        | 23        | 25        | 20        |
| Nutria.....        | Nil       | Nil       | Nil       | Nil       | Nil       | Nil       | Nil       | 50        | 3         |
| Chinchilla rabbit  | 520       | 806       | 45        | 65        | 8         | Nil       | Nil       | Nil       | Nil       |
| Rabbit, n.e.s..... | 246       | 263       | 22        | Nil       | Nil       | 29        | Nil       | Nil       | Nil       |
| Karakul sheep..... | Nil       | Nil       | Nil       | Nil       | 246       | 159       | 638       | 338       | 638       |
| Muskrat.....       | 9,365     | 9,325     | 9,205     | 8,945     | 2,723     | 4,710     | 4,024     | 3,212     | 6,435     |
| Beaver.....        | 25        | 550       | 150       | 126       | 410       | 212       | 105       | 113       | 248       |
| Totals.....        | 2,389,626 | 2,304,910 | 3,006,270 | 3,071,460 | 3,046,627 | 3,712,443 | 3,966,010 | 4,870,995 | 5,707,922 |

## Section 3.—Statistics of Total Production and Trade in Furs.

**Fur Production Statistics.\***—Early records of raw fur production are confined to the decennial censuses, when account was taken of the number and value of pelts obtained by trappers. In 1920 the Dominion Bureau of Statistics commenced an annual survey of raw fur production, basing its statistics on information supplied by the licensed fur traders. This survey was continued for some years. More recently, annual statements, based on royalties, export tax, etc., have been made available by the provincial game departments, and these statements are now used in the preparation of the statistics issued annually by the Bureau. In the case of Prince Edward Island, which, until the present, has been unable to furnish such annual data, the Bureau has heretofore used the returns of fur farms to supply information concerning the pelts sold. This method has been unsatisfactory, as the returns of fur farms are made for the calendar year, whereas the fur production statistics cover the 12 months ending June 30. Again in Prince Edward Island, the Bureau's list of fur farms, although inclusive of all the larger fur farms, is probably incomplete with regard to properties where not more than one or two pairs of foxes are kept. A licence is not necessary to operate a fur farm in that province and consequently no list of licensees is available. For the latest year the Prince Edward Island Department of Agriculture has furnished a statement giving the value of silver fox pelts, the product of Prince Edward Island fur farms, exported from the province during the season 1935-36, and based on data collected from the various selling agencies. The number of skins has been estimated at 62,169, this estimate being obtained by taking an average value of \$34 per pelt. The increase in fur production (almost entirely silver fox pelts) for Prince Edward Island is due to the change in the source used for the information.

The chief markets for Canadian furs are London and New York; the trade tables for the 12 months ended June 30, 1936, show that of the total of \$16,159,275 worth of raw furs exported, the United Kingdom received \$9,321,147 and the United

\*Revised by Miss F. A. Brown, Chief of the Fisheries, Fur, and Dairy Statistics Branch, Dominion Bureau of Statistics.



States, \$6,015,782. At the close of the Great War, Montreal took a position as an international fur market, holding the first Canadian fur auction sale in 1920. At the sales held in Montreal during the year 1936 the pelts sold numbered 868,164, while the value amounted to \$5,397,042. Fur auction sales are held also at Winnipeg, Edmonton, and Vancouver. An important industry in Canada is the manufacture of fur goods, such as coats, capes, scarves, muffs, etc. In 1935 the number of plants so engaged was 309, and the total value of output \$12,518,670. Then there is the fur-dressing and -dyeing industry whose 13 plants in 1935 treated fur skins to the number of 5,738,920. The chief kinds of furs, with regard to number treated, were rabbit (2,736,041) and muskrat (1,131,496).

**6.—Summary of the Numbers and Values of Pelts of Fur-Bearing Animals Produced in Canada, years ended June 30, 1920-36.**

| Year ended June 30— | Pelts.    |                         | Year ended June 30— | Pelts.    |                       |
|---------------------|-----------|-------------------------|---------------------|-----------|-----------------------|
|                     | No.       | Value of Pelts.<br>\$   |                     | No.       | Value of Pelts.<br>\$ |
| 1920.....           | 3,600,004 | 21,387,005 <sup>1</sup> | 1929.....           | 5,150,328 | 18,745,473            |
| 1921.....           | 2,936,407 | 10,151,594              | 1930.....           | 3,798,444 | 12,158,370            |
| 1922.....           | 4,306,790 | 17,438,867              | 1931.....           | 4,000,856 | 11,835,217            |
| 1923.....           | 4,968,996 | 16,761,667              | 1932.....           | 4,449,289 | 10,189,481            |
| 1924.....           | 4,207,593 | 15,643,817              | 1933.....           | 4,808,558 | 10,805,154            |
| 1925.....           | 3,820,326 | 15,441,564              | 1934.....           | 6,076,197 | 12,349,328            |
| 1926.....           | 3,686,148 | 15,072,244              | 1935.....           | 4,920,413 | 12,843,341            |
| 1927.....           | 4,289,233 | 18,864,126              | 1936.....           | 4,590,713 | 15,464,883            |
| 1928.....           | 3,601,153 | 18,758,177              |                     |           |                       |

<sup>1</sup> Fur prices in this year were abnormally high. Any comparison of this figure with those of later years should take this into account.

Among the provinces, Ontario occupies first place in value of raw fur production, its output in 1935-36 being valued at \$2,649,647. The relation of the value of raw fur production in each province to the total for Canada in 1935-36 is shown by the following percentages: Ontario 17.1; Quebec 16.0; Prince Edward Island, 13.7; Alberta, 11.0; Manitoba, 8.3; British Columbia, 7.8; Northwest Territories, 7.7; Saskatchewan, 7.4; New Brunswick, 4.8; Nova Scotia, 4.4; and Yukon, 1.8. Details by provinces of the numbers of pelts produced in the two latest years are given in Table 7.

**7.—Numbers and Values of Pelts of Fur-Bearing Animals Produced in Canada, by Provinces, years ended June 30, 1935 and 1936.**

| Province or Territory.     | Numbers of Pelts.   |                     | Values of Pelts.     |                        |
|----------------------------|---------------------|---------------------|----------------------|------------------------|
|                            | 1934-35.            | 1935-36.            | 1934-35.<br>\$       | 1935-36.<br>\$         |
| Prince Edward Island.....  | 19,828 <sup>1</sup> | 64,581 <sup>1</sup> | 658,238 <sup>1</sup> | 2,119,706 <sup>1</sup> |
| Nova Scotia.....           | 66,828              | 78,200              | 650,886              | 676,379                |
| New Brunswick.....         | 55,184              | 53,802              | 765,169              | 740,789                |
| Quebec.....                | 299,279             | 295,606             | 1,815,009            | 2,470,998              |
| Ontario.....               | 656,342             | 599,710             | 2,215,514            | 2,649,647              |
| Manitoba.....              | 496,265             | 379,191             | 1,135,205            | 1,231,854              |
| Saskatchewan.....          | 1,004,122           | 1,401,809           | 1,262,058            | 1,152,373              |
| Alberta.....               | 1,850,461           | 1,274,919           | 1,474,523            | 1,606,383              |
| British Columbia.....      | 200,351             | 194,596             | 809,198              | 1,201,523              |
| Northwest Territories..... | 212,414             | 211,551             | 1,678,544            | 1,188,285              |
| Yukon.....                 | 41,309              | 42,708              | 230,074              | 276,946                |
| <b>Canada.....</b>         | <b>4,926,413</b>    | <b>4,596,713</b>    | <b>12,843,341</b>    | <b>15,464,883</b>      |

<sup>1</sup> The large increase in Prince Edward Island in both the number and value of pelts produced from the year 1934-35 to 1935-36 is mainly due to a change of method explained on p. 315.

The chief item of production is silver fox, practically the whole supply of which may be credited to the fur farms. The number of silver fox pelts shown for the season is 185,259, and the value, \$6,108,194. Next in order of value is muskrat, with \$2,148,605, and third is mink, with \$1,701,577. Mink farming has advanced rapidly in recent years and the farms now supply about 20 p.c. of the total production of mink pelts.

Compared with the preceding season, increases in average prices are shown for all kinds excepting blue, red, and silver fox, and wolverine, for which lower prices are recorded. Among the principal kinds, silver fox dropped from \$36.06 to \$32.97, but muskrat advanced from 90 cents to \$1.32, and mink from \$8.41 to \$11.03.

The total number of pelts of all kinds produced during the season 1935-36 was 4,596,713, compared with 4,926,413 in the preceding season. The reduction was due, chiefly, to the smaller numbers of muskrat and squirrel pelts.

The following table gives details of raw fur production by kinds for 1935 and 1936.

8.—Kinds, Numbers, Total Values and Average Values of Pelts of Fur-Bearing Animals Taken in Canada, years ended June 30, 1935 and 1936.

| Kind.                       | Numbers of Pelts. |                  | Total Values of Pelts. |                   | Average Values per Pelt. |          |
|-----------------------------|-------------------|------------------|------------------------|-------------------|--------------------------|----------|
|                             | 1934-35.          | 1935-36.         | 1934-35.               | 1935-36.          | 1934-35.                 | 1935-36. |
|                             |                   |                  | \$                     | \$                | \$                       | \$       |
| Badger.....                 | 1,225             | 157              | 9,426                  | 2,001             | 7.69                     | 12.75    |
| Bear, black and brown.....  | 1,123             | 1,025            | 1,845                  | 1,710             | 1.64                     | 1.67     |
| Bear, grizzly.....          | 10                | 45               | 33                     | 450               | 3.30                     | 7.00     |
| Bear, white.....            | 43                | 59               | 572                    | 843               | 13.30                    | 14.39    |
| Beaver.....                 | 50,175            | 44,000           | 412,862                | 451,070           | 8.23                     | 10.11    |
| Coyote or prairie wolf..... | 53,018            | 50,639           | 359,036                | 365,560           | 0.77                     | 7.22     |
| Ermine (weasel).....        | 577,688           | 661,573          | 275,502                | 403,300           | 0.48                     | 0.61     |
| Fisher or pekan.....        | 3,728             | 4,024            | 170,064                | 236,287           | 45.62                    | 51.10    |
| Fitch.....                  | 2,510             | 2,417            | 2,931                  | 3,232             | 1.17                     | 1.34     |
| Fox, cross.....             | 32,789            | 28,077           | 684,174                | 674,919           | 21.16                    | 24.04    |
| Fox, red.....               | 104,468           | 106,012          | 731,700                | 791,448           | 7.45                     | 7.47     |
| Fox, silver.....            | 120,465           | 185,259          | 4,343,523              | 6,108,194         | 30.06                    | 32.97    |
| Fox, blue.....              | 1,316             | 1,046            | 32,550                 | 24,124            | 24.73                    | 23.06    |
| Fox, white.....             | 68,366            | 45,743           | 1,043,028              | 697,597           | 15.24                    | 15.25    |
| Fox, unspecified.....       | 1,163             | 900              | 8,508                  | 7,828             | -                        | -        |
| Lynx.....                   | 22,014            | 22,456           | 511,410                | 636,305           | 23.23                    | 28.33    |
| Marten or sable.....        | 22,906            | 24,536           | 318,403                | 537,199           | 13.90                    | 21.85    |
| Mink.....                   | 183,306           | 154,279          | 1,640,684              | 1,701,577         | 8.41                     | 11.03    |
| Muskrat.....                | 1,983,747         | 1,630,231        | 1,784,252              | 2,148,605         | 0.90                     | 1.32     |
| Nutria.....                 | Nil               | 6                | Nil                    | 50                | Nil                      | 8.33     |
| Otter.....                  | 8,027             | 9,749            | 152,404                | 173,858           | 17.07                    | 17.83    |
| Rabbit.....                 | 288,641           | 853,277          | 18,097                 | 102,393           | 0.06                     | 0.12     |
| Raccoon.....                | 20,101            | 20,370           | 69,309                 | 73,322            | 3.45                     | 3.64     |
| Skunk.....                  | 131,940           | 105,547          | 87,154                 | 84,054            | 0.66                     | 0.62     |
| Squirrel.....               | 1,321,200         | 629,850          | 109,757                | 39,748            | 0.08                     | 0.14     |
| Wild cat.....               | 2,218             | 1,884            | 7,750                  | 11,273            | 3.50                     | 5.95     |
| Wolf.....                   | 12,007            | 11,654           | 102,918                | 128,782           | 8.57                     | 11.14    |
| Wolverine or caracajou..... | 655               | 650              | 3,988                  | 5,000             | 6.09                     | 5.54     |
| Domestic cat.....           | 565               | 244              | 71                     | 39                | 0.13                     | 0.16     |
| <b>Totals.....</b>          | <b>4,926,413</b>  | <b>4,596,713</b> | <b>12,843,341</b>      | <b>15,464,883</b> | -                        | -        |

<sup>1</sup> Coyote or prairie wolf pelts for Manitoba are included with wolf pelts.

**External Trade in Furs.**—The important external markets for Canadian furs are London and New York; the trade tables for the twelve months ended June 30, 1936, show that of the total of \$16,159,275 worth of raw furs exported, the United Kingdom took \$9,321,147 and the United States \$6,015,782. In 1667 exports of furs to France and the West Indies were valued at 550,000 francs. In 1850, the first year for which tables of the Customs Department are available, the value of raw furs exported was £19,395. The following table shows exports for recent years which are greatly in excess of the earlier values.

9.—Exports of Canadian Raw Furs by Leading Countries and Kinds of Fur, years ended June 30, 1932-36.

| Country and Kind.          | Years ended June 30— |                   |                   |                   |                   |
|----------------------------|----------------------|-------------------|-------------------|-------------------|-------------------|
|                            | 1932.                | 1933.             | 1934.             | 1935.             | 1936.             |
| COUNTRY.                   | \$                   | \$                | \$                | \$                | \$                |
| United Kingdom.....        | 6,316,529            | 7,122,874         | 8,723,485         | 9,755,922         | 9,321,147         |
| United States.....         | 3,908,773            | 2,684,231         | 4,156,005         | 4,626,876         | 6,015,752         |
| Other countries.....       | 1,299,784            | 1,372,947         | 1,065,331         | 841,544           | 822,346           |
| <b>Totals.....</b>         | <b>11,495,086</b>    | <b>11,180,052</b> | <b>13,944,821</b> | <b>15,224,342</b> | <b>16,159,275</b> |
| KIND OF FUR.               |                      |                   |                   |                   |                   |
| Beaver.....                | 1,004,413            | 871,710           | 709,950           | 748,521           | 615,738           |
| Fox, black and silver..... | 3,818,463            | 4,550,906         | 5,264,026         | 5,708,024         | 6,260,371         |
| Fox, other.....            | 2,021,303            | 1,676,757         | 2,076,921         | 2,818,386         | 2,522,428         |
| Lynx.....                  | 174,276              | 177,059           | 255,002           | 456,469           | 600,239           |
| Marten.....                | 370,722              | 282,808           | 295,002           | 302,516           | 439,125           |
| Mink.....                  | 1,144,828            | 1,314,047         | 2,144,121         | 1,878,666         | 2,202,085         |
| Muskrat.....               | 1,130,155            | 987,189           | 1,285,333         | 1,022,787         | 1,403,397         |
| Other kinds.....           | 1,734,926            | 1,319,516         | 1,064,456         | 1,088,978         | 2,026,282         |
| <b>Totals.....</b>         | <b>11,495,086</b>    | <b>11,180,052</b> | <b>13,944,821</b> | <b>15,224,342</b> | <b>16,159,275</b> |

10.—Imports of Raw Furs by Leading Countries Whence Imported and Kinds of Fur, years ended June 30, 1932-36.

| Country and Kind.    | Years ended June 30— |                  |                  |                  |                  |
|----------------------|----------------------|------------------|------------------|------------------|------------------|
|                      | 1932.                | 1933.            | 1934.            | 1935.            | 1936.            |
| COUNTRY.             | \$                   | \$               | \$               | \$               | \$               |
| United Kingdom.....  | 290,353              | 202,762          | 540,727          | 454,421          | 630,775          |
| United States.....   | 2,190,309            | 2,078,078        | 2,842,870        | 1,719,154        | 3,101,902        |
| Other countries..... | 228,623              | 201,330          | 411,495          | 451,039          | 618,062          |
| <b>Totals.....</b>   | <b>2,709,285</b>     | <b>2,482,170</b> | <b>3,795,092</b> | <b>2,625,214</b> | <b>4,351,339</b> |
| KIND OF FUR.         |                      |                  |                  |                  |                  |
| Fox.....             | 184,504              | 218,075          | 275,823          | 176,474          | 350,216          |
| Kolinsky.....        | 84,143               | 110,280          | 59,146           | 21,554           | 50,918           |
| Mink.....            | 109,577              | 95,867           | 238,798          | 106,723          | 194,671          |
| Muskrat.....         | 594,542              | 518,251          | 1,012,050        | 316,231          | 622,850          |
| Persian lamb.....    | 283,067              | 155,168          | 319,593          | 284,898          | 604,366          |
| Rabbit.....          | 215,621              | 240,691          | 280,826          | 422,673          | 662,434          |
| Other kinds.....     | 1,237,826            | 1,143,838        | 1,608,256        | 1,296,661        | 1,865,894        |
| <b>Totals.....</b>   | <b>2,709,285</b>     | <b>2,482,170</b> | <b>3,795,092</b> | <b>2,625,214</b> | <b>4,351,339</b> |

Among living animals exported from Canada only two kinds of fur-bearing animals are separately classified by the Customs Department. These are foxes, separately recorded first in 1925, and mink, in 1931. Live foxes exported were valued at \$1,388,459 in the fiscal year ended Mar. 31, 1925, \$1,434,686 in 1926, when the highest value was recorded, and only \$25,335 in 1937. Live mink exported were valued at \$66,811 in 1931 and \$27,590 in 1937. Foxes have been separately classified among imports of living animals since the fiscal year ended Mar. 31, 1928, when those imported were valued at \$6,914 compared with \$250 in 1937.

## CHAPTER XI.—THE FISHERIES.

### Section 1.—The Early Fisheries.

Fishing is one of the earliest and most historic industries of Canada. Leaving aside inconclusive evidence in favour of authentic record, one must ascribe to Cabot the honour of having discovered, in 1497, the cod banks of Newfoundland, when he first sighted the mainland of North America. Fishing may well be regarded as the first industry to be systematically prosecuted by Europeans in what is to-day the Canadian domain. It has since yielded a perennial harvest to both Europe and America. According to the Census of 1931, of 3,927,591 persons in Canada gainfully occupied in that year, 34,340 were reported as occupied in the fishing industry, that is, in primary fishing operations exclusive of canning and curing.

A more detailed account of the history of the Atlantic fisheries was given on p. 348 of the 1934-35 Year Book.

### Section 2.—The Canadian Fishing Grounds.

The fishing grounds of the Dominion are of exceptional national value inasmuch as two of the four great sea-fishing areas of the world border on Canada. They fall naturally into three divisions: Atlantic, inland, and Pacific fishing grounds. A detailed description of each division, of the fish caught, and of the methods of fishing, will be found at pp. 222-225 of the 1932 Year Book.

### Section 3.—The Government and the Fisheries.\*

Upon the organization of the Dominion Government at Confederation, the administration of the Canadian fisheries was placed under the Department of Marine and Fisheries. Early in 1930 a Department of Fisheries, in charge of its own Minister, was organized. This Department now administers all the tidal fisheries (except those of the mainland portion of Quebec, which, by agreement, are under provincial administration), the non-tidal fisheries of Nova Scotia, and the fisheries of Yukon and the Northwest Territories. The non-tidal fisheries of New Brunswick, Prince Edward Island, Ontario, the Prairie Provinces, and British Columbia, and both the tidal and non-tidal fisheries of Quebec (except the fisheries of the Magdalen islands) are administered by the respective provinces, although the Dominion Department does certain protective work in non-tidal waters of New Brunswick, Prince Edward Island, and British Columbia. The right of fisheries regulation for all the provinces, however, rests with the Dominion Government. [See the Fisheries Act (22-23 Geo. V, c. 42).] The expenditure of the Dominion on the fisheries in the fiscal year 1936-37, including civil government salaries, contingencies, etc., was \$2,036,891 and the revenue \$176,730.

**Conservation.**—River and lake fisheries certainly, and sea fisheries probably, if left to themselves, conform to the economic law of diminishing returns. The Canadian Government, accordingly, has had for a main object the prevention of depletion by the enforcement of close seasons, the forbidding of obstructions and pollutions and the regulation of nets, gear, and fishing operations generally. In addition, an extensive system of fish culture has been organized; the Dominion, in 1936, operated 23 main hatcheries, 8 subsidiary hatcheries, 2 rearing stations, 8 salmon retaining ponds, and several egg collecting stations at a cost of \$214,528,

\* Revised under the direction of W. A. Found, Deputy Minister, Department of Fisheries, Ottawa.

and distributed 111,672,401 trout and salmon eggs, fry, and older fish. The young fish are distributed *gratis* if the waters in which they are to be placed are suitable and are open to public fishing. Investigations and experiments directed toward the culture of the oyster have been carried on since 1929 in Prince Edward Island, by the Dominion Department of Fisheries, and are now being extended to areas in Nova Scotia. In New Brunswick, the oyster areas are under the jurisdiction of the provincial authorities, but in a portion of Shediac bay the areas have been transferred to the Dominion Department of Fisheries by the Provincial Government in order that certain oyster investigations might be begun there.

**Direct Assistance.**—On the Atlantic coast where conditions attending fishing operations make such a service desirable, a system has been established of broadcasting radio reports as to weather probabilities, bait and ice supplies, and ice conditions. Further, under authority of the Fish Inspection Act (R.S.C., 1927, c. 72) systems of instruction in improved methods of fish-curing and barrel-making have been in operation for several years.

From a special appropriation made by Parliament for the fiscal year 1936-37, the sum of \$200,008 was expended by the Department of Fisheries, in co-operation with the provinces concerned, in aiding needy fishermen in Nova Scotia, New Brunswick, Prince Edward Island, and Quebec, to re-establish themselves. In each of these areas, the Provincial Government contributed to the fishermen's aid an amount equal to the sum provided by the Dominion authorities for assisting the fishermen of that province. In all, 6,649 loans, totalling \$249,054 were made to fishermen in the Maritime Provinces and 22 loans, averaging \$1,061, to fishermen's associations, while in Quebec 8,930 fishermen received grants totalling \$127,616.

**Scientific Research.**—Under the direction of the Biological Board of Canada or Fisheries Research Board, stations for the conduct of research into the numerous complex problems occurring in connection with the fisheries are established at Halifax, N.S., St. Andrews, N.B., Grande Rivière, Que., and Nanaimo and Prince Rupert, B.C. Another station, chiefly for oyster investigation work, is conducted by the Board at Eglerslie, P.E.I., and a sub-station for salmon investigations at Cultus Lake, B.C. A permanent staff of scientists is employed by the Board. The life-histories of edible fishes, the bacteriology of fresh and cured fish, improved methods of handling and preparing fish, and numerous other practical problems have been taken up and papers dealing with them issued by the Board. Instructional courses for fishermen are given at some of the stations and information brought out by the station research is made available without charge to interested branches of the fishing industry.

**International Problems.**—The chief international fisheries problem has been the question of the privileges of the United States in the Atlantic fisheries. Details of the history of this question for the past century and a half may be found at pp. 351-352 of the 1934-35 Year Book. Since 1933, under the former *modus vivendi* licence plan, which grew out of a treaty of 1888, which, however, was never ratified, United States vessels have again been permitted to enter Canadian ports to buy bait and all other supplies.

On the Great Lakes, also, the more important fishery problems, such as restocking and marketing, are necessarily international in character, and are complicated by the number of State governments interested. Much the same situation has developed in connection with the sockeye salmon fishery of the Pacific coast

where the sockeye of the Fraser river, British Columbia, are taken by the canners of Puget sound in quantities that largely exceed the catch of the Canadian canners. Different treaties to settle the matter were signed but none of them has so far been made effective.

Better results have been obtained in dealing with the international problem touching the halibut fishery of the Pacific which was settled by the treaty "For the Protection of the Pacific Halibut", signed by Canada and the United States on Mar. 2, 1923. Under this treaty a close season in each year was provided for halibut fishing. A further convention, signed by the plenipotentiaries of the two countries at Ottawa on May 9, 1930, and ratified by the respective Governments of the countries on May 9, 1931, provided for the regulation of the fishery by the division of the waters into fishing areas, changing of dates for close seasons, etc. This revised convention provides a simpler and more responsive system of control than was previously possible.\*

**Fishing Bounties.**—By an Act of 1882 (45 Vict., c. 18) for the development of the sea fisheries and the encouragement of boat-building, provision was made for the distribution, annually, among fishermen and the owners of fishing boats and vessels on the Atlantic waters, of \$150,000 in bounties, representing the interest on the amount of the Halifax Award. An Act of 1891 (54-55 Vict., c. 42) increased the amount to \$160,000, the details of the expenditure to be settled each year by Order in Council. For the year 1936, payment was made under authority of the Deep Sea Fisheries Act (R.S.C., 1927, c. 74) on the following basis: to owners of vessels entitled to receive bounty, \$1 per registered ton, payment to the owner of any one vessel not to exceed \$80; to vessel fishermen entitled to receive bounty, \$6.60 each; to owners of boats measuring not less than 12 feet keel, \$1 per boat; to boat fishermen entitled to receive bounty, \$5.70 each. The total amount paid in 1936 was \$159,977. Details of the distribution of bounties for the years 1933 to 1936 are as follows:—

**1.—Government Bounties Paid to Fishermen for the calendar years 1933-36.**

| Province.                 | Numbers of Men who Received Bounties. |               |               |               | Amounts of Bounties Paid. <sup>1</sup> |                |                |                |
|---------------------------|---------------------------------------|---------------|---------------|---------------|--|----------------|----------------|----------------|
|                           | 1933.                                 | 1934.         | 1935.         | 1936.         | 1933.                                  | 1934.          | 1935.          | 1936.          |
|                           |                                       |               |               |               | \$                                     | \$             | \$             | \$             |
| Prince Edward Island..... | 1,984                                 | 2,058         | 2,129         | 2,129         | 11,518                                 | 12,028         | 12,815         | 13,495         |
| Nova Scotia.....          | 11,386                                | 11,770        | 11,093        | 11,022        | 72,920                                 | 76,538         | 74,843         | 77,849         |
| New Brunswick.....        | 3,462                                 | 3,420         | 3,248         | 2,710         | 24,455                                 | 24,663         | 23,174         | 20,508         |
| Quebec.....               | 8,715                                 | 8,008         | 8,135         | 7,714         | 50,415                                 | 46,727         | 49,133         | 48,625         |
| <b>Totals.....</b>        | <b>25,547</b>                         | <b>25,256</b> | <b>24,605</b> | <b>23,575</b> | <b>159,308</b>                         | <b>159,976</b> | <b>159,965</b> | <b>159,977</b> |

<sup>1</sup> Amounts include payments to vessel and boat owners.

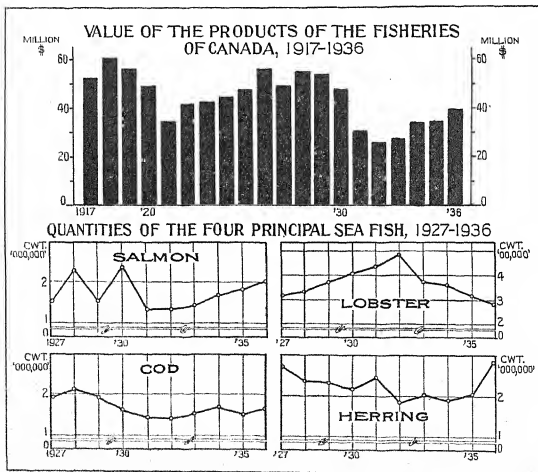
**Collection of Statistics.**—The fisheries statistics of Canada are issued under an arrangement for statistical co-operation between the Dominion Bureau of Statistics, the Dominion Department of Fisheries, and those branches of the different Provincial Governments having jurisdiction with regard to fisheries. Under this

\* A new convention, generally similar to that of 1930 but embodying several changes, was signed at Ottawa on Jan. 29, 1937.

arrangement, the statistics of the catch and of the products marketed in the fresh state or domestically prepared are collected by the local fishery officers, checked in the Department of Fisheries, so far as operations in areas where the fisheries are under Dominion administration are concerned, and compiled in the Dominion Bureau of Statistics. In the case of manufactured fish products, schedules similar to those of other sections of the Census of Industry are sent by the Bureau to the operators of canneries, fish-curing establishments, etc., the fisheries officers assisting in securing expeditious and correct reports.

### Section 4.—The Modern Fishing Industry.\*

The latter half of the nineteenth century saw the commencement of expansion in the commercial fishing industry of Canada. In 1844 the estimated value of the catch was only \$125,000. It doubled in the following decade and by 1860 had passed the million mark. Ten years later it reached \$6,000,000 and this was again more than doubled by 1878. By 1900 it had reached a total of \$21,000,000 and the growth continued with little interruption until 1918, when it reached the high record of \$60,000,000. Since then there have been decreases in value, due to lower prices rather than to smaller catches. In 1936 the value was \$39,165,055 and



\* Revised by Miss F. A. Brown, Chief of the Fisheries, Fur, and Dairy Statistics Branch, Dominion Bureau of Statistics. This Branch publishes an Annual Report on the Fisheries Statistics of Canada, together with advance summaries on fish caught, marketed, and prepared, by provinces. These may be obtained from the Dominion Statistician.

showed an increase of 13.7 p.c. over 1935. It will be understood that the figures given represent the total value of the fish as marketed, whether in a fresh, dried, canned, or otherwise prepared state. The numbers of employees engaged in the industry have increased in proportion to the catch, amounting in some years to over 90,000, and the capital investment has gone as high as \$64,000,000. In 1936 the number of employees was 86,973, and the capital investment, \$45,831,842.

Among the different kinds of fish, the cod of the Atlantic and the salmon of the Pacific, in the earlier years of the fishing industry, disputed the primacy; since 1895 salmon has definitely taken the lead, and the heavy packs and high prices of lobsters have, in more recent years, sent cod down to third place. The value of output of the salmon fishery in the period 1869-1936 was approximately \$462,000,000, and that of the cod fishery, \$200,000,000. These facts have affected the relative standing of the provinces, British Columbia now occupying the leadership that in earlier times belonged to Nova Scotia. The record of production since 1870, production by provinces for the past six years, and the record of principal fish products for the past five years, are shown in Tables 2, 3, and 4, respectively.

## 2.—Total Values of the Products of the Fisheries of Canada, 1870-1936.

NOTE.—From 1870 to 1906, inclusive, years ended June 30; from 1908 to 1917 (a), inclusive, years ended Mar. 31; since and including 1917 (b), calendar years. No statistics are available for the nine-month period ended Mar. 31, 1907.

| Year.     | Value.     | Year.     | Value.     | Year.         | Value.     | Year.     | Value.     |
|-----------|------------|-----------|------------|---------------|------------|-----------|------------|
|           | \$         |           | \$         |               | \$         |           | \$         |
| 1870..... | 6,577,391  | 1887..... | 18,356,103 | 1904.....     | 23,516,439 | 1920..... | 49,241,339 |
| 1871..... | 7,573,199  | 1888..... | 17,418,508 | 1905.....     | 29,479,562 | 1921..... | 34,831,585 |
| 1872..... | 9,070,110  | 1889..... | 17,658,264 | 1906.....     | 26,279,485 | 1922..... | 41,800,210 |
| 1873..... | 10,754,997 | 1890..... | 17,714,900 | 1908.....     | 25,499,349 | 1923..... | 42,535,545 |
| 1874..... | 11,681,886 | 1891..... | 18,977,874 | 1909.....     | 25,451,085 | 1924..... | 41,634,235 |
| 1875..... | 10,350,385 | 1892..... | 18,941,169 | 1910.....     | 29,629,169 | 1925..... | 47,942,131 |
| 1876..... | 11,117,000 | 1893..... | 20,896,659 | 1911.....     | 29,965,142 | 1926..... | 56,360,653 |
| 1877..... | 12,005,934 | 1894..... | 20,719,570 | 1912.....     | 34,667,872 | 1927..... | 49,123,609 |
| 1878..... | 13,215,673 | 1895..... | 20,199,888 | 1913.....     | 33,330,464 | 1928..... | 55,050,673 |
| 1879..... | 13,529,254 | 1896..... | 20,407,424 | 1914.....     | 35,207,748 | 1929..... | 53,618,521 |
| 1880..... | 14,499,079 | 1897..... | 22,783,544 | 1915.....     | 31,264,631 | 1930..... | 47,804,216 |
| 1881..... | 15,817,163 | 1898..... | 19,067,121 | 1916.....     | 35,860,708 | 1931..... | 50,517,306 |
| 1882..... | 16,824,092 | 1899..... | 21,891,706 | 1917 (a)..... | 39,208,378 | 1932..... | 56,967,109 |
| 1883..... | 16,958,192 | 1900..... | 21,557,639 | 1917 (b)..... | 52,312,044 | 1934..... | 34,022,323 |
| 1884..... | 17,705,404 | 1901..... | 25,737,153 | 1918.....     | 60,250,744 | 1935..... | 34,427,854 |
| 1885..... | 17,722,973 | 1902..... | 21,050,433 | 1919.....     | 56,508,479 | 1936..... | 39,165,065 |
| 1886..... | 15,979,288 | 1903..... | 23,106,978 |               |            |           |            |

## 3.—Total Values of the Products of the Fisheries, by Provinces, calendar years 1931-36.

| Province.                 | 1931.      | 1932.      | 1933.      | 1934.      | 1935.      | 1936.      |
|---------------------------|------------|------------|------------|------------|------------|------------|
|                           | \$         | \$         | \$         | \$         | \$         | \$         |
| Prince Edward Island..... | 1,078,901  | 988,919    | 842,345    | 963,926    | 899,685    | 953,029    |
| Nova Scotia.....          | 7,986,711  | 6,657,943  | 6,010,601  | 7,673,865  | 7,562,899  | 8,993,268  |
| New Brunswick.....        | 4,169,811  | 2,972,632  | 3,000,045  | 3,679,979  | 3,149,615  | 4,339,725  |
| Quebec.....               | 1,962,894  | 1,815,544  | 2,128,471  | 2,308,517  | 1,947,250  | 2,105,494  |
| Ontario.....              | 2,477,131  | 2,147,990  | 2,080,842  | 2,218,550  | 2,852,007  | 3,209,422  |
| Manitoba.....             | 1,241,575  | 1,204,892  | 1,076,136  | 1,466,358  | 1,238,335  | 1,667,371  |
| Saskatchewan.....         | 317,063    | 186,174    | 186,417    | 219,772    | 252,059    | 367,025    |
| Alberta.....              | 158,897    | 153,780    | 144,518    | 245,405    | 225,741    | 369,882    |
| British Columbia.....     | 11,108,873 | 9,909,116  | 12,001,471 | 15,234,335 | 15,169,529 | 17,231,534 |
| Yukon.....                | 29,550     | 20,060     | 17,100     | 14,625     | 20,725     | 13,385     |
| Totals.....               | 39,517,306 | 25,857,109 | 27,496,946 | 34,022,323 | 34,427,854 | 39,165,065 |



4.—Quantities<sup>1</sup> and Values<sup>2</sup> of the Chief Commercial Fishes, calendar years 1932-36.

| Kind of Fish.                  | 1932.     | 1933.     | 1934.      | 1935.      | 1936.      | Increase (+)<br>or<br>Decrease (-)<br>1936<br>compared with 1935. |
|--------------------------------|-----------|-----------|------------|------------|------------|---|
| Salmon.....cwt.                | 1,331,064 | 1,456,501 | 1,696,856  | 1,824,205  | 2,029,704  | +205,499  |
| \$                             | 8,067,964 | 9,758,546 | 12,876,257 | 12,540,807 | 13,867,513 | +1,327,206  |
| Lokesters.....cwt.             | 456,488   | 374,916   | 351,922    | 319,060    | 283,273    | -36,696   |
| \$                             | 4,745,311 | 3,524,356 | 4,260,764  | 4,378,742  | 4,388,428  | +4,686  |
| Cod.....cwt.                   | 1,428,941 | 1,561,637 | 1,714,050  | 1,530,150  | 1,699,974  | +160,824  |
| \$                             | 2,193,621 | 2,598,756 | 3,327,507  | 2,758,140  | 3,331,750  | +573,610  |
| Herring.....cwt.               | 1,862,372 | 3,056,706 | 1,901,874  | 2,060,320  | 2,852,381  | +792,061  |
| \$                             | 1,473,288 | 1,747,863 | 1,799,067  | 1,817,540  | 2,576,533  | +758,993  |
| Sardines.....bbl.              | 66,910    | 130,485   | 191,549    | 187,666    | 247,238    | +59,572   |
| \$                             | 426,914   | 623,976   | 1,039,002  | 1,335,798  | 1,698,562  | +262,764  |
| Whitefish.....cwt.             | 138,478   | 152,135   | 144,615    | 147,456    | 144,003    | -2,353  |
| \$                             | 1,193,634 | 1,136,400 | 1,358,692  | 1,432,072  | 1,526,700  | +93,628   |
| Halibut <sup>3</sup> .....cwt. | 193,845   | 200,824   | 132,152    | 132,130    | 138,468    | +6,338  |
| \$                             | 1,227,680 | 1,694,405 | 1,134,307  | 1,285,687  | 1,441,310  | +155,723  |
| Hadlock.....cwt.               | 360,185   | 268,881   | 350,068    | 368,426    | 402,010    | +33,584   |
| \$                             | 1,114,802 | 839,029   | 1,075,529  | 1,126,665  | 1,291,605  | +164,936  |
| Pickarel.....cwt.              | 89,498    | 106,272   | 122,512    | 109,548    | 145,635    | +36,087   |
| \$                             | 707,957   | 623,343   | 844,848    | 801,822    | 1,109,397  | +307,575  |
| Trout.....cwt.                 | 50,198    | 50,032    | 58,977     | 66,325     | 72,973     | +6,648  |
| \$                             | 557,988   | 525,192   | 594,354    | 708,568    | 842,738    | +74,170   |
| Pilehards.....cwt.             | 886,964   | 121,013   | 860,103    | 911,411    | 880,037    | -22,374   |
| \$                             | 353,920   | 77,464    | 549,910    | 670,328    | 667,313    | -3,015  |
| Smelts.....cwt.                | 96,163    | 77,699    | 59,909     | 79,409     | 94,868     | +15,459   |
| \$                             | 690,964   | 496,632   | 557,538    | 588,333    | 656,056    | +67,323   |
| Blue pickarel.....cwt.         | 40,610    | 43,164    | 24,321     | 61,230     | 68,995     | +7,765  |
| \$                             | 174,623   | 267,301   | 116,741    | 302,259    | 614,055    | +311,796  |
| Mackeral.....cwt.              | 178,453   | 267,316   | 190,818    | 100,455    | 227,638    | +127,183  |
| \$                             | 276,947   | 396,306   | 421,013    | 308,721    | 461,566    | +152,845  |
| Ling cod.....cwt.              | 39,960    | 40,282    | 47,806     | 62,841     | 68,932     | +6,091  |
| \$                             | 159,534   | 198,570   | 281,644    | 326,029    | 392,147    | +66,118   |
| Scallops.....gal.              | 46,792    | 86,344    | 89,890     | 133,225    | 170,762    | +37,537   |
| \$                             | 77,141    | 161,779   | 108,415    | 207,641    | 334,424    | +126,783  |
| Hake and eusk.....cwt.         | 128,208   | 177,514   | 246,179    | 189,756    | 228,047    | +38,291   |
| \$                             | 153,600   | 149,211   | 257,340    | 221,341    | 316,200    | +94,859   |
| Tullibee.....cwt.              | 47,644    | 42,300    | 44,076     | 39,721     | 59,285     | +19,564   |
| \$                             | 224,138   | 265,204   | 204,984    | 225,809    | 276,404    | +50,666   |
| Perch.....cwt.                 | 60,072    | 40,945    | 72,766     | 72,001     | 32,255     | -39,745   |
| \$                             | 272,110   | 244,129   | 334,389    | 401,034    | 208,053    | -182,381  |
| Saugers.....cwt.               | 18,942    | 24,014    | 48,666     | 35,044     | 47,711     | +12,667   |
| \$                             | 105,404   | 115,635   | 242,889    | 156,075    | 263,570    | +107,494  |
| Swordfish.....cwt.             | 10,359    | 17,137    | 14,091     | 22,330     | 17,553     | -4,780  |
| \$                             | 99,585    | 208,038   | 176,640    | 264,097    | 230,708    | -33,299   |
| Pike.....cwt.                  | 41,400    | 41,146    | 37,195     | 44,761     | 54,370     | +9,609  |
| \$                             | 133,250   | 112,312   | 149,821    | 151,263    | 225,589    | +44,326   |
| Chanos <sup>4</sup> .....bbl.  | 49,922    | 38,281    | 42,657     | 68,972     | 71,637     | +2,665  |
| \$                             | 167,881   | 107,622   | 111,885    | 173,626    | 192,010    | +19,284   |
| Oysters.....bbl.               | 23,041    | 22,424    | 24,964     | 27,113     | 26,065     | -148  |
| \$                             | 115,102   | 126,535   | 153,241    | 178,126    | 189,922    | +11,796   |
| Eels.....cwt.                  | 21,470    | 27,404    | 25,238     | 25,091     | 23,440     | -1,651  |
| \$                             | 110,317   | 148,995   | 159,674    | 162,370    | 155,496    | -6,875  |
| Cutfish.....cwt.               | 11,245    | 12,673    | 13,550     | 17,406     | 17,406     | +1,116  |
| \$                             | 81,065    | 91,012    | 98,811     | 115,579    | 125,939    | +8,360  |
| Pollock.....cwt.               | 77,629    | 52,905    | 85,037     | 82,048     | 126,345    | +44,297   |
| \$                             | 64,101    | 48,039    | 95,024     | 82,745     | 114,200    | +31,455   |
| Soles.....cwt.                 | 9,683     | 10,757    | 14,469     | 16,578     | 24,301     | +7,723  |
| \$                             | 47,424    | 56,901    | 71,741     | 79,246     | 108,409    | +29,163   |

<sup>1</sup> Quantities caught.      <sup>2</sup> Values marketed.      <sup>3</sup> Previous to 1934 the totals for halibut included landings at British Columbia ports by United States vessels, whereas from 1934 on the United States landings are excluded from the statistics and the figures cover landings by Canadian vessels only.      <sup>4</sup> Prior to 1935 clams and quahogs were combined.

**Quantities and Values in Recent Years.**—The wide variations in prices from year to year make total values misleading. On the other hand, the quantities of different kinds of fish are stated in many different units, which make the total volume of production difficult to compare from year to year. An effort is made to overcome these difficulties in Table 5 by working out what the values would be

in a later year if prices had remained the same as in the preceding year. From 1935 to 1936 there was an increase of 13.7 p.c. in the total value of the fisheries. The increase due to higher prices was 4.8 p.c., while larger quantities caught accounted for the other 8.9 p.c. of the increase in total values. The improvement of actual values in 1936 amounted to over \$4,700,000; 35 p.c. of it was due to higher prices, and 65 p.c. to larger quantities.

5.—Value of the Fisheries Production of Canada in 1936 Compared with 1935, together with the Amounts of the Change Due to Price Fluctuations and Quantity Fluctuations, respectively, by Items.

| Kind of Fish or Product.        | Actual Value, 1936. | Value at Prices of 1935. | Actual Value, 1935. | Increase (+) or Decrease (-). | Due to Higher (+) or Lower (-) Prices. | Due to Larger (+) or Smaller (-) Quantities. |
|---------------------------------|---------------------|--------------------------|---------------------|-------------------------------|--|--|
|                                 | \$'000              | \$'000                   | \$'000              | \$'000                        | \$'000                                 | \$'000                                       |
| Salmon.....                     | 13,867              | 13,964                   | 12,540              | +1,327                        | -97                                    | +1,424                                       |
| Loisters.....                   | 4,383               | 3,875                    | 4,378               | +5                            | +508                                   | -503   |
| Cod.....                        | 3,332               | 3,043                    | 2,758               | +574                          | +289                                   | +285   |
| Herring.....                    | 2,577               | 2,272                    | 1,818               | +759                          | +305                                   | +454   |
| Sardines.....                   | 1,599               | 1,760                    | 1,336               | +263                          | -161                                   | +424   |
| Whitefish.....                  | 1,626               | 1,404                    | 1,432               | +194                          | +122                                   | -28  |
| Hallibut.....                   | 1,441               | 1,347                    | 1,285               | +156                          | +94                                    | +62  |
| Haddock.....                    | 1,292               | 1,237                    | 1,130               | +162                          | +165                                   | +107   |
| Pickeral.....                   | 1,109               | 1,066                    | 802                 | +307                          | +43                                    | +264   |
| Trout.....                      | 843                 | 840                      | 769                 | +74                           | -3                                     | +77  |
| Pilchards.....                  | 667                 | 658                      | 670                 | -3                            | +9                                     | -12  |
| Smelts.....                     | 656                 | 703                      | 588                 | +68                           | -47                                    | +115   |
| Blue pickeral.....              | 614                 | 407                      | 302                 | +312                          | +207                                   | +105   |
| Mackerel.....                   | 462                 | 437                      | 309                 | +153                          | +25                                    | +128   |
| King cod.....                   | 392                 | 358                      | 326                 | +66                           | +34                                    | +32  |
| Sculpin.....                    | 355                 | 266                      | 208                 | +147                          | +69                                    | +78  |
| Mixed fish.....                 | 330                 | 260                      | 317                 | -57                           | +70                                    | -127   |
| Hake and cusk.....              | 316                 | 269                      | 221                 | +95                           | +47                                    | +48  |
| Tullibee.....                   | 276                 | 337                      | 220                 | +56                           | -61                                    | +111   |
| Perch.....                      | 269                 | 180                      | 401                 | -132                          | +80                                    | -221   |
| Saugers.....                    | 264                 | 212                      | 156                 | +108                          | +52                                    | +56  |
| Swordfish.....                  | 231                 | 211                      | 264                 | -33                           | +20                                    | -53  |
| Pike.....                       | 225                 | 220                      | 181                 | +44                           | +5                                     | +39  |
| Clams.....                      | 193                 | 181                      | 174                 | +19                           | +12                                    | +7   |
| Oysters.....                    | 190                 | 177                      | 178                 | +12                           | +13                                    | -1   |
| Whales.....                     | 172                 | 193                      | 105                 | +67                           | -21                                    | +88  |
| Eels.....                       | 153                 | 152                      | 162                 | -9                            | +1                                     | -10  |
| Catfish.....                    | 124                 | 124                      | 116                 | +8                            | -                                      | +8   |
| Pollock.....                    | 114                 | 128                      | 83                  | +31                           | -14                                    | +45  |
| Soles.....                      | 108                 | 116                      | 79                  | +29                           | -8                                     | +37  |
| Alowives.....                   | 94                  | 105                      | 98                  | -4                            | -11                                    | +7   |
| Sturgeon.....                   | 93                  | 96                       | 102                 | -9                            | -3                                     | -6   |
| Grayfish.....                   | 87                  | 79                       | 63                  | +29                           | +8                                     | +21  |
| Shad.....                       | 86                  | 94                       | 65                  | +21                           | -8                                     | +29  |
| Carp.....                       | 65                  | 62                       | 73                  | -8                            | -7                                     | -1   |
| Black cod.....                  | 53                  | 49                       | 66                  | -13                           | +4                                     | -17  |
| Goldeyes.....                   | 50                  | 67                       | 38                  | +12                           | -17                                    | +29  |
| Crabs.....                      | 39                  | 42                       | 45                  | -6                            | -3                                     | -3   |
| Flounders.....                  | 36                  | 31                       | 30                  | +6                            | +5                                     | +1   |
| Seals.....                      | 34                  | 33                       | 20                  | +14                           | +1                                     | +13  |
| Tuna.....                       | 23                  | 18                       | 13                  | +10                           | +5                                     | +5   |
| Tom cod.....                    | 16                  | 14                       | 13                  | +3                            | +1                                     | +2   |
| Shrimps.....                    | 9                   | 8                        | 25                  | -16                           | +1                                     | -17  |
| Fish meal, &c.....              | 247                 | 237                      | 231                 | +16                           | +10                                    | +6   |
| Fish skins and bones.....       | 22                  | 30                       | 22                  | -8                            | +2                                     | -10  |
| Other fishery products.....     | 161                 | 145                      | 182                 | -21                           | +16                                    | -37  |
| <b>Totals.....</b>              | <b>39,165</b>       | <b>37,503</b>            | <b>34,428</b>       | <b>+4,737</b>                 | <b>+1,662</b>                          | <b>+3,075</b>                                |
| <b>Increases, per cent.....</b> | <b>-</b>            | <b>-</b>                 | <b>-</b>            | <b>+13.7</b>                  | <b>+4.8</b>                            | <b>+8.9</b>                                  |

**6. — Quantities and Values of Sea Fish and Products Marketed, calendar years  
1935 and 1936.**

| Kind of Fish or Product.                  | 1935.     |           | 1936.     |           |
|---|-----------|-----------|-----------|-----------|
|   | Quantity. | Value.    | Quantity. | Value.    |
| <b>I. —</b>                               |           |           |           |           |
| Cod, used fresh.....                      | cwt.      | \$ 98,638 | 121,000   | 323,553   |
| Cod, fresh fillets.....                   | cwt.      | 58,454    | 95,246    | 749,434   |
| Cod, green-salted.....                    | "         | 143,201   | 229,681   | 633,140   |
| Cod, smoked fillets.....                  | "         | 43,906    | 54,024    | 465,369   |
| Cod, smoked.....                          | "         | 155       | 304       | 2,122     |
| Cod, dried.....                           | "         | 244,917   | 180,008   | 881,893   |
| Cod, boneless.....                        | "         | 26,397    | 24,324    | 177,544   |
| Cod, roe.....                             | "         | 25        | 42        | 420       |
| Cod, canned.....                          | case      | 4,236     | 4,206     | 18,530    |
| Cod, livers.....                          | cwt.      | 504       | 1,100     | 514       |
| Cod-liver oil, medicinal.....             | gal.      | 60,570    | 70,488    | 45,891    |
| Cod-oil.....                              | "         | 93,913    | 89,811    | 38,340    |
| Haddock, used fresh.....                  | cwt.      | 106,365   | 112,747   | 379,252   |
| Haddock, fresh fillets.....               | "         | 49,449    | 70,389    | 635,291   |
| Haddock, canned.....                      | case      | 19,741    | 12,165    | 53,533    |
| Haddock, smoked.....                      | cwt.      | 23,017    | 23,549    | 194,009   |
| Haddock, smoked fillets.....              | "         | 3,540     | 2,451     | 21,921    |
| Haddock, green-salted.....                | "         | 7,685     | 558       | 1,370     |
| Haddock, dried.....                       | "         | 4,305     | 1,278     | 4,395     |
| Haddock, boneless.....                    | "         | 47        | 97        | 519       |
| Haddock, roe.....                         | "         | 47        | 61        | 625       |
| Hake and cusk, used fresh.....            | "         | 14,060    | 26,942    | 26,631    |
| Hake and cusk, fresh fillets.....         | "         | 4,505     | 8,140     | 49,651    |
| Hake and cusk, green-salted.....          | "         | 30,644    | 39,763    | 73,290    |
| Hake and cusk, canned.....                | case      | 8,373     | 13,048    | 56,991    |
| Hake and cusk, smoked.....                | cwt.      | Nil       | 25        | 125       |
| Hake and cusk, smoked fillets.....        | "         | 0,833     | 6,859     | 61,661    |
| Hake and cusk, dried.....                 | "         | 20,183    | 13,510    | 32,638    |
| Hake and cusk, boneless.....              | "         | 1,581     | 2,342     | 13,477    |
| Hake and cusk, oil.....                   | gal.      | 8,987     | 6,136     | 1,336     |
| Pollock, used fresh.....                  | cwt.      | 8,144     | 7,029     | 21,968    |
| Pollock, fresh fillets.....               | "         | 50        | 387       | 2,576     |
| Pollock, green-salted.....                | "         | 6,579     | 12,033    | 15,875    |
| Pollock, smoked.....                      | "         | 1         | 7         | 29        |
| Pollock, dried.....                       | "         | 20,160    | 31,158    | 71,233    |
| Pollock, boneless.....                    | "         | 50        | 8         | 25        |
| Pollock, oil.....                         | gal.      | 10,362    | 8,462     | 2,494     |
| Cutfish, fresh.....                       | "         | 555       | 939       | 3,064     |
| Cutfish, fresh fillets.....               | "         | 1,069     | 1,013     | 7,445     |
| Cutfish, smoked fillets.....              | "         | Nil       | 7         | 42        |
| Whiting, used fresh.....                  | cwt.      | 76        | 19        | 69        |
| <b>II. —</b>                              |           |           |           |           |
| Hallbut, used fresh.....                  | "         | 131,951   | 1,184,238 | 1,305,735 |
| Hallbut, fresh fillets.....               | "         | 23        | Nil       | -         |
| Hallbut, smoked.....                      | "         | 5         | 78        | -         |
| Hallbut, canned.....                      | case      | 70        | 607       | 547       |
| Hallbut, livers.....                      | cwt.      | 2,359     | 100,479   | 135,028   |
| Plounders, brill, plaice, used fresh..... | "         | 7,488     | 20,469    | 23,283    |
| Plounders, fresh fillets.....             | "         | 775       | 9,335     | 12,956    |
| Skate, used fresh.....                    | "         | 3,100     | 6,394     | 6,194     |
| Soles, used fresh.....                    | "         | 8,649     | 47,530    | 66,069    |
| Soles, fresh fillets.....                 | "         | 2,643     | 3,917     | 42,320    |
| <b>III. —</b>                             |           |           |           |           |
| Herring, used fresh.....                  | "         | 235,160   | 195,463   | 238,059   |
| Herring, canned (round).....              | case      | 32,144    | 86,887    | 313,589   |
| Herring, canned (kippered).....           | "         | 6,749     | 6,593     | 32,297    |
| Herring, smoked (round).....              | cwt.      | 51,964    | 59,041    | 150,757   |
| Herring, smoked (boneless).....           | "         | 1,505     | 1,388     | 6,334     |
| Herring, kippered.....                    | "         | 10,043    | 4,052     | 40,411    |
| Herring, dry-salted.....                  | "         | 302,710   | 383,337   | 347,322   |
| Herring, pickled.....                     | bbl.      | 33,623    | 32,484    | 142,413   |
| Herring, used as bait.....                | "         | 185,255   | 237,113   | 385,295   |
| Herring, fertilizer.....                  | "         | 116,891   | 152,508   | 75,704    |
| Herring, oil.....                         | gal.      | 365,553   | 810,250   | 204,191   |
| Herring, meal.....                        | ton       | 6,133     | 11,218    | 353,900   |
| Herring, scales.....                      | "         | 1,183     | 4,107     | 22,112    |
| Mackerel, used fresh.....                 | cwt.      | 32,520    | 73,793    | 206,158   |
| Mackerel, fresh fillets.....              | "         | Nil       | 73,793    | 1,400     |
| Mackerel, canned.....                     | case      | 98        | 402       | 1,536     |
| Mackerel, smoked.....                     | cwt.      | Nil       | 31        | 275       |
| Mackerel, pickled.....                    | bbl.      | 38,771    | 41,735    | 191,718   |
| Mackerel, fillets (salted).....           | "         | 453       | 3,012     | 36,652    |
| Mackerel, used as bait.....               | "         | 4,957     | 7,531     | 24,127    |
| Sardines, canned.....                     | case      | 338,436   | 393,584   | 1,381,228 |
| Sardines, sold fresh and salted.....      | bbl.      | 112,458   | 159,715   | 217,334   |

## 6.—Quantities and Values of Sea Fish and Products Marketed, calendar years 1935 and 1936—continued.

| Kind of Fish or Product.          | 1935.          |              | 1936.     |              |
|-----------------------------------|----------------|--------------|-----------|--------------|
|                                   | Quantity.      | Value.<br>\$ | Quantity. | Value.<br>\$ |
| III.—concluded.                   |                |              |           |              |
| Pilchards, used fresh.....        | cwt. 191       | 1,300        | 173       | 208          |
| Pilchards, canned.....            | case 27,184    | 82,901       | 35,007    | 102,127      |
| Pilchards, used as bait.....      | hbl. 521       | 995          | 580       | 599          |
| Pilchards, oil.....               | gal. 1,649,392 | 359,326      | 1,217,097 | 290,216      |
| Pilchards, meal.....              | ton 8,681      | 225,716      | 8,715     | 274,053      |
| IV.—                              |                |              |           |              |
| Alowives, used fresh.....         | cwt. 31,834    | 27,652       | 31,111    | 25,756       |
| Alowives, salted.....             | " 17,340       | 66,123       | 19,575    | 63,273       |
| Alowives, smoked.....             | " 1,231        | 3,439        | 1,505     | 3,623        |
| Bass, used fresh.....             | " 191          | 1,155        | 145       | 782          |
| Perch, used fresh.....            | " 848          | 5,104        | 1,168     | 7,633        |
| Rosefish, fresh.....              | " Nil          | -            | 151       | 302          |
| Rosefish, fresh fillets.....      | " Nil          | -            | 653       | 3,018        |
| Salmon, used fresh.....           | " 319,717      | 2,082,336    | 243,471   | 2,016,972    |
| Salmon, canned.....               | case 1,530,320 | 9,663,305    | 1,882,275 | 11,139,391   |
| Salmon, smoked.....               | cwt. 109       | 1,514        | 75        | 1,572        |
| Salmon, kippered.....             | " 124          | 1,030        | 100       | 1,100        |
| Salmon, dry-salted.....           | " 146,941      | 406,006      | 149,533   | 331,524      |
| Salmon, mild cured.....           | " 20,368       | 279,576      | 13,821    | 192,614      |
| Salmon, pickled.....              | " 2,190        | 9,045        | 2,768     | 10,594       |
| Salmon, used as bait.....         | " 275          | 679          | 197       | 492          |
| Salmon, roe.....                  | " 10,230       | 27,427       | 11,710    | 30,168       |
| Salmon, meal.....                 | ton 806        | 21,275       | 2,083     | 66,701       |
| Salmon, oil.....                  | gal. 61,313    | 10,738       | 171,326   | 38,717       |
| Shad, used fresh.....             | cwt. 9,625     | 42,828       | 13,373    | 54,501       |
| Shad, salted.....                 | hbl. 117       | 1,157        | 422       | 4,231        |
| Shad, salted fillets.....         | " 50           | 450          | 50        | 400          |
| Smelts, used fresh.....           | cwt. 78,279    | 589,323      | 93,866    | 647,843      |
| Sturgeon, used fresh.....         | " 503          | 7,602        | 212       | 2,733        |
| Trout, used fresh.....            | " 83           | 973          | 148       | 1,780        |
| V.—                               |                |              |           |              |
| Black cod, used fresh.....        | " 6,390        | 34,490       | 4,965     | 31,585       |
| Black cod, smoked.....            | " 1,474        | 19,498       | 1,148     | 9,661        |
| Black cod, smoked fillets.....    | " 120          | 1,200        | Nil       | -            |
| Black cod, livers.....            | " 241          | 10,674       | 235       | 12,251       |
| Lang cod, used fresh.....         | " 62,841       | 308,616      | 68,212    | 342,544      |
| Lang cod, smoked fillets.....     | " Nil          | -            | 240       | 2,400        |
| Lang cod, livers.....             | " 629          | 22,413       | 1,195     | 47,403       |
| Red and rock cod, used fresh..... | " 2,501        | 9,936        | 3,266     | 13,820       |
| Red and rock cod, smoked.....     | " 38           | 457          | Nil       | -            |
| VI.—                              |                |              |           |              |
| Tuna, used fresh.....             | " 2,392        | 8,648        | 3,066     | 17,799       |
| Tuna, canned.....                 | case 1,074     | 4,444        | 525       | 5,700        |
| Caplin, used fresh.....           | hbl. 11,499    | 11,541       | 10,036    | 10,303       |
| Flies, used fresh.....            | cwt. 2,028     | 10,701       | 1,376     | 8,880        |
| Grayfish, used fresh.....         | " 400          | 80           | 1,626     | 432          |
| Octopus, used fresh.....          | " 271          | 1,094        | 266       | 982          |
| Onychophora, used fresh.....      | " 407          | 1,110        | 222       | 803          |
| Squid, used as bait.....          | hbl. 3,718     | 11,549       | 4,879     | 13,171       |
| Swordfish, used fresh.....        | cwt. 22,339    | 256,692      | 17,853    | 226,101      |
| Swordfish, livers.....            | " 340          | 7,405        | 267       | 4,697        |
| Tom cod, used fresh.....          | " 7,983        | 13,218       | 8,160     | 16,564       |
| Mixed fish, used fresh.....       | " 9,510        | 47,516       | 8,606     | 42,665       |
| SHELL FISH—                       |                |              |           |              |
| Abalone, used fresh.....          | hbl. Nil       | -            | 2         | 34           |
| Clams, used fresh.....            | " 40,343       | 61,046       | 41,002    | 71,421       |
| Clams, canned.....                | case 28,934    | 112,850      | 30,152    | 120,877      |
| Clams, chowder.....               | " 175          | -            | 175       | -            |
| Crabs, used fresh.....            | cwt. 4,336     | 24,502       | 4,347     | 23,423       |
| Crabs, canned.....                | case 1,331     | 19,903       | 1,322     | 15,672       |
| Lobsters, in shell.....           | cwt. 115,151   | 2,073,804    | 102,785   | 2,033,687    |
| Lobsters, meat.....               | " 1,003        | 55,242       | 917       | 57,668       |
| Lobsters, canned.....             | case 99,905    | 2,195,633    | 88,102    | 2,229,967    |
| Lobsters, tomalley.....           | " 5,539        | 54,063       | 6,469     | 62,106       |
| Mussels, fresh.....               | cwt. 12        | 24           | Nil       | -            |
| Oysters, used fresh.....          | hbl. 26,026    | 171,061      | 23,544    | 168,359      |
| Oysters, canned.....              | case 1,087     | 7,065        | 3,601     | 21,563       |
| Quahogs, used fresh.....          | hbl. 736       | 1,918        | 928       | 2,210        |
| Quahogs, canned.....              | case 949       | 4,772        | 1,250     | 7,557        |
| Quahogs, chowder.....             | " 100          | 350          | Nil       | -            |
| Scallops, shelled.....            | gal. 133,057   | 207,153      | 170,610   | 334,616      |
| Scallops, canned.....             | case 54        | 488          | 34        | 408          |

**6.—Quantities and Values of Sea Fish and Products Marketed, calendar years  
1935 and 1936—concluded.**

| Kind of Fish or Product.                        | 1935.     |                   | 1936.     |                   |
|---|-----------|-------------------|-----------|-------------------|
|   | Quantity. | Value.            | Quantity. | Value.            |
|   |           | \$                |           | \$                |
| <b>SHELL FISH—concluded.</b>                    |           |                   |           |                   |
| Shrimps, used fresh..... cwt.                   | 1,545     | 15,413            | 646       | 9,557             |
| Shrimps, canned..... case                       | 483       | 10,079            | 25        | 270               |
| Winkles, used fresh..... cwt.                   | 438       | 915               | 428       | 563               |
| <b>SPECIAL PRODUCTS—</b>                        |           |                   |           |                   |
| Dulse, dried..... "                             | 1,078     | 8,136             | 426       | 3,346             |
| Seaweed, dried..... "                           | 80        | 56                | 100       | 75                |
| Seaweed, meal..... ton                          | 61        | 3,050             | 51        | 2,040             |
| Tongues and sounds, pickled or dried..... cwt.  | 612       | 4,863             | 722       | 4,830             |
| Sea skins, fur..... No.                         | 841       | 1,071             | 1,388     | 5,564             |
| Sea skins, hair..... "                          | 8,740     | 11,379            | 14,238    | 15,999            |
| Porpoise skins..... "                           | 577       | 11,510            | 28        | 392               |
| Whalebone meal..... ton                         | 211       | 4,642             | 332       | 6,840             |
| Whale fertilizer..... "                         | 354       | 11,328            | 687       | 20,610            |
| Seal oil..... gal.                              | 27,231    | 6,623             | 49,016    | 12,407            |
| Porpoise oil..... "                             | 10,550    | 1,055             | 176       | 35                |
| Whale oil..... "                                | 426,772   | 80,390            | 763,740   | 144,751           |
| Grayfish oil..... "                             | 134,470   | 26,165            | 176,568   | 38,945            |
| Fish oil, n.e.s..... "                          | 71,351    | 15,181            | 12,020    | 3,630             |
| Grayfish meal..... ton                          | 1,065     | 31,534            | 1,343     | 47,400            |
| Fish skins and bones..... cwt.                  | 5,230     | 21,420            | 5,333     | 247,004           |
| Fish offal and fertilizer..... ton              | 20,531    | 22,036            | 18,557    | 22,246            |
| Other products..... "                           | 997       | 1,697             | 3,381     | 3,165             |
|   | -         | 43,092            | -         | 40,029            |
| <b>Total Values, Sea Fish and Products.....</b> | <b>-</b>  | <b>29,175,400</b> | <b>-</b>  | <b>32,951,504</b> |

**7.—Quantities and Values of Inland Fish Marketed, calendar years 1935 and 1936.**

| Kind of Fish or Product.                           | 1935.      |                  | 1936.      |                  |
|--|------------|------------------|------------|------------------|
|  | Quantity.  | Value.           | Quantity.  | Value.           |
|  |            | \$               |            | \$               |
| <b>Alowives, fresh..... cwt.</b>                   | <b>830</b> | <b>1,030</b>     | <b>687</b> | <b>974</b>       |
| Bass, fresh..... "                                 | 698        | 8,542            | 613        | 7,710            |
| Carp, fresh..... "                                 | 21,026     | 73,484           | 17,770     | 54,009           |
| Catfish, fresh..... "                              | 12,527     | 105,751          | 13,407     | 113,388          |
| Catfish, smoked..... "                             | 1          | 14               | NH         | -                |
| Eels, fresh..... "                                 | 23,063     | 151,029          | 22,004     | 144,615          |
| Freshwater drum..... "                             | 73         | 627              | 205        | 722              |
| Goldeyes, fresh..... "                             | 450        | 3,783            | 3,242      | 23,758           |
| Goldeyes, smoked..... "                            | 1,807      | 34,048           | 1,596      | 26,092           |
| Herring, fresh..... "                              | 34,536     | 121,400          | 50,919     | 243,649          |
| King..... "  | 1,572      | 1,633            | 3,161      | 3,407            |
| Maskinonge, fresh..... "                           | 937        | 10,388           | 637        | 7,365            |
| Mixed fish, fresh..... "                           | 46,849     | 299,956          | 44,569     | 287,794          |
| Mullets, fresh..... "                              | 3,297      | 7,006            | 42         | 57               |
| Perch, fresh..... "                                | 71,153     | 395,930          | 31,090     | 261,020          |
| Pickeral or cove, fresh..... "                     | 109,548    | 301,822          | 145,635    | 1,109,397        |
| Pickeral, blue, fresh..... "                       | 51,230     | 302,250          | 98,935     | 614,055          |
| Pike, fresh..... "                                 | 44,761     | 151,263          | 54,370     | 225,589          |
| Salmon, fresh..... "                               | 2,060      | 34,786           | 2,274      | 37,673           |
| Saugers, fresh..... "                              | 35,044     | 155,975          | 47,711     | 263,579          |
| Shad, fresh..... "                                 | 4,389      | 21,890           | 5,900      | 23,059           |
| Shad, salted..... bbl.                             | 200        | 2,149            | 300        | 3,038            |
| Smelts, fresh..... cwt.                            | 1,130      | 8,610            | 1,002      | 7,813            |
| Sturgeon, fresh..... "                             | 6,473      | 91,383           | 6,351      | 87,832           |
| Sturgeon, caviar..... lb.                          | 2,894      | 2,744            | 2,081      | 1,941            |
| Suckers..... cwt.                                  | 6,973      | 9,437            | 12,470     | 20,333           |
| Trout, fresh..... "                                | 60,242     | 767,506          | 72,325     | 849,958          |
| Tulibee, fresh..... "                              | 37,309     | 214,585          | 50,620     | 268,138          |
| Tulibee, smoked..... "                             | 1,470      | 11,223           | 1,407      | 8,276            |
| Whitefish, fresh..... "                            | 147,430    | 1,431,808        | 144,586    | 1,523,551        |
| Whitefish, smoked..... "                           | 16         | 266              | 10         | 181              |
| <b>Total Values, Inland Fish and Products.....</b> | <b>-</b>   | <b>5,252,454</b> | <b>-</b>   | <b>6,213,551</b> |

## 8.—Numbers of Fish-Canning and -Curing Establishments, by Provinces, 1935 and 1936.

| Kind of Establishment.                | P.E.I.    | N.S.       | N.B.       | Que.       | B.C.      | Total for Canada. |
|---------------------------------------|-----------|------------|------------|------------|-----------|-------------------|
|                                       | No.       | No.        | No.        | No.        | No.       | No.               |
| <b>1935.</b>                          |           |            |            |            |           |                   |
| Lobster canneries.....                | 89        | 77         | 86         | 52         | -         | 304               |
| Salmon canneries.....                 | -         | 1          | -          | 31         | 43        | 75                |
| Clam canneries.....                   | 1         | 3          | 8          | -          | 2         | 14                |
| Sardine and other fish canneries..... | -         | 7          | 4          | -          | 3         | 14                |
| Fish-curing establishments.....       | 5         | 80         | 32         | 44         | 33        | 194               |
| Freezing plants.....                  | -         | 3          | 4          | 4          | 2         | 13                |
| Reduction plants.....                 | -         | 5          | 3          | -          | 8         | 16                |
| <b>Totals, 1935.....</b>              | <b>95</b> | <b>176</b> | <b>137</b> | <b>131</b> | <b>91</b> | <b>630</b>        |
| <b>1936.</b>                          |           |            |            |            |           |                   |
| Lobster canneries.....                | 84        | 76         | 80         | 64         | -         | 304               |
| Salmon canneries.....                 | -         | 2          | -          | 20         | 46        | 68                |
| Clam canneries.....                   | 2         | 3          | 10         | -          | 2         | 17                |
| Sardine and other fish canneries..... | 1         | 7          | 4          | 1          | 2         | 15                |
| Fish-curing establishments.....       | 6         | 76         | 28         | 47         | 31        | 188               |
| Freezing plants.....                  | -         | 2          | 4          | 7          | 2         | 15                |
| Reduction plants.....                 | -         | 6          | 3          | -          | 8         | 17                |
| <b>Totals, 1936.....</b>              | <b>93</b> | <b>172</b> | <b>129</b> | <b>139</b> | <b>91</b> | <b>624</b>        |

## 9.—Values of Materials Used and of Products of Fish-Canning and -Curing Establishments, 1932-36.

| Material and Product.                         | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
|   | \$                | \$                | \$                | \$                | \$                |
| <b>Materials Used—</b>                        |                   |                   |                   |                   |                   |
| Fish.....                                     | 7,708,713         | 8,178,543         | 11,638,820        | 10,058,895        | 11,916,060        |
| Edible oils.....                              | 1                 | 1                 | 1                 | 1                 | 137,144           |
| Salt.....                                     | 170,385           | 216,618           | 236,185           | 212,554           | 256,661           |
| Containers.....                               | 2,190,935         | 2,321,918         | 3,345,792         | 3,152,924         | 3,672,437         |
| Other.....                                    | 193,598           | 243,210           | 340,363           | 448,349           | 477,020           |
| <b>Totals, Materials Used.....</b>            | <b>10,263,631</b> | <b>10,960,289</b> | <b>15,567,160</b> | <b>14,772,722</b> | <b>16,459,938</b> |
| <b>Products—</b>                              |                   |                   |                   |                   |                   |
| Fish marketed for consumption, fresh..        | 4,243,614         | 4,337,130         | 4,897,000         | 5,204,465         | 6,430,174         |
| Fish canned, cured or otherwise prepared..... | 12,440,511        | 13,043,193        | 19,159,927        | 18,253,891        | 20,254,627        |
| <b>Totals, Products.....</b>                  | <b>16,684,125</b> | <b>17,380,323</b> | <b>24,056,927</b> | <b>23,458,356</b> | <b>26,684,801</b> |

<sup>1</sup> Included with "Other".

**Capital and Employees.**—The total capital invested reached an all-time record of \$64,026,297 in 1930, declined successively for three years to \$40,914,057 in 1933, rose again in 1934 and in 1935, and in 1936 reached \$45,831,842, an increase of \$2,213,954 over 1935 and of \$4,917,785 over 1933, the low year of the period 1920 to 1936. The number of persons employed in the primary and secondary operations connected with the fishing industry declined from 80,450 in 1929 to 74,882 in 1931, rose steadily since then to 83,436 in 1934, dropped in 1935 to 82,918, and rose again to 86,973 in 1936. The 1936 figure is the highest in the period 1920 to 1936.

16.—Numbers and Capital Values of Fishing Vessels, Boats, Nets, Traps, etc., Used in the Fisheries of Canada, and of Establishments Processing the Products, 1935 and 1936.

| Equipment or Kind of Establishment.                            | 1935.      |                   | 1936.      |                   |
|--|------------|-------------------|------------|-------------------|
|  | Number.    | Value.            | Number.    | Value.            |
|  |            | \$                |            | \$                |
| <b>Sea Fisheries—</b>  |            |                   |            |                   |
| Boats (gasoline).....  | 19,695     | 7,463,895         | 20,155     | 7,645,067         |
| Sailing and gasoline vessels.....                              | 942        | 4,031,570         | 1,000      | 4,170,500         |
| Lobster traps.....   | 2,013,960  | 2,175,824         | 2,134,762  | 2,321,774         |
| Carrying smacks and scows.....                                 | 628        | 1,549,789         | 655        | 1,076,335         |
| Salmon drift nets.....   | 11,645     | 1,059,364         | 13,654     | 1,146,022         |
| Gill nets.....   | 69,331     | 855,762           | 71,594     | 929,595           |
| Small fish- and smoke- houses.....                             | 8,974      | 762,003           | 8,181      | 701,633           |
| Fishing piers and wharves.....                                 | 1,773      | 668,800           | 1,750      | 665,020           |
| Boats (sail and row).....                                      | 15,016     | 450,004           | 15,158     | 425,278           |
| Smelt nets.....  | 15,726     | 325,197           | 17,289     | 372,074           |
| Salmon trap nets.....  | 998        | 384,590           | 949        | 367,260           |
| Weirs.....   | 344        | 313,137           | 374        | 299,093           |
| Tubs of trawl.....   | 20,345     | 261,970           | 22,055     | 288,887           |
| Trap nets, other.....  | 597        | 277,965           | 551        | 264,860           |
| Freezers and ice-houses.....                                   | 605        | 228,220           | 620        | 233,800           |
| Seines, other.....   | 796        | 214,425           | 843        | 213,575           |
| Salmon purse seines.....                                       | 320        | 355,850           | 185        | 207,200           |
| Hand lines.....  | 71,433     | 159,882           | 72,906     | 161,634           |
| Steam fishing vessels.....                                     | 5          | 125,000           | 6          | 150,000           |
| Lobster pounds.....  | 55         | 77,180            | 54         | 69,830            |
| Stem trawlers.....   | 3          | 82,000            | 3          | 68,750            |
| Skates of gear.....  | 2,561      | 50,244            | 2,833      | 52,975            |
| Sealop drags.....  | 806        | 28,085            | 835        | 23,278            |
| Crab traps.....  | 6,591      | 24,972            | 7,265      | 27,225            |
| Pound nets.....  | 74         | 9,250             | 62         | 8,680             |
| Oyster rakes.....  | 1,782      | 5,343             | 1,605      | 6,423             |
| Salmon drag seines.....  | 9          | 5,430             | 9          | 5,800             |
| Otter trawl.....   | 11         | 1,550             | 14         | 2,050             |
| Bel traps.....   | 401        | 737               | 395        | 734               |
| Quahaug rakes.....   | 122        | 436               | 184        | 628               |
| Oulachon nets.....   | 29         | 775               | 18         | 540               |
| Weir drivers.....  | 11         | 4,100             | -          | 1                 |
| Other gear.....  | -          | 16,102            | -          | 37,761            |
| <b>Total Values, Sea Fisheries.....</b>                        | <b>-</b>   | <b>22,000,051</b> | <b>-</b>   | <b>22,543,681</b> |
| <b>Inland Fisheries—</b>                                       |            |                   |            |                   |
| Gill nets.....   | -          | 1,339,587         | -          | 1,547,136         |
| Boats (gasoline).....  | 1,599      | 887,900           | 1,682      | 888,723           |
| Tugs.....  | 84         | 589,250           | 90         | 653,460           |
| Pound nets.....  | 1,095      | 553,080           | 1,152      | 542,628           |
| Freezers and ice-houses.....                                   | 940        | 425,154           | 915        | 375,035           |
| Fishing piers and wharves.....                                 | 549        | 179,049           | 546        | 164,943           |
| Weirs.....   | 935        | 125,900           | 919        | 125,950           |
| Fish carriers.....   | 25         | 377,778           | 27         | 125,850           |
| Boats (skiffs and canoes).....                                 | 3,553      | 120,180           | 3,608      | 119,972           |
| Small fish- and smoke- houses.....                             | 170        | 52,870            | 196        | 60,125            |
| Hoop nets.....   | 1,098      | 22,719            | 1,116      | 24,029            |
| Seines.....  | 182        | 22,052            | 168        | 21,533            |
| Lines.....   | 2,749      | 14,104            | 2,876      | 19,551            |
| Spears.....  | 210        | 1,024             | 231        | 1,687             |
| Fish wheels.....   | 12         | 1,000             | 9          | 765               |
| Dip or roll nets.....  | 130        | 593               | 97         | 402               |
| Bel traps.....   | 60         | 120               | 130        | 260               |
| <b>Total Values, Inland Fisheries.....</b>                     | <b>-</b>   | <b>4,473,028</b>  | <b>-</b>   | <b>4,673,569</b>  |
| <b>Fish-Canning and -Curing Establishments—<sup>1</sup></b>    |            |                   |            |                   |
| Salmon canneries.....  | 75         | 7,774,845         | 68         | 9,365,076         |
| Fish-curing establishments.....                                | 194        | 5,432,658         | 188        | 4,606,602         |
| Sardine and other fish canneries.....                          | 14         | 1,545,424         | 15         | 1,690,575         |
| Lobster canneries.....   | 304        | 1,219,522         | 304        | 1,606,073         |
| Reduction plants.....  | 16         | 560,026           | 17         | 708,694           |
| Freezing plants.....   | 13         | 518,104           | 15         | 433,680           |
| Clam canneries.....  | 14         | 96,227            | 17         | 113,892           |
| <b>Totals for Fish-Canning and -Curing Establishments.....</b> | <b>630</b> | <b>17,144,896</b> | <b>624</b> | <b>18,614,592</b> |
| <b>Grand Totals, Capital Invested in Fisheries</b>             | <b>-</b>   | <b>43,617,888</b> | <b>-</b>   | <b>45,831,842</b> |

<sup>1</sup> Included with "Other gear".

<sup>2</sup> Comprises values of land, buildings and machinery, products and supplies on hand, accounts and bills receivable, and cash.

### 11.—Numbers of Persons Employed in the Fisheries of Canada and in Processing Establishments Connected Therewith, 1934-36.

| Employed in—                              | Sea Fisheries. |               |               | Inland Fisheries. |               |               |
|---|----------------|---------------|---------------|-------------------|---------------|---------------|
|   | 1934.          | 1935.         | 1936.         | 1934.             | 1935.         | 1936.         |
|   | No.            | No.           | No.           | No.               | No.           | No.           |
| Steam trawlers.....                       | 65             | 70            | 75            | Nil               | Nil           | Nil           |
| Vessels.....                              | 4,840          | 4,948         | 5,083         | 1                 | 1             | 1             |
| Boats.....                                | 48,505         | 47,845        | 48,948        | 8,292             | 8,252         | 8,994         |
| Carrying snacks and collecting vessels..  | 851            | 901           | 965           | 134               | 123           | 132           |
| Fishing, not in boats.....                | 3,278          | 3,060         | 3,300         | 2,669             | 3,349         | 4,238         |
| <b>Totals, Fishermen<sup>1</sup>.....</b> | <b>57,539</b>  | <b>56,833</b> | <b>58,371</b> | <b>11,095</b>     | <b>11,724</b> | <b>13,364</b> |

<sup>1</sup> Included with boats. <sup>2</sup> These totals include all individuals employed in primary fishing operations irrespective of the period of employment. The census figure for 1931, given on p. 319, includes only those whose main occupation was fishing.

### 12.—Employees in Fish-Canning and -Curing Establishments, 1934-36.

| Employed in—                           | 1934.        |              |               | 1935.        |              |               | 1936.        |              |               |
|--|--------------|--------------|---------------|--------------|--------------|---------------|--------------|--------------|---------------|
|  | Male.        | Female.      | Total.        | Male.        | Female.      | Total.        | Male.        | Female.      | Total.        |
|  | No.          | No.          | No.           | No.          | No.          | No.           | No.          | No.          | No.           |
| Lobster canneries.....                 | 2,033        | 3,429        | 6,062         | 2,269        | 3,312        | 5,581         | 2,273        | 3,256        | 5,534         |
| Salmon canneries.....                  | 2,714        | 2,341        | 5,055         | 2,509        | 2,331        | 4,840         | 2,960        | 2,553        | 5,513         |
| Clam canneries.....                    | 45           | 108          | 153           | 64           | 153          | 222           | 94           | 177          | 271           |
| Sardines and other fish canneries..... | 292          | 360          | 652           | 311          | 335          | 646           | 374          | 354          | 728           |
| Fish-curing establishments             | 2,331        | 201          | 2,532         | 2,376        | 265          | 2,641         | 2,421        | 307          | 2,728         |
| Freezing plants.....                   | 51           | 2            | 53            | 163          | 21           | 184           | 138          | 10           | 148           |
| Reduction plants.....                  | 292          | 13           | 305           | 239          | 8            | 247           | 308          | 8            | 316           |
| <b>Totals.....</b>                     | <b>8,348</b> | <b>6,434</b> | <b>14,802</b> | <b>7,831</b> | <b>6,430</b> | <b>14,361</b> | <b>8,573</b> | <b>6,665</b> | <b>15,238</b> |

### 13.—Employees and Salaries and Wages in Fish-Canning and -Curing Establishments, 1920-36.

| Year.     | On Salaries. |         | On Wages. |           | Contract and Piece-Workers. |           | Totals. |           |
|-----------|--------------|---------|-----------|-----------|-----------------------------|-----------|---------|-----------|
|           | No.          | \$      | No.       | \$        | No.                         | \$        | No.     | \$        |
| 1920..... | 651          | 759,176 | 13,137    | 3,180,701 | 4,711                       | 916,413   | 18,499  | 4,856,290 |
| 1921..... | 457          | 551,330 | 10,534    | 2,023,040 | 3,083                       | 389,010   | 14,104  | 2,978,386 |
| 1922..... | 614          | 632,555 | 11,845    | 2,358,780 | 4,115                       | 690,415   | 19,577  | 3,641,730 |
| 1923..... | 585          | 681,101 | 11,265    | 2,448,971 | 3,567                       | 644,832   | 15,447  | 3,769,914 |
| 1924..... | 574          | 755,631 | 10,583    | 2,588,717 | 4,379                       | 890,413   | 15,536  | 4,234,761 |
| 1925..... | 632          | 806,418 | 10,687    | 3,166,045 | 4,653                       | 998,704   | 16,272  | 4,971,167 |
| 1926..... | 546          | 733,760 | 11,579    | 3,807,533 | 5,283                       | 1,081,544 | 17,408  | 5,022,837 |
| 1927..... | 939          | 871,211 | 11,343    | 3,760,791 | 4,715                       | 732,949   | 16,997  | 5,373,951 |
| 1928..... | 630          | 853,800 | 10,579    | 3,539,070 | 4,225                       | 868,226   | 15,434  | 5,261,096 |
| 1929..... | 660          | 951,669 | 11,122    | 3,668,802 | 4,885                       | 791,334   | 16,367  | 5,411,855 |
| 1930..... | 591          | 918,952 | 9,967     | 3,383,902 | 5,164                       | 1,023,609 | 15,722  | 5,326,463 |
| 1931..... | 540          | 662,270 | 9,577     | 2,069,153 | 2,964                       | 421,452   | 13,071  | 3,153,875 |
| 1932..... | 488          | 602,760 | 9,799     | 1,741,404 | 3,439                       | 477,714   | 13,724  | 2,821,878 |
| 1933..... | 473          | 558,500 | 9,453     | 1,728,585 | 4,116                       | 736,553   | 14,042  | 3,024,068 |
| 1934..... | 548          | 676,124 | 9,642     | 2,193,985 | 4,612                       | 684,956   | 14,802  | 3,555,075 |
| 1935..... | 550          | 703,075 | 9,468     | 2,171,478 | 4,343                       | 679,395   | 14,361  | 3,553,948 |
| 1936..... | 558          | 734,678 | 10,073    | 2,544,903 | 4,607                       | 724,269   | 15,238  | 4,008,850 |



**Trade.**—The domestic consumption of fish is relatively small in Canada and the trade depends largely upon foreign markets. From 60 to 70 p.c. of the annual capture is an average export, of which the United States takes approximately one-half and the United Kingdom one-fourth. In the calendar year 1936, total exports amounted to \$25,398,102, of which \$12,917,592 went to the United States and \$5,781,730 to the United Kingdom. A further division shows that \$9,388,184 went to British Empire countries and \$16,009,918 to foreign countries. The most important single export is canned salmon (to the United Kingdom and European markets), followed by fresh lobster, canned lobster, fresh whitefish, fresh salmon, and dried cod (to the West Indies, South America, etc.). For fresh fish the United States is the chief market. Canadian imports of fishery products in the calendar year 1936 amounted to \$2,918,251. A general review of the import and export trade in fish for 36 years past is given in Table 14, by fiscal years, while Table 15 gives a comparative record of exports, by countries, during the calendar years 1935 and 1936. Table 16 shows the leading items of export for the calendar years 1934-36. For a complete analysis of imports and exports, as well as of production, see the annual report "Fisheries Statistics", issued by the Dominion Bureau of Statistics.

#### 14.—Values of Exports and Imports of Fish and Fish Products, fiscal years 1902-37.

**NOTE.**—In this table "Exports" includes seal skins, fish oils and whale oil, and "Imports" includes turtles, whalebone, shells and their products, fur skins of marine animals, fish oils and ambergris, in addition to fishery products as shown in Tables 12 and 13 of Chapter XVI on External Trade, in this volume.

| Fiscal Year. | Exports, Fisheries, Domestic. | Imports of Fish for Home Consumption. |           | Fiscal Year. | Exports, Fisheries, Domestic. | Imports of Fish for Home Consumption. |           |
|--------------|-------------------------------|---------------------------------------|-----------|--------------|-------------------------------|---------------------------------------|-----------|
|              |                               | Dutiable.                             | Free.     |              |                               | Dutiable.                             | Free.     |
|              | \$                            | \$                                    | \$        |              | \$                            | \$                                    | \$        |
| 1902.....    | 14,143,294                    | 620,706                               | 525,459   | 1920.....    | 42,227,996                    | 2,605,379                             | 1,440,493 |
| 1903.....    | 11,800,184                    | 659,717                               | 743,703   | 1921.....    | 33,615,119                    | 2,416,152                             | 1,876,303 |
| 1904.....    | 10,759,029                    | 734,800                               | 850,945   | 1922.....    | 29,578,392                    | 2,172,850                             | 990,763   |
| 1905.....    | 11,114,318                    | 752,558                               | 761,402   | 1923.....    | 27,816,935                    | 2,006,300                             | 899,531   |
| 1906.....    | 16,025,840                    | 814,540                               | 1,234,563 | 1924.....    | 30,925,769                    | 1,878,336                             | 648,096   |
| 1907.....    | 10,362,142                    | 735,045                               | 924,046   | 1925.....    | 33,967,009                    | 2,064,222                             | 997,050   |
| 1908.....    | 13,867,367                    | 838,037                               | 1,103,649 | 1926.....    | 37,487,517                    | 1,949,269                             | 641,240   |
| 1909.....    | 13,319,664                    | 784,176                               | 925,173   | 1927.....    | 36,365,454                    | 2,347,890                             | 906,183   |
| 1910.....    | 15,663,162                    | 952,522                               | 820,183   | 1928.....    | 35,660,257                    | 2,505,591                             | 1,181,067 |
| 1911.....    | 15,675,544                    | 1,175,072                             | 820,019   | 1929.....    | 37,962,929                    | 2,956,182                             | 1,218,386 |
| 1912.....    | 16,704,678                    | 1,261,096                             | 1,148,522 | 1930.....    | 37,185,185                    | 3,078,385                             | 1,100,335 |
| 1913.....    | 18,330,721                    | 1,608,663                             | 910,923   | 1931.....    | 29,663,978                    | 2,393,870                             | 988,689   |
| 1914.....    | 20,623,560                    | 1,558,563                             | 773,109   | 1932.....    | 24,854,088                    | 1,726,622                             | 701,632   |
| 1915.....    | 19,687,068                    | 1,155,186                             | 701,112   | 1933.....    | 17,425,228                    | 1,281,466                             | 425,138   |
| 1916.....    | 22,377,977                    | 895,371                               | 695,702   | 1934.....    | 20,972,444                    | 1,278,497                             | 539,456   |
| 1917.....    | 24,889,253                    | 1,347,511                             | 1,128,768 | 1935.....    | 23,294,508                    | 1,799,936                             | 726,168   |
| 1918.....    | 32,602,151                    | 1,039,585                             | 1,864,041 | 1936.....    | 25,572,665                    | 1,877,831                             | 798,380*  |
| 1919.....    | 37,137,072                    | 1,054,848                             | 2,128,970 | 1937.....    | 26,702,831                    | 1,942,849                             | 1,101,926 |

\* Nine months.

\* Revised since the publication of the 1937 Year Book.

## 15.—Exports of the Fisheries, the Produce of Canada, by Principal Countries, calendar years 1935 and 1936.

| Exports to—                               | 1935.             | 1936.            | Exports to—                           | 1935.             | 1936.             |
|---|-------------------|------------------|---------------------------------------|-------------------|-------------------|
| \$  | \$                |                  | \$                                    | \$                |                   |
| <b>British Empire.</b>                    |                   |                  | <b>Foreign Countries.</b>             |                   |                   |
| United Kingdom.....                       | 6,759,505         | 5,781,730        | Belgium.....                          | 151,827           | 150,618           |
| Africa, British South.....                | 410,039           | 430,847          | Brazil.....                           | 53,407            | 15,071            |
| Africa, British West.....                 | 15,790            | 27,062           | China.....                            | 155,805           | 155,478           |
| Bermuda.....                              | 38,501            | 37,681           | Cuba.....                             | 239,834           | 220,911           |
| British India.....                        | 40,876            | 35,726           | Denmark.....                          | 34,125            | 16,567            |
| Ceylon.....                               | 1,612             | 4,380            | France.....                           | 806,619           | 806,669           |
| Straits Settlements.....                  | 15,691            | 15,906           | Germany.....                          | 283,499           | 79,493            |
| British Guiana.....                       | 132,495           | 134,939          | Haiti.....                            | 46,827            | 93,991            |
| Barbados.....                             | 65,064            | 36,854           | Italy.....                            | 94,045            | 2,891             |
| Jamaica.....                              | 493,767           | 342,104          | Japan.....                            | 780,977           | 624,903           |
| Trinidad and Tobago.....                  | 306,188           | 245,389          | Netherlands.....                      | 69,945            | 72,339            |
| Hong Kong.....                            | 79,444            | 29,482           | Dutch Guiana.....                     | 21,096            | 15,370            |
| Newfoundland.....                         | 60,780            | 22,129           | Norway.....                           | 37,189            | 73,354            |
| Australia.....                            | 2,060,351         | 1,668,594        | Portugal.....                         | Nil               | 93                |
| Fiji.....                                 | 82,549            | 75,453           | Portuguese Africa.....                | 35,018            | 23,782            |
| New Zealand.....                          | 282,648           | 391,466          | Santo Domingo.....                    | 67,010            | 87,904            |
| Palestine.....                            | 16,116            | 11,724           | Sweden.....                           | 227,554           | 273,618           |
|   |                   |                  | United States.....                    | 10,321,296        | 12,917,592        |
|   |                   |                  | Philippine Islands.....               | 33,950            | 20,226            |
|   |                   |                  | Puerto Rico.....                      | 384,937           | 113,664           |
| <b>Totals, British Empire<sup>1</sup></b> | <b>10,956,538</b> | <b>9,388,151</b> | <b>Totals, Foreign Countries.....</b> | <b>13,902,948</b> | <b>16,609,918</b> |
|   |                   |                  | <b>Grand Totals, Exports.</b>         | <b>24,859,486</b> | <b>25,398,102</b> |

<sup>1</sup> Totals include other countries not specified.

## 16.—Exports of the Fisheries of Canada, by Quantities and Values, calendar years 1934-36.

| Kind of Fish or Product.   | 1934.     |           | 1935.     |           | 1936.     |           |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
|  | Quantity. | Value.    | Quantity. | Value.    | Quantity. | Value.    |
| <b>Fish—</b>   |           | \$        |           | \$        |           | \$        |
| Alewives, salted.....cwt.  | 49,776    | 93,438    | 22,800    | 57,703    | 28,478    | 58,289    |
| Bait fish.....ton  | 416       | 9,966     | 608       | 15,266    | 359       | 8,252     |
| Clams, canned.....cwt.   | 391       | 2,318     | 428       | 4,893     | 191       | 2,068     |
| Clams, fresh....."   | 16,647    | 22,809    | 56,624    | 63,446    | 47,464    | 53,855    |
| Codfish, boneless, canned or preserved, n.e.s....."                | 22,454    | 185,596   | 23,178    | 194,318   | 22,474    | 195,744   |
| Codfish, dried....."   | 338,400   | 1,056,004 | 291,569   | 1,538,203 | 213,444   | 1,074,872 |
| Codfish, fresh and frozen....."                                    | 9,925     | 61,751    | 22,946    | 146,774   | 45,984    | 289,400   |
| Codfish, greensteamed (pickled)....."                              | 98,578    | 291,871   | 107,498   | 319,403   | 163,760   | 480,135   |
| Codfish, smoked....."  | 8,718     | 88,071    | 11,589    | 114,255   | 18,268    | 183,898   |
| Eels, fresh and frozen....."                                       | 8,712     | 56,477    | 8,053     | 54,059    | 5,671     | 34,213    |
| Haddock, canned....."  | 436       | 2,335     | 229       | 2,444     | 222       | 2,230     |
| Haddock, dried....."   | 8,781     | 40,776    | 11,598    | 49,181    | 4,398     | 16,849    |
| Haddock, fresh and frozen....."                                    | 26,659    | 202,960   | 26,307    | 168,856   | 51,147    | 309,754   |
| Haddock, smoked....."  | 8,277     | 78,194    | 9,987     | 92,598    | 8,048     | 82,032    |
| Halibut, fresh and frozen....."                                    | 43,437    | 393,006   | 53,062    | 485,975   | 64,310    | 595,818   |
| Herring, lake, fresh and frozen....."                              | 7,490     | 85,336    | 7,240     | 72,399    | 14,047    | 103,826   |
| Herring, sea, canned....."   | 13,964    | 96,860    | 15,493    | 109,928   | 13,168    | 99,008    |
| Herring, sea, dry-salted....."                                     | 311,098   | 356,549   | 402,781   | 543,974   | 313,149   | 391,084   |
| Herring, sea, fresh and frozen....."                               | 265,073   | 208,640   | 297,342   | 259,584   | 307,366   | 270,219   |
| Herring, sea, pickled....."  | 35,361    | 79,658    | 27,454    | 69,847    | 19,241    | 47,113    |
| Herring, sea, smoked....."   | 66,699    | 191,588   | 49,853    | 159,694   | 54,256    | 175,828   |
| Lobsters, canned....."   | 52,338    | 2,499,372 | 45,693    | 2,274,783 | 38,162    | 2,080,005 |
| Lobsters, fresh....."  | 97,485    | 1,550,456 | 92,049    | 1,041,300 | 98,864    | 2,100,762 |
| Mackerel, fresh and frozen....."                                   | 2,832     | 14,132    | 1,118     | 6,158     | 4,689     | 21,292    |
| Mackerel, pickled....."  | 110,931   | 350,346   | 84,724    | 319,285   | 89,145    | 279,816   |
| Oysters, fresh....."   | 2,316     | 12,005    | 1,081     | 7,365     | 413       | 2,760     |
| Pilchards, canned....."  | 6,240     | 51,375    | 5,003     | 45,577    | 7,496     | 57,315    |
| Pollock, hake and cusk, boneless, canned or preserved, n.e.s....." | 28        | 137       | Nil       | —         | Nil       | —         |
| Pollock, hake and cusk, dried....."                                | 48,891    | 188,513   | 47,892    | 189,789   | 46,377    | 164,079   |
| Pollock, hake and cusk, fresh and frozen....."                     | 956       | 2,201     | 1,772     | 3,094     | 5,580     | 16,258    |
| Pollock, hake and cusk, green-salted....."                         | 18,252    | 28,991    | 10,084    | 14,402    | 24,706    | 36,478    |

16.—Exports of the Fisheries of Canada, by Quantities and Values, calendar years 1934-36—concluded.

| Kind of Fish or Product.                                       | 1934.     |                   | 1935.     |                   | 1936.     |                   |
|--|-----------|-------------------|-----------|-------------------|-----------|-------------------|
|  | Quantity. | Value.            | Quantity. | Value.            | Quantity. | Value.            |
|  |           | \$                |           | \$                |           | \$                |
| <b>Fish—concluded.</b>   |           |                   |           |                   |           |                   |
| Pollack, hake and cusk, smoked..cwt.                           | 10        | 72                | 327       | 2,232             | 65        | 743               |
| Salmon, canned....."   | 291,645   | 5,906,424         | 508,478   | 7,394,632         | 471,538   | 6,367,323         |
| Salmon, dry-salted (chum)....."                                | 106,186   | 235,478           | 183,001   | 414,321           | 108,615   | 335,282           |
| Salmon, fresh and frozen....."                                 | 107,602   | 1,187,727         | 119,986   | 1,228,162         | 154,659   | 1,455,878         |
| Salmon, pickled....."  | 27,399    | 413,979           | 28,581    | 418,175           | 14,539    | 241,728           |
| Salmon, smoked....."   | 185       | 4,091             | 224       | 5,193             | 274       | 6,244             |
| Salmon trout or lake trout, fresh and frozen....."             | 33,006    | 301,446           | 39,771    | 378,531           | 45,970    | 468,710           |
| Sardines (little fish in oil)....."                            | 48,556    | 383,080           | 54,130    | 448,150           | 54,108    | 471,819           |
| Shell fish, other, fresh....."                                 | 7,066     | 117,175           | 9,278     | 162,797           | 14,217    | 245,827           |
| Smelts, fresh and frozen....."                                 | 49,458    | 575,787           | 71,550    | 740,259           | 83,170    | 819,804           |
| Sturgeon, fresh and frozen....."                               | 1,088     | 28,319            | 1,349     | 38,978            | 1,658     | 46,942            |
| Swordfish, fresh and frozen....."                              | 15,115    | 156,330           | 20,397    | 214,262           | 21,552    | 270,862           |
| Tongues and sounds....."                                       | 773       | 6,756             | 479       | 4,304             | 697       | 5,633             |
| Tullibee, fresh and frozen....."                               | 11,186    | 47,586            | 25,437    | 143,493           | 18,576    | 113,114           |
| Whale meat, canned or preserved.."                             | 3         | 17                | Nil       | —                 | Nil       | —                 |
| Whitefish, fresh and frozen....."                              | 101,397   | 977,147           | 117,478   | 1,260,375         | 119,234   | 1,458,827         |
| Other fresh-water fish, fresh and frozen....."                 | 283,952   | 1,891,754         | 299,870   | 2,036,827         | 314,584   | 2,345,781         |
| Other fresh-water fish, salted, dried, smoked or pickled....." | 30        | 122               | 179       | 1,703             | 714       | 6,763             |
| Other sea fish, fresh and frozen....."                         | 5,433     | 29,863            | 6,195     | 34,896            | 8,325     | 60,056            |
| Other sea fish, salted, dried, smoked or pickled....."         | 3,604     | 19,415            | 6,783     | 31,875            | 2,528     | 12,382            |
| Other sea fish, canned or preserved, n.e.s....."               | 200       | 2,440             | 33        | 553               | 17        | 313               |
| <b>Fishery Products—</b>                                       |           |                   |           |                   |           |                   |
| Fish livers.....cwt.   | 1         | —                 | 1         | —                 | 3,833*    | 199,543*          |
| Fish meal....."  | 245,915   | 484,865           | 143,884   | 245,449           | 320,079   | 539,483           |
| Fish offal or refuse....."                                     | 14,899    | 26,184            | 22,779    | 37,325            | 13,687    | 17,880            |
| <b>Oils—</b>   |           |                   |           |                   |           |                   |
| Cod-liver oil.....gnl.   | 19,446    | 11,183            | 10,378    | 7,247             | 52,768    | 35,130            |
| Seal oil....."   | 1,818     | 392               | Nil       | —                 | Nil       | —                 |
| Whale oil....."  | 653,937   | 148,116           | 398,429   | 98,518            | 551,129   | 128,898           |
| Other fish oil....."   | 1,069,015 | 176,220           | 1,111,278 | 249,807           | 1,171,332 | 336,579           |
| Seal skins, undressed.....No.                                  | 8,694     | 10,273            | 11,375    | 20,673            | 14,900    | 39,051            |
| Other products of the fisheries....."                          | —         | 150,068           | —         | 227,261           | —         | 94,196            |
| <b>Totals, Fish and Fishery Products....</b>                   | <b>—</b>  | <b>22,497,135</b> | <b>—</b>  | <b>24,859,486</b> | <b>—</b>  | <b>25,398,102</b> |

\* Information not available prior to April 1, 1936.

\* Nine months, April to December, 1936.

Sharp increase in the value of fisheries exports, as compared with 1936 value, took place during 1937. Shipments of fish and fish products to export markets during the year had a value, in round figures, of \$28,834,000, or almost \$3,500,000 more than in the preceding year. So far as fisheries production in 1937 is concerned, preliminary figures indicate some decrease in the landings of sea fish and shell fish, but an increase in the landed value of the sea catches to the fishermen. Statistics of fresh-water catch and landed value are not available at the time of writing.

## CHAPTER XII.—MINES AND MINERALS.\*

NOTE.—An article on the geology of Canada will be found at pp. 16-17 of the present edition of the Year Book.

**Historical Sketch.**—The early settlements in the lower St. Lawrence valley were hemmed in by the non-agricultural rock formations of the Canadian Shield which approached closely to the first points of colonization. An important epoch of Canadian expansion, about the middle of the 19th century, coincided with the surmounting of the transportation difficulties presented by the arm of the Canadian Shield which crosses the St. Lawrence river above Montreal and is responsible for the series of rapids between that city and lake Ontario. A second and greater period of expansion followed again when railways bridged the barriers of rocky country separating lake Superior in the east and the Pacific coast in the west from the extensive agricultural plains of the Prairie Provinces. These forbidding areas, with their exposed ancient rocks, their forests, and their lakes, which impeded Canadian growth and agricultural settlement until nearly the end of the 19th century, since 1920 have become, because of their resources of pulpwood, water power, and mineral deposits, the chief source of the expansion of wealth and productive activity.

The discovery of minerals in Canada was closely associated with the early exploration of the country. Iron and silver, and later coal, were reported in Nova Scotia by some of the first French adventurers. Bellin's maps published in 1744 indicated the existence of silver-lead not ten miles distant from the now famous Cobalt Silver Camp. However, in the early period of Eastern Canada's history such development of mineral resources as occurred was almost entirely incidental to the agricultural colonization of the country and consisted principally of the smelting of bog iron ores and of the production of such necessities as salt and building materials.

Though coal was discovered on Vancouver island in 1835, it was the alluvial deposits of the Fraser river and the gold rush to the Cariboo in 1859 which really opened up the interior of the mainland, so that, on the western coast, mineral exploitation preceded agricultural settlement.

These early isolated discoveries were followed by others, notably the gold ores of Nova Scotia, the copper-nickel of Sudbury, the silver of Silver islet on lake Superior, copper-gold at Rossland, and silver-lead in the Kootenays. A foundation for the mining industry was laid with the setting up of the Geological Survey of Canada under Sir William Logan and the publication in 1863 of the "Geology of Canada". However, it was not until the mining development in British Columbia in the 1890's and the discovery of rich deposits of silver and gold in northern Ontario in the first decade of this century that the mining industry began to give promise of its tremendous possibilities. The effects of successive steps in the development of the mineral resources may be traced in the per capita figures of mineral production in Table 1, p. 343. The first period of rapid increase from 1895 to 1900 resulted from the placer discoveries of Yukon and the expansion of lode mining in British Columbia. The next important increase in 1906-13 followed the discovery of silver and gold at Cobalt and Porcupine.

\* Revised by W. H. Loose, B.Sc., Chief of the Mining, Metallurgical and Chemical Branch, Dominion Bureau of Statistics. A complete list of the publications of this Branch appears in Chapter XXIX, Section 1, under "Production".

War prices stimulated the production of base metals from properties already developed, but on the whole active prospecting was much curtailed during the war period. However, in the decade following the War, new discoveries were widespread and the expansion was very rapid. The aeroplane furnished a means of comparatively easy access to remote districts and the discovery of new deposits of minerals increased annually. Important discoveries of base metals were the copper-gold areas of Rouyn in northwestern Quebec, and the copper-gold-zinc ore bodies near the Manitoba-Saskatchewan boundary. Expansion programs were carried out at nickel-copper properties in the Sudbury district of Ontario and silver-lead-zinc properties in British Columbia. New gold mines were brought to the production stage in northwestern Quebec, northwestern Ontario, and eastern Manitoba. An intrepid prospector went farther afield and uncovered silver-radium ores at the easterly end of Great Bear lake.

It should not be imagined from the brief outline given above that the successful and profitable development of mining enterprise in Canada has depended solely upon the *discovery* of the ore bodies. Even in the case of occurrences of free-milling gold ores, a long and expensive process of exploration is required before the possibilities of a property as an economic producer can be determined, and, in the majority of cases, though the original discovery may be promising, development yields disappointing results. In the case of base-metal ore-bodies, not only is the expenditure for preliminary development necessary, but also difficult problems in metallurgy are presented, requiring long periods of research and experiment for their solution before profitable production is made possible. The nickel-copper deposits of Sudbury were discovered in 1883, but production on an important scale did not come until after 1900 and the greatest expansion has occurred since the War. The great Sullivan silver-lead-zinc deposit in the Kootenay district of British Columbia was discovered in 1892, but production upon anything like the present scale did not come until after the War, when a successful method of separating the lead and zinc had been worked out.

**Statistics of Mines and Minerals.**—The compilation and publication of statistics concerning mines and minerals in the Dominion is carried out by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics, which works in close co-operation with the Mines Departments of the various Provincial Governments, collecting the data in collaboration with these Departments. Questionnaires sent to those engaged in mineral industries are designed to meet the requirements of both the Dominion and the provincial authorities, thus eliminating duplication of labour.

For more detailed information on the mineral production of Canada, the reader is referred to the various reports issued by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics. The more important of these are: annual preliminary reports on the mineral production of Canada; a complete, detailed, annual report on the mineral industries; monthly bulletins on the production of the 16 leading minerals; and monthly, quarterly, and annual reports on coal statistics. (See footnote to p. 335.)

The following material of this chapter is divided into six sections: (1) a sketch of the administration of mineral lands and mining laws; (2) a summary of general production; (3) the industrial statistics of the mineral industries; (4) production of metallic minerals; (5) production of non-metallic minerals; (6) production of clay products and structural materials.

## Section 1.—Mineral Lands Administration and Mining Laws.

The mineral lands of Canada, like other Crown lands, are administered by either the Dominion or the Provincial Governments. The Dominion Government administers the mineral lands of Yukon and the Northwest Territories as well as those in all Indian Reserves, and in National Parks in the Prairie Provinces and British Columbia. Since the transfer of the natural resources to the Prairie Provinces in 1930, all other mineral lands lying within the boundaries of the several provinces have been administered by the respective Provincial Governments.

### Subsection 1.—Dominion Mining Laws and Regulations.\*

Dominion lands to which these regulations apply are those administered by the Department of Mines and Resources, and lie within Yukon and the Northwest Territories. Titles issued for Dominion lands, the property of the Dominion Government, in the Territories of Canada, reserve to the Crown the mines and minerals which may be found on or under such lands, together with the right of operation.

**Placer.**—Claims 500 feet long and from 1,000 to 2,000 feet wide, according to location, may be staked out and acquired by any person 18 years of age or over; claims to be marked by two legal posts, one at each end, and the line joining them marked. Creek claims are staked along the base line of the creek, and extend 1,000 feet on each side. River claims are 500 feet on one side of the river and extend back 1,000 feet. Other claims are staked parallel to the creek or river on which they front, 500 feet long by 1,000 feet. Expenditure in development of each claim to be incurred and proved each year, \$200 in Yukon and \$100 elsewhere. Royalty  $2\frac{1}{2}$  p.c. under the Yukon Placer Mining Act.

**Quartz.**—"Mineral" under this heading means all deposits of metals and other useful minerals other than placer deposits, peat, coal, petroleum, natural gas, bitumen, and oil shales.

Under the present regulations, effective April 2, 1932, applicable to the Northwest Territories, any prospector or locator of a mineral claim, whether an individual, mining partnership or a company, must hold a miners licence, the fee being \$5 for an individual, from \$5 to \$20 for mining partnerships, and larger amounts proportionate to their capitalization for mining companies. A licensee may stake out 6 claims on his own licence and 12 more for 2 other licensees, not exceeding 18 in all in any one licence year in any mining division. A mineral claim shall be rectangular and marked by a post at each corner—maximum area 51.65 acres, being 1,500 feet square. Entry is granted by a mining recorder, fee \$5 for a claim located by a licensee on his own licence and \$10 if located on behalf of another licensee. Grant is renewable from year to year, subject to representation work to the value of \$100 being done on the location each year, and the renewal of the owner's miners licence. A maximum of 36 claims may be grouped for purposes of representation work. When prescribed representation work to the value of \$500 has been done and confirmed, discovery of mineral in place shown to have been made, a survey made by a Dominion land surveyor at grantee's expense, and certain other requirements met, a lease is issued for a term of 21 years, renewable, the rental for the full term of a

\* For copies of any of the regulations referred to application may be made to the Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.

claim not exceeding 51.65 acres being \$50. The cost of the survey, reckoned at \$100, may be counted as work done on the claim. When the profits of a mine exceed \$10,000 in any calendar year, there is a royalty of from 3 to 6 p.c. or higher, proportionate to profits. Miners licences are not required in Yukon under the Yukon Quartz Mining Act, but the general provisions of the Act are similar to those of the Quartz Mining Regulations above, except that the fee for a grant is \$10 and only 8 mineral claims may be grouped for operation.

In addition to these Quartz and Placer Mining Regulations, applicable to the Northwest Territories, and the Yukon Quartz and Placer Mining Acts, the following regulations regarding minerals are in force: *Yukon*.—Dredging Regulations; Petroleum and Natural Gas Regulations. *Yukon and Northwest Territories*.—Alkali Mining Regulations; Carbon-Black Regulations; Coal Mining Regulations; Potash Regulations and Domestic Coal Permits. *Northwest Territories*.—Dredging Regulations; Oil and Gas Regulations; Quarrying Regulations and Permits to remove sand, stone, and gravel from beds of rivers.

### Subsection 2.—Provincial Mining Laws and Regulations.

The granting of land in any province except Ontario no longer carries with it mining rights upon or under such land. In Ontario mineral rights are expressly reserved if they are not to be included. Some early grants in New Brunswick and Quebec also included certain mineral rights. Otherwise mining rights must be separately obtained by lease or grant from the provincial authority administering the mining laws and regulations. Mining activities may be classified as placer, general minerals (usually metallic ores), fuel (coal, petroleum, gas), and quarrying. Under these divisions of the mining industry provincial regulations may be summarized as follows:—

*Placer*.—In those provinces in which placer deposits occur there are regulations defining the size of placer holdings, the terms under which they may be acquired and held, and the royalties to be paid.

*General Minerals*.—These are sometimes described as quartz, lode minerals, or minerals in place. The most elaborate regulations apply in this division. In all provinces a prospector or miners licence to search for mineral deposits, valid for a year, must be obtained. A claim of promising-looking ground of a specified size may then be staked. This claim must be recorded within a time limit, with the payment of recording fees. Work to a specified value per annum must be performed upon the claim for a period up to five years, when a grant or lease of the mining rights may be obtained subject to fees or annual rental. The taxation most frequently applied is a percentage of net profits of producing mines.

*Fuels*.—In those provinces in which coal occurs, the size of holdings is laid down and the conditions regarding work and rental under which they may be held. In some cases royalties are provided for. In the cases of petroleum and natural gas, a boring permit on likely ground is usually first obtained. If oil or gas is discovered, the operator may obtain the lease or grant of a limited area subject to rental or fees. A royalty on production is sometimes payable.

*Quarrying*.—Regulations under this heading define the size of holding and the terms of lease or grant.

The more important features of the regulations dealing with these divisions of the mining industry are outlined for each of the provinces below.

**Nova Scotia.**—*Administration.*—Minister of Public Works and Mines, Parliament Buildings, Halifax. *Legislation.*—Mines Act (c. 22, R.S.N.S. 1923) and amending Acts of 1927 (c. 17), 1929 (c. 22), 1933 (c. 12), 1935 (c. 23), 1936 (c. 46), and 1937 (c.19).

*General Minerals.*—Prospectors licence at nominal fee. Lease of mining rights—40 years for gold and silver; 20 years, three times renewable, for other minerals; both subject to annual rental and performance of work.

*Coal.*—Royalty—12½ cents per long ton, with exemption of coal used in mining operations and for domestic purposes by workmen employed about the mine.

*Quarrying.*—Rights to limestone, gypsum, and building materials are acquired with ordinary land title.

**New Brunswick.**—*Administration.*—Department of Lands and Mines, Fredericton. *Legislation.*—Mining Act (c. 35, R.S.N.B. 1927), as amended by c. 27, 1927, and c. 23, 1933. In most grants of Crown land since about 1805, all mines and minerals are reserved to the Crown. Prior to that time, most of the land grants reserved only gold, silver, copper, lead, and coal.

*General Minerals.*—Prospectors licence costs \$10 for a year. *Claims.*—A prospector may stake 10 claims of 40 acres each which must be registered within 30 days and 25 days' work done in each claim within the year. All this work may be concentrated on one of a group of claims. Mining rights are granted by mining licence, renewable annually, upon payment of \$10 per claim. When the mine produces on a commercial basis, a 20-year lease under similar conditions may issue.

*Fuel.*—Royalties are 10 cents per long ton on coal and 5 p.c. on the value at the well's mouth for petroleum and natural gas.

**Quebec.**—*Administration.*—Minister of Mines, Quebec. Information and statistics on mining operations and geological explorations are to be found in the Annual Report of the Quebec Bureau of Mines. *Legislation.*—Quebec Mining Act (c. 80, R.S.Q. 1925) and amendments. In townships the Crown retains full mining rights on lands granted subsequently to July 24, 1880, and gold and silver rights on lands granted previously to that date. All mining rights belong to the Crown in most of the seigneuries.

*General Minerals.*—Miners certificate good for calendar year; fee \$10. *Claims.*—Five claims of 40 acres each must be recorded and 25 days' work per claim done within 12 months; a development licence renewable annually is granted upon payment of \$10 recording fee and 50 cents per acre. Mining rights can be purchased as a mining concession for \$5 per acre for superior minerals and \$3 per acre for inferior minerals. Operators must make annual returns to the Minister. Taxes are payable on annual profits at rates graduated from 4 p.c. upward.

**Ontario.**—*Administration.*—Department of Mines, Parliament Buildings, Toronto. A resident mining recorder is appointed for each mining division. *Legislation.*—Mining Act (c. 45, R.S.O. 1927), with amendments; applies to all Crown lands except Indian lands. Title is a grant in fee simple, except in provincial forests where mining lands are leased. There is no apex law, all claim boundaries extending vertically downwards. Disputes are settled by the recorder, or on appeal, by the Judge of the Mining Court of Ontario.

*General Minerals.*—Annual miners licence—fee \$5 for an individual; \$100 on each \$1,000,000 capital for companies; holder permitted to stake 3 claims



in any and every mining division for himself and 6 additional for other licence holders, but not more than 3 for any individual licensee. *Claims.*—In unsurveyed territory 20 chains square (40 acres) with lines N.-S. and E.-W. astronomically; in surveyed territory an eighth, a quarter or a half lot, *i.e.*, up to 50 acres. Representation work consists of the actual performance of at least 200 days' work within 5 years. *Taxation.*—Five cents per acre per annum on patented and leased mining lands with an area of 10 acres or over in unorganized territory; on net profits, with \$10,000 exempt, 3 p.c. up to \$1,000,000, 5 p.c. from \$1,000,000 to \$5,000,000 and 6 p.c. on the excess above \$5,000,000.

*Fuels.*—Petroleum, natural gas, coal, and salt on the James Bay slope may be searched for under authority of a boring permit. A total of 1,920 acres may be taken up by an individual in blocks of 640 acres. Certain areas have been withdrawn from staking.

**Manitoba.**—*Administration.*—Director, Mines Branch, Department of Mines and Natural Resources, Winnipeg; mining recorders' offices at Winnipeg and The Pas. *Legislation.*—The Mines Act (c. 27, 1930; c. 28, 1932; c. 25, 1933; c. 27, 1934) and regulations thereunder; the Mining Tax Act (c. 27, 1933; c. 44, 1937); and the Well Drilling Act (c. 50, 1937).

*General Minerals.*—The regulations follow closely those summarized for Dominion lands in Subsection 1, except that: not more than 3 claims may be staked for any one licensee, and not more than 9 altogether by one person in any year in any mining division; and representation work required is 25 days' work per year for 5 years for which purpose 9 claims may be grouped.

*Fuels.*—A prospecting permit, good for one year, is necessary to search for oil, coal, gas, or salt. If mineral is discovered a 21-year lease, subject to annual rental and certain work, is granted.

*Quarrying.*—Lands up to 40 acres containing building stone, clay, gravel, gypsum, or sand may be leased as a quarrying location at an annual rental.

**Saskatchewan.**—*Administration.*—Department of Natural Resources, Regina. *Legislation.*—Mineral Resources Act of 1931 and regulations thereunder; Saskatchewan Mines Act, providing for the competency of mine managers and pit bosses, for the reporting of accidents and the welfare and safety of those employed in the production of minerals; Coal Mining Industry Act, 1935, providing for a Coal Administrator to administer all legislation pertaining to the coal industry.

*General Minerals.*—The regulations follow closely those outlined for Dominion lands in Subsection 1, except that the holder of a miners licence may stake not more than 3 claims for himself and 3 for each of 2 other licensees, while not more than 9 claims may be grouped for representation work.

*Coal.*—Three locations may be applied for by mail or in person; the size of a location may be from 40 acres to 640 acres, but the length must not exceed three times the breadth. All operators must be licensed by the Coal Administrator, the licence being contingent upon payment of fair wages, workmen's compensation assessments, rentals, and royalties to the Crown and certain other conditions. Operators must mine annually 5 tons per acre, on leases issued since Jan. 1, 1936.

*Petroleum and Natural Gas.*—Locations may be applied for by mail or in person. The area of a location may be from 40 acres to 19,200 acres, and one person may

apply for 3 locations, but not over 19,200 acres in all, except in unsurveyed lands, in which the limit is 1,920 acres. An operator must obtain a permit and furnish a substantial bond. All drillers must secure licences of competency. The record of a driller may be obtained by payment of a fee.

**Alberta.**—*Administration.*—Department of Lands and Mines, Edmonton. There is a staff of inspectors of mines. *Legislation.*—The Coal Mines Regulation Act and regulations thereunder make provision for the safe operation of mines of coal, ironstone, shale, clay, and other minerals. Operating officials must hold certificates of competency. Monthly reports of operations must be returned to the Minister. The Coal Sales Act requires all coal mines to be registered by name and all coal produced to be sold under the registered name. The Coal Miners' Wages Security Act requires all coal operators to provide bond to insure the payment of wages, unless exemption is obtained through the Board of Public Utility Commissioners.

The general laws and regulations pertaining to mining and minerals are similar to those in force under the Dominion Government before the Provincial Government took over the natural resources in 1930. They follow closely those summarized in Subsection 1 of this chapter.

**British Columbia.**—*Administration.*—Department of Mines, Victoria. The Department includes all Government offices in connection with the mining industry. *Legislation.*—The Department of Mines Act and other Acts respecting mining and minerals, notably: The Mineral Act (c. 181, R.S.B.C. 1936); The Placer-Mining Act (c. 184, R.S.B.C. 1936); Metalliferous Mines Regulation Act (c. 189, R.S.B.C. 1936); The Coal-Mines Regulation Act (c. 188, R.S.B.C. 1936); and amendments to the above Acts.

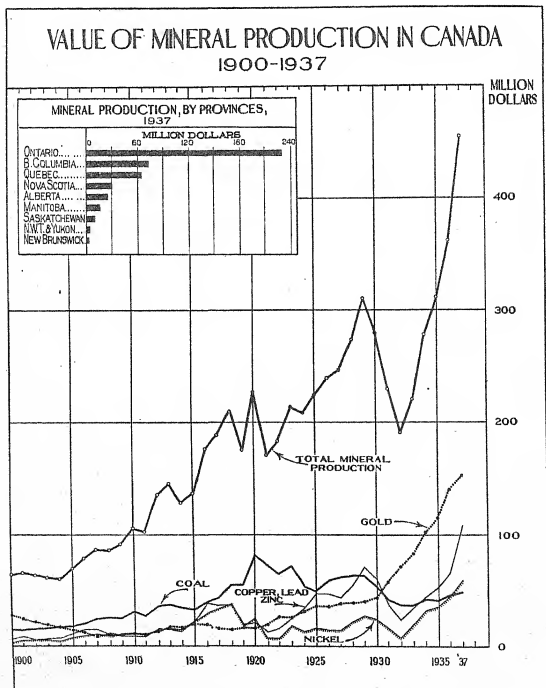
**Placer.**—Claims are of three classes: (1) creek diggings—250 feet long and 1,000 feet wide, 500 feet on each side of the stream; (2) bar diggings—250 feet square on a bar covered at high water, or a strip 250 feet long at high water, extending between high-water mark and extreme low-water mark; (3) dry diggings over which water never extends—250 feet square. A placer claim must be worked by the owner, or someone on his behalf continuously during working hours. Discontinuance for 72 hours, except in close season, lay-over, leave of absence, sickness or other reason satisfactory to the Gold Commissioner is deemed abandonment. To hold a placer claim more than one year, it must be again recorded before the expiration of the year.

Placer leases of unoccupied Crown lands, approximately 80 acres in extent, may be granted by the Gold Commissioner of the district, the annual rental for same being \$30 and the annual expenditure required in development work \$250. Provision is also made for the granting of special leases of areas in excess of that referred to above.

**General Minerals.**—The terms of the mining laws are favourable to the prospector and operator, fees and rentals being small. Prospectors licence or "free miners certificate"—applicant must be over the age of 18; fee for individual \$5 per annum; for a joint-stock company \$50 or \$100 per annum depending on capitalization. Mineral claims must not exceed 1,500 feet square (51.65 acres); work, amounting to \$500 which may be spread over 5 years, required to obtain a Crown grant, while surface rights are obtainable at a figure in no case exceeding \$5 per acre.

## Section 2.—Summary of General Production.

The trend in the development of the mineral resources of Canada was affected by the incidence of the depression for several years after 1929. The decline in the prices of base metals materially reduced the prospecting for, and development of, new deposits of these metals, but the higher price of gold after 1932 greatly stimulated the development of auriferous deposits. Prospecting for gold ores and the exploration and development of known auriferous deposits have been more extensively carried on throughout Canada since 1932 than ever before. These activities have been common to both the older producing camps and new areas. In certain of the older camps properties closed prior to the revaluation of gold were reopened and placed in production or further explored as to their economic possibilities. In



some of the producing mines the higher price for the metal permitted a very considerable extension or increase of pay ore with the resultant milling of rock of lower gold content and important increases in ore reserves.

The economic recovery since 1932 and the rising trend in base-metal prices have resulted in a rapid increase in production from deposits which were already known and partly developed before 1929; this expansion has occurred in spite of the fact that base-metal prices have not yet reached the level relative to gold which existed prior to 1929. The metals, nickel, copper, lead, and zinc were produced in greater quantities in 1937 than ever before in Canada. Furthermore, during the past year there has been a revival of activity in the search for base-metal properties.

Production of various non-metallic minerals, especially asbestos and coal, have realized important gains since 1932. The gains in the structural materials industries, where recessions were severe during the period of business depression, have been encouraging since 1933, but there is room for a large expansion in this division when the construction industry recovers its normal activity.

In 1936, the latest year for which comprehensive world figures of the Imperial Institute are available, Canada stood first in the production of asbestos, nickel, and the platinum metals, second in radium, third in gold, zinc and copper, and fourth in lead and silver. During that year, Canada produced approximately 87 p.c. of the world production of nickel, 54 p.c. of the asbestos, 11 p.c. of the copper, 11 p.c. of the gold, 11 p.c. of the lead, 9 p.c. of the zinc, and 7 p.c. of the silver.

The Preliminary Report on the Mineral Production of Canada, released by the Dominion Bureau of Statistics in March, 1938, shows a total valuation of \$456,793,280 for the mineral output of the Dominion in 1937 compared with \$361,919,372 in 1936. This represents an increase of 20.8 p.c. and reflects the continuation of the improved conditions commencing in 1933.

### Subsection 1.—General Statistics of Mineral Production.

In Table 1 will be found the total values of the minerals produced in Canada in each year since 1886, while Table 2 gives the details of the mineral production of 1935 and 1936, with the percentage of increase or decrease in the latter year.

#### 1.—Value of Mineral Production in Canada, calendar years 1886-1937.

| Calendar Year. | Total Value. | Value per Capita. | Calendar Year. | Total Value. | Value per Capita. | Calendar Year. | Total Value.             | Value per Capita. |
|----------------|--------------|-------------------|----------------|--------------|-------------------|----------------|--------------------------|-------------------|
|                | \$           | \$                |                | \$           | \$                |                | \$                       | \$                |
| 1886.....      | 10,221,255   | 2-23              | 1904.....      | 60,082,771   | 10-31             | 1922.....      | 184,297,242              | 20-66             |
| 1887.....      | 10,321,331   | 2-23              | 1905.....      | 69,078,999   | 11-51             | 1923.....      | 214,079,331              | 23-76             |
| 1888.....      | 12,518,894   | 2-67              | 1906.....      | 79,286,097   | 12-86             | 1924.....      | 200,583,406              | 22-92             |
| 1889.....      | 14,013,113   | 2-96              | 1907.....      | 86,895,202   | 13-55             | 1925.....      | 226,583,333              | 24-38             |
| 1890.....      | 16,763,353   | 3-51              | 1908.....      | 85,557,101   | 12-92             | 1926.....      | 240,437,123              | 25-44             |
| 1891.....      | 18,976,616   | 3-93              | 1909.....      | 91,831,441   | 13-60             | 1927.....      | 247,356,695              | 25-67             |
| 1892.....      | 16,023,415   | 3-40              | 1910.....      | 106,823,623  | 15-20             | 1928.....      | 274,989,487              | 27-96             |
| 1893.....      | 20,035,082   | 4-06              | 1911.....      | 103,220,994  | 14-32             | 1929.....      | 310,850,249              | 31-00             |
| 1894.....      | 19,931,158   | 4-00              | 1912.....      | 135,048,296  | 18-28             | 1930.....      | 279,873,578              | 27-42             |
| 1895.....      | 20,505,917   | 4-08              | 1913.....      | 145,634,812  | 19-08             |                |                          |                   |
| 1896.....      | 22,474,256   | 4-42              | 1914.....      | 128,863,075  | 16-36             | 1931.....      | 230,434,726 <sup>1</sup> | 23-21             |
| 1897.....      | 28,485,023   | 5-56              | 1915.....      | 137,109,171  | 17-18             | 1932.....      | 191,228,225              | 18-20             |
|                |              |                   |                |              |                   | 1933.....      | 221,495,293              | 20-74             |
| 1898.....      | 38,412,431   | 7-42              | 1916.....      | 177,201,534  | 22-15             |                |                          |                   |
| 1899.....      | 49,334,005   | 9-41              | 1917.....      | 189,646,821  | 23-83             | 1934.....      | 278,161,590              | 25-67             |
| 1900.....      | 64,420,877   | 12-15             | 1918.....      | 211,301,897  | 25-93             | 1935.....      | 312,244,487              | 28-56             |
| 1901.....      | 65,797,911   | 12-25             | 1919.....      | 176,686,390  | 21-26             | 1936.....      | 361,019,372              | 32-82             |
| 1902.....      | 63,231,836   | 11-51             | 1920.....      | 227,859,665  | 26-63             | 1937.....      | 456,793,280              | 41-08             |
| 1903.....      | 61,740,513   | 10-90             | 1921.....      | 171,923,342  | 19-56             |                |                          |                   |

<sup>1</sup> Beginning with 1931 exchange equalization on gold production is included in total value. for 1937 are subject to revision.

<sup>2</sup> Figures

## 2.—Mineral Production of Canada, calendar years 1935 and 1936.

| Mineral.   | 1935.       |                    | 1936.       |                    | P.C. Increase (+)<br>or Decrease (—) in 1936. |              |
|--|-------------|--------------------|-------------|--------------------|---|--------------|
|  | Quantity.   | Value.             | Quantity.   | Value.             | Quantity.                                     | Value.       |
|  |             | \$                 |             | \$                 | p.c.  | p.c.         |
| <b>METALLICS.</b>  |             |                    |             |                    |   |              |
| Arsenic (As <sub>2</sub> O <sub>3</sub> )..... lb.                   | 2,558,789   | 75,326             | 1,365,606   | 42,491             | -46.6   | -43.6        |
| Bismuth..... " "   | 13,797      | 13,245             | 304,165     | 360,523            | +2,539.8                                      | +2,621.9     |
| Cadmium..... " "   | 580,530     | 441,203            | 785,916     | 699,465            | +35.4   | +58.5        |
| Chromite..... " "  | 1           | 14,947             | 1           | 13,578             | -   | -9.2         |
| Cobalt..... lb.  | 681,419     | 512,705            | 887,561     | 804,676            | +30.3   | +56.9        |
| Copper..... " "  | 418,997,700 | 32,311,960         | 421,027,732 | 39,514,101         | +0.5  | +22.3        |
| Gold..... fine oz.   | 3,284,890   | 67,904,700         | 3,748,028   | 77,478,612         | +14.1   | +14.1        |
| Estimated exchange<br>equalization paid for<br>gold produced..... \$ | -           | 47,690,579         | -           | 53,814,809         | -   | +12.8        |
| Lead..... lb.  | 339,105,079 | 10,624,772         | 383,190,909 | 14,993,809         | +13.0   | +41.1        |
| Manganese ore..... ton   | 100         | 800                | 221         | 1,596              | +121.0  | +99.5        |
| Nickel..... lb.  | 138,516,240 | 35,345,103         | 169,739,393 | 43,876,525         | +22.5   | +24.1        |
| Palladium, rhodium, irid-<br>ium, etc..... fine oz.                  | 84,772      | 1,962,937          | 103,671     | 2,453,075          | +22.3   | +26.5        |
| Platinum..... " "  | 105,374     | 3,445,730          | 131,571     | 5,320,731          | +24.9   | +54.4        |
| Selenium..... lb.  | 366,425     | 703,536            | 350,857     | 621,017            | -4.2  | -11.7        |
| Silver..... fine oz.   | 10,618,558  | 10,767,148         | 18,334,457  | 8,273,804          | +10.3   | -23.2        |
| Tellurium..... lb.   | 16,425      | 32,650             | 35,591      | 62,997             | +116.7  | +91.8        |
| Titanium ore..... ton  | 2,288       | 16,400             | 2,560       | 18,318             | +12.2   | +11.7        |
| Zinc..... lb.  | 320,640,556 | 9,936,908          | 333,182,736 | 11,045,007         | +3.9  | +11.2        |
| <b>Totals, Metallic Minerals..</b>                                   | -           | <b>221,800,849</b> | -           | <b>259,425,194</b> | -   | <b>+17.0</b> |
| <b>NON-METALLICS.</b>  |             |                    |             |                    |   |              |
| <b>Fuels.</b>  |             |                    |             |                    |   |              |
| Coal..... ton  | 13,888,006  | 41,963,110         | 15,229,182  | 45,791,894         | +9.7  | +9.1         |
| Natural gas..... M cu. ft.   | 24,910,786  | 9,363,141          | 28,113,348  | 10,762,243         | +13.9   | +14.9        |
| Peat..... ton  | 1,340       | 5,701              | 1,341       | 7,876              | +0.1  | +28.0        |
| Petroleum, crude..... bbl.   | 1,446,620   | 3,452,188          | 1,500,374   | 3,421,767          | +3.7  | +2.0         |
| <b>Totals, Fuels.....</b>  | -           | <b>54,824,200</b>  | -           | <b>59,983,320</b>  | -   | <b>+9.4</b>  |
| <b>Other Non-Metallic Minerals.</b>                                  |             |                    |             |                    |   |              |
| Asbestos..... ton  | 210,467     | 7,054,614          | 301,287     | 9,958,183          | +43.2   | +41.2        |
| Bituminous sands..... " "  | 40          | 160                | Nil         | -                  | -   | -            |
| Diatomite..... " "   | 823         | 33,140             | 615         | 13,650             | -25.3   | -58.8        |
| Feldspar..... " "  | 17,742      | 144,330            | 17,840      | 154,475            | +0.6  | +7.0         |
| Fluorspar..... " "   | 75          | 900                | 75          | 900                | Nil   | Nil          |
| Graphite..... " "  | 1           | 79,781             | 1           | 83,812             | -   | +11.3        |
| Grindstones..... ton   | 708         | 34,010             | 569         | 24,724             | -19.6   | -27.8        |
| Gypsum..... " "  | 541,844     | 932,202            | 833,522     | 1,278,971          | +53.9   | +37.2        |
| Iron oxides (ochre)..... " "   | 5,516       | 77,075             | 5,854       | 99,630             | +6.1  | +9.1         |
| Magnesian dolomite..... " "  | 1           | 483,084            | 1           | 768,742            | -   | +58.2        |
| Magnesium sulphate..... ton  | 340         | 7,965              | 654         | 13,712             | +92.4   | +72.2        |
| Mica..... lb.  | 1,255,616   | 82,038             | 1,601,557   | 74,556             | +27.6   | +9.1         |
| Mineral water..... Imp. gal.   | 146,516     | 16,590             | 154,286     | 18,516             | +5.3  | +11.6        |
| Nepheline-syenite..... " "   | Nil         | -                  | 1           | 37,426             | -   | -            |
| Phosphate..... ton   | 186         | 1,103              | 525         | 4,927              | +182.3  | +346.7       |
| Quartz..... " "  | 233,002     | 424,882            | 1,046,649   | 507,781            | +349.2  | +40.7        |
| Salt..... " "  | 300,343     | 1,880,978          | 391,316     | 1,773,144          | +8.6  | +5.7         |
| Silica brick..... M  | 2,461       | 96,194             | 2,393       | 97,285             | -2.8  | +1.1         |
| Soapstone..... " "   | 1           | 32,053             | 1           | 32,770             | -   | +2.2         |
| Sodium carbonate..... ton  | 242         | 2,430              | 192         | 1,677              | -20.7   | -31.0        |
| Sodium sulphate..... " "   | 44,817      | 343,704            | 75,598      | 555,681            | +68.7   | +60.8        |
| Sulphur <sup>2</sup> ..... " "                                       | 67,446      | 634,235            | 122,132     | 1,033,055          | +81.1   | +62.9        |
| Talc..... " "  | 13,803      | 139,479            | 14,508      | 144,500            | +5.1  | +3.6         |
| <b>Totals, Other Non-Metallic Minerals.....</b>                      | -           | <b>12,504,008</b>  | -           | <b>16,740,117</b>  | -   | <b>+33.9</b> |
| <b>Totals, Non-Metallic Minerals.....</b>                            | -           | <b>67,328,208</b>  | -           | <b>76,723,437</b>  | -   | <b>+13.9</b> |

<sup>1</sup> Not available.<sup>2</sup> Sulphur content of pyrites shipped and estimated sulphur contained in the sulphuric acid made from smelter gases.

## 2.—Mineral Production of Canada, calendar years 1935 and 1936—concluded.

| Mineral.  | 1935.      |             | 1936.      |             | P.C. Increase (+) or Decrease (—) in 1936. |        |
|---|------------|-------------|------------|-------------|--|--------|
|   | Quantity.  | Value.      | Quantity.  | Value.      | Quantity.                                  | Value. |
|   |            | \$          |            | \$          | p.c.                                       | p.c.   |
| <b>CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.</b>      |            |             |            |             |  |        |
| <i>Clay Products.</i>                                     |            |             |            |             |  |        |
| Brick—  |            |             |            |             |  |        |
| Soft Mud Process—   |            |             |            |             |  |        |
| Face..... M   | 6,995      | 122,215     | 6,097      | 111,378     | —12.8                                      | —9.2   |
| Common..... M   | 21,197     | 259,504     | 24,180     | 302,690     | +14.1                                      | +16.6  |
| Stiff Mud Process (wire cut)—                             |            |             |            |             |  |        |
| Face..... M   | 25,289     | 500,066     | 30,218     | 575,765     | +19.5                                      | +15.1  |
| Common..... M   | 32,334     | 437,123     | 35,592     | 484,078     | +10.1                                      | +10.7  |
| Dry Press—  |            |             |            |             |  |        |
| Face..... M   | 8,454      | 175,042     | 8,961      | 165,924     | +6.0                                       | —5.5   |
| Common..... M   | 6,381      | 55,253      | 10,241     | 100,785     | +60.5                                      | +52.4  |
| Fancy or ornamental brick..... M                          | 13         | 728         | 25         | 1,374       | +92.3                                      | +88.7  |
| Sewer brick..... M  | 175        | 5,236       | 418        | 6,778       | +138.9                                     | +20.4  |
| Paving brick..... M                                       | 15         | 627         | 116        | 3,149       | +673.3                                     | +402.2 |
| Firebrick..... M  | 1,817      | 90,140      | 2,548      | 118,923     | +40.2                                      | +31.9  |
| Fireclay and other clay ton                               | 2,272      | 15,574      | 2,437      | 17,689      | +7.3                                       | +13.3  |
| Kaolin.....   | 170        | 1,520       | Nil        | —           | —  | —      |
| Fireclay blocks and shapes..                              | 1          | 71,344      | 1          | 65,171      | —  | —8.7   |
| Hollow blocks..... ton                                    | 47,195     | 344,608     | 58,501     | 467,860     | +24.0                                      | +35.8  |
| Roofing tile..... No.                                     | 82,015     | 3,669       | 52,730     | 2,139       | —35.7                                      | —41.7  |
| Floor tile (quarries).....sq. ft.                         | 51,765     | 7,629       | 97,738     | 13,798      | +88.8                                      | +80.9  |
| Ceramic tile.....   | 1          | 615         | Nil        | —           | —  | —      |
| Drain tile..... M   | 7,124      | 205,330     | 8,148      | 214,590     | +14.4                                      | +4.5   |
| Sewer pipe, copings, flue linings, etc.....               | 1          | 481,559     | 1          | 588,485     | —  | +22.2  |
| Pottery, glazed or unglazed.                              | 1          | 220,711     | 1          | 218,402     | —  | —1.0   |
| Bentonite..... ton  | 41         | 781         | 120        | 180         | +192.7                                     | —76.9  |
| Other clay products.....                                  | 1          | 13,274      | 1          | 11,919      | —  | —10.2  |
| Totals, Clay Products..                                   | —          | 3,012,563   | —          | 3,471,027   | —  | +15.2  |
| <i>Other Structural Materials.</i>                        |            |             |            |             |  |        |
| Cement..... bbl.  | 3,648,086  | 5,580,043   | 4,508,718  | 6,908,192   | +23.6                                      | +23.8  |
| Lime..... ton   | 405,419    | 2,925,791   | 468,401    | 3,335,970   | +15.6                                      | +14.0  |
| Sand and gravel.....                                      | 21,213,489 | 6,369,440   | 22,124,160 | 6,921,399   | +4.3                                       | +3.3   |
| Slate..... “  | 1,129      | 4,329       | 1,247      | 5,414       | +10.6                                      | +25.1  |
| Stone—  |            |             |            |             |  |        |
| Granite..... “  | 326,354    | 1,126,287   | 941,743    | 1,319,313   | +188.6                                     | +17.2  |
| Limestone..... “  | 3,631,065  | 3,253,573   | 3,731,548  | 3,143,872   | +2.8                                       | —3.3   |
| Marble..... “   | 15,975     | 85,369      | 22,866     | 169,698     | +43.2                                      | +98.8  |
| Sandstone..... “  | 342,324    | 838,005     | 285,808    | 495,869     | —16.7                                      | —40.8  |
| Totals, Other Structural Materials.....                   | —          | 20,202,837  | —          | 23,290,714  | —  | +10.4  |
| Totals, Clay Products and Other Structural Materials..... | —          | 23,215,400  | —          | 25,770,741  | —  | +11.0  |
| Grand Totals (Canadian Funds).....                        | —          | 312,344,457 | —          | 361,919,372 | —  | +15.9  |

1 Not available.

**Volume of Mineral Production in Recent Years.**—An interesting comparison of the mineral production of the two years 1935 and 1936 is furnished in Table 3.

The percentage increase or decrease in quantity production of the individual minerals is shown in Table 2 above, but, owing to the many different units in which the quantities of different minerals are expressed, the total volume of production from year to year is difficult to compare, while the wide variations in prices make comparisons of total values misleading. Table 3 constitutes an attempt to overcome these difficulties by working out what the values would have been in the later

year if prices had remained the same as in the earlier, thus obtaining the increases or decreases due to changes in quantity alone; these are shown in the last column.

Mineral production in 1936 increased materially when compared with 1935. Table 3 shows that there was an increase of 14.6 p.c. in physical volume. There was a healthy increase in the volume of production in all divisions of the mineral industry, while in the case of non-metallic minerals other than fuels, the gain amounted to no less than 50 p.c. The average price level was slightly lower in all divisions except metallic minerals.

It is interesting to note the uneven influence of the economic disturbances of recent years upon different divisions of the mineral industry. Prior to 1935, production in Canada reached its highest recorded value of \$310,850,000 in 1929. The production of metallic minerals actually expanded further in volume in 1930, and in 1932 was still 3.7 p.c. greater than in 1929. Drastic declines had occurred in the volume of production in other divisions, fuels being reduced 28.9 p.c., other non-metallics 47.8 p.c., clay products 72.1 p.c., and other structural materials 57.6 p.c. compared with 1929. The rapid decline in prices was arrested by 1933 and in that year there was increased volume of production in both metallic and non-metallic minerals, but production declined further in clay products to only 20 p.c. and in other structural materials to only 31 p.c. of their respective volumes in 1929. Since then, there has been improvement in all divisions of the industry. Compared with 1929, the volume of production in 1936 was 60.1 p.c. greater for metallic minerals, 10.1 p.c. smaller for fuels, 9.8 p.c. greater for other non-metallics, 71.1 p.c. smaller for clay products, 49.9 p.c. smaller for other structural materials, and 17.5 p.c. larger for the whole mineral industry. Preliminary figures for 1937 indicate a further considerable growth in the production of metals and a continuation of the recovery in each of the other divisions.

3.—Value of the Mineral Production of Canada in 1936, Compared with 1935, together with the Amounts of the Change Due to Price Fluctuations and Quantity Fluctuations, respectively, by Items.

| Item.                                 | Actual Value, 1936. | Value at Prices of 1935. | Actual Value, 1935. | Actual Increase (+) or Decrease (-). | Due to Higher (+) or Lower (-) Prices. | Due to Larger (+) or Smaller (-) Quantities. |
|---------------------------------------|---------------------|--------------------------|---------------------|--------------------------------------|--|--|
|                                       | \$ '000             | \$ '000                  | \$ '000             | \$ '000                              | \$ '000                                | \$ '000                                      |
| <b>METALLICS.</b>                     |                     |                          |                     |                                      |  |  |
| Arsenic.....                          | 42                  | 41                       | 75                  | -33                                  | +1                                     | -34  |
| Bismuth.....                          | 361                 | 350                      | 13                  | +348                                 | +11                                    | +337   |
| Cadmium.....                          | 699                 | 597                      | 441                 | +258                                 | +102                                   | +156   |
| Chromite.....                         | 14                  | 11                       | 15                  | -1                                   | +3                                     | -4   |
| Cobalt.....                           | 805                 | 666                      | 513                 | +292                                 | +139                                   | +153   |
| Copper.....                           | 39,614              | 33,632                   | 32,312              | +7,202                               | +5,832                                 | +1,370                                       |
| Gold.....                             | 77,473              | 77,473                   | 67,905              | +9,568                               | -                                      | +9,568                                       |
| Gold exchange equalization.....       | 53,815              | 54,421                   | 47,691              | +6,124                               | -606                                   | +6,730                                       |
| Lead.....                             | 14,994              | 11,495                   | 10,625              | +4,369                               | +3,499                                 | +870   |
| Nickel.....                           | 43,877              | 44,132                   | 35,345              | +8,532                               | -255                                   | +8,787                                       |
| Palladium, rhodium, etc.....          | 2,483               | 2,401                    | 1,063               | +1,520                               | +82                                    | +1,438                                       |
| Platinum.....                         | 5,321               | 4,302                    | 3,446               | +1,875                               | +1,019                                 | +856   |
| Selenium.....                         | 621                 | 674                      | 703                 | -82                                  | -53                                    | -29  |
| Silver.....                           | 8,274               | 11,917                   | 10,767              | -2,443                               | -3,643                                 | +1,150                                       |
| Tellurium.....                        | 63                  | 71                       | 33                  | +30                                  | -8                                     | +38  |
| Titanium ore.....                     | 18                  | 18                       | 16                  | +2                                   | -                                      | +2   |
| Zinc.....                             | 11,045              | 9,995                    | 9,937               | +1,108                               | +1,050                                 | +58  |
| Other metallics.....                  | 1                   | 2                        | 1                   | -                                    | -1                                     | +1   |
| <b>Totals, Metallic Minerals.....</b> | <b>250,425</b>      | <b>252,253</b>           | <b>221,801</b>      | <b>+37,624</b>                       | <b>+7,172</b>                          | <b>+30,452</b>                               |
| Increases, p.c.....                   | -                   | -                        | -                   | +16.9                                | +3.2                                   | +13.7  |

3.—Value of the Mineral Production of Canada in 1936, Compared with 1935, together with the Amounts of the Change Due to Price Fluctuations and Quantity Fluctuations, respectively, by Items—concluded.

| Item.  | Actual Value, 1936. | Value at Prices of 1935. | Actual Value, 1935. | Actual Increase (+) or Decrease (-). | Due to Higher (+) or Lower (-) Prices. | Due to Larger (+) or Smaller (-) Quantities. |
|--|---------------------|--------------------------|---------------------|--------------------------------------|--|--|
|  | \$ '000             | \$ '000                  | \$ '000             | \$ '000                              | \$ '000                                | \$ '000                                      |
| <b>NON-METALLICS.</b>                                |                     |                          |                     |                                      |  |  |
| <i>Fuels.</i>  |                     |                          |                     |                                      |  |  |
| Coal .....   | 45,792              | 45,992                   | 41,963              | +3,829                               | -200                                   | +4,029                                       |
| Natural gas .....                                    | 10,762              | 10,633                   | 9,363               | +1,399                               | +79                                    | +1,320                                       |
| Petroleum, crude .....                               | 3,422               | 3,616                    | 3,492               | -70                                  | -194                                   | +124   |
| Peat .....   | 7                   | 6                        | 6                   | +1                                   | +1                                     | -  |
| <b>Totals, Fuels.</b>                                | <b>59,983</b>       | <b>60,297</b>            | <b>54,824</b>       | <b>+5,159</b>                        | <b>-314</b>                            | <b>+5,473</b>                                |
| Increases or decreases, p.c....                      | -                   | -                        | -                   | +9.4                                 | -0.6                                   | +10.0  |
| <i>Other Non-Metallic Minerals.</i>                  |                     |                          |                     |                                      |  |  |
| Asbestos .....                                       | 9,958               | 10,099                   | 7,055               | +2,903                               | -141                                   | +3,044                                       |
| Diatomite .....                                      | 14                  | 25                       | 33                  | -19                                  | -11                                    | -8   |
| Feldspar .....                                       | 154                 | 145                      | 144                 | +10                                  | +9                                     | +1   |
| Graphite .....                                       | 80                  | 92                       | 80                  | +9                                   | -3                                     | +12  |
| Grindstones .....                                    | 25                  | 27                       | 34                  | -9                                   | -2                                     | -7   |
| Gypsum .....   | 1,279               | 1,434                    | 932                 | +347                                 | -155                                   | +502   |
| Iron oxides .....                                    | 70                  | 82                       | 77                  | -7                                   | -12                                    | +5   |
| Magnesium dolomite .....                             | 709                 | 701                      | 486                 | +213                                 | +63                                    | +215   |
| Magnesium sulphate .....                             | 14                  | 15                       | 8                   | +6                                   | -1                                     | +7   |
| Mica .....   | 75                  | 113                      | 82                  | -7                                   | -37                                    | +30  |
| Mineral water .....                                  | 19                  | 17                       | 17                  | +2                                   | +2                                     | -  |
| Nepheline-syenite .....                              | 37                  | 37 <sup>1</sup>          | -                   | +37                                  | -                                      | +37  |
| Quartz .....   | 598                 | 1,905                    | 425                 | +173                                 | -1,307                                 | +1,480                                       |
| Salt .....   | 1,773               | 2,043                    | 1,581               | -108                                 | -270                                   | +162   |
| Silica brick .....                                   | 97                  | 94                       | 96                  | +1                                   | +3                                     | -2   |
| Soapstone .....                                      | 33                  | 44                       | 32                  | +1                                   | -11                                    | +12  |
| Sodium sulphate .....                                | 553                 | 550                      | 344                 | +209                                 | -27                                    | +239   |
| Sulphur .....  | 1,033               | 1,148                    | 634                 | +399                                 | -115                                   | +514   |
| Talc .....   | 145                 | 147                      | 139                 | +6                                   | -2                                     | +8   |
| Other non-metallics .....                            | 5                   | 6                        | 5                   | -                                    | -1                                     | +1   |
| <b>Totals, Other Non-Metallic Minerals.</b>          | <b>16,740</b>       | <b>18,753</b>            | <b>12,564</b>       | <b>+4,236</b>                        | <b>-2,613</b>                          | <b>+6,849</b>                                |
| Increases or decreases, p.c....                      | -                   | -                        | -                   | +33.9                                | -10.1                                  | +50.0  |
| <b>CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.</b> |                     |                          |                     |                                      |  |  |
| <i>Clay Products.</i>                                |                     |                          |                     |                                      |  |  |
| Brick—Soft Mud (face) .....                          | 111                 | 107                      | 122                 | -11                                  | +4                                     | -15  |
| Process common .....                                 | 303                 | 296                      | 259                 | +44                                  | +7                                     | +37  |
| Stiff Mud (face) .....                               | 576                 | 597                      | 500                 | +76                                  | -21                                    | +97  |
| Process common (wire cut) .....                      | 484                 | 481                      | 437                 | +47                                  | +3                                     | +44  |
| Dry Press (face) .....                               | 166                 | 186                      | 175                 | -9                                   | -20                                    | +11  |
| Common .....   | 101                 | 89                       | 55                  | +46                                  | +12                                    | +34  |
| Fancy or ornamental .....                            | 1                   | 1                        | 1                   | -                                    | -                                      | -  |
| Sewer brick .....                                    | 7                   | 13                       | 5                   | +2                                   | -6                                     | +8   |
| Fire brick .....                                     | 110                 | 126                      | 96                  | +20                                  | -7                                     | +26  |
| Fireclay and other clay .....                        | 18                  | 18                       | 16                  | +2                                   | -18                                    | +2   |
| Fireclay blocks, etc. ....                           | 65                  | 69                       | 71                  | -6                                   | -4                                     | -2   |
| Hollow blocks .....                                  | 468                 | 427                      | 345                 | +123                                 | +41                                    | +82  |
| Floor tile .....                                     | 14                  | 15                       | 8                   | +6                                   | -1                                     | +7   |
| Drain tile .....                                     | 215                 | 235                      | 205                 | +10                                  | -20                                    | +30  |
| Sewer pipe, copings, etc. ....                       | 588                 | 644                      | 482                 | +166                                 | -56                                    | +162   |
| Pottery—glazed or not .....                          | 218                 | 223                      | 221                 | -3                                   | -5                                     | +2   |
| Other clay products .....                            | 17                  | 18                       | 20                  | -3                                   | -                                      | -2   |
| <b>Totals, Clay Products.</b>                        | <b>3,471</b>        | <b>3,545</b>             | <b>3,012</b>        | <b>+459</b>                          | <b>-74</b>                             | <b>+533</b>                                  |
| Increases or decreases, p.c....                      | -                   | -                        | -                   | +15.2                                | -2.4                                   | +17.6  |
| <i>Other Structural Materials.</i>                   |                     |                          |                     |                                      |  |  |
| Cement .....   | 6,908               | 6,898                    | 5,580               | +1,328                               | +10                                    | +1,318                                       |
| Lime .....   | 3,336               | 3,382                    | 2,926               | +410                                 | -45                                    | +455   |
| Sand and gravel .....                                | 6,921               | 6,637                    | 6,359               | +532                                 | +284                                   | +245   |
| Stone .....  | 5,135               | 6,129                    | 5,508               | -173                                 | -994                                   | +821   |
| <b>Totals, Other Structural Materials.</b>           | <b>22,300</b>       | <b>23,046</b>            | <b>20,203</b>       | <b>+2,097</b>                        | <b>-746</b>                            | <b>+2,843</b>                                |
| Increases or decreases, p.c....                      | -                   | -                        | -                   | +10.4                                | -3.7                                   | +14.1  |
| <b>Grand Totals.</b>                                 | <b>361,919</b>      | <b>357,894</b>           | <b>312,344</b>      | <b>+49,575</b>                       | <b>+4,025</b>                          | <b>+45,550</b>                               |
| Increases, p.c. ....                                 | -                   | -                        | -                   | +15.9                                | +1.3                                   | +14.6  |

<sup>1</sup>Since no production was reported for 1935 the price in that year is assumed to be the same as in 1936 and therefore the increase is entirely due to quantity.



## Subsection 2.—Provincial Distribution of Mineral Production.

The principal mineral-producing province of Canada in recent years has been Ontario, which accounted for 51.0 p.c. of the Dominion total in 1936. The rise in the price of gold has been especially favourable to Ontario's mineral production, while the Sudbury nickel-copper deposits are another outstanding feature in the mineral resources of the province. British Columbia holds second place in the value of minerals produced with 15.0 p.c. of the Dominion totals in 1936. The mineral resources of British Columbia are probably more varied than those of any other province, since its production includes most of the important metals as well as substantial quantities of coal. Mineral production in Quebec has increased greatly in the post-war period, accounting for 13.7 p.c. of the total for Canada in 1936. Whereas formerly non-metallies (especially asbestos) and structural materials made up nearly all of its mineral production, more than half the value is now made up of metals, particularly gold and copper. Nova Scotia and Alberta are the most important coal-producing provinces. Manitoba and Saskatchewan, in recent years, have been making a growing contribution to the production of gold, copper, and zinc in the Dominion. The total value of mineral production in each of the provinces for each year since 1911 is given in Table 4.

## 4.—Mineral Production of Canada, by Provinces, calendar years 1911-37.

NOTE.—Figures for the years 1899-1910, inclusive, will be found at p. 345 of the 1933 Year Book.

| Calendar Year. | Nova Scotia. | New Brunswick. | Quebec.    | Ontario.    | Manitoba.  | Saskatchewan. | Alberta.   | British Columbia. | Yukon. <sup>1</sup> |
|----------------|--------------|----------------|------------|-------------|------------|---------------|------------|-------------------|---------------------|
|                | \$           | \$             | \$         | \$          | \$         | \$            | \$         | \$                | \$                  |
| 1911...        | 15,409,397   | 612,830        | 9,304,717  | 42,790,162  | 1,791,772  | 636,706       | 6,662,673  | 21,299,305        | 4,707,432           |
| 1912...        | 18,922,236   | 771,004        | 11,686,998 | 51,985,376  | 2,463,074  | 1,165,642     | 12,073,589 | 30,076,635        | 5,993,242           |
| 1913...        | 19,376,183   | 1,102,618      | 13,475,534 | 59,167,749  | 2,214,496  | 881,142       | 15,054,046 | 28,086,312        | 6,276,737           |
| 1914...        | 17,584,689   | 1,014,570      | 11,836,929 | 53,034,677  | 2,413,499  | 712,313       | 12,684,234 | 24,164,039        | 5,418,185           |
| 1915...        | 18,088,342   | 908,467        | 11,619,275 | 61,071,287  | 1,318,387  | 451,933       | 9,909,347  | 28,689,426        | 5,067,708           |
| 1916...        | 20,042,269   | 1,118,187      | 14,406,598 | 80,461,323  | 1,823,576  | 590,473       | 13,267,543 | 39,969,062        | 5,491,610           |
| 1917...        | 21,104,542   | 1,436,024      | 17,400,077 | 89,006,600  | 2,625,264  | 800,651       | 16,527,533 | 36,141,026        | 4,482,202           |
| 1918...        | 22,317,108   | 2,144,017      | 19,605,347 | 94,694,093  | 3,120,600  | 1,019,781     | 23,109,877 | 42,935,338        | 2,355,681           |
| 1919...        | 23,445,215   | 1,770,945      | 21,267,947 | 67,917,998  | 2,868,378  | 1,821,964     | 21,087,582 | 34,865,427        | 1,940,934           |
| 1920...        | 34,130,017   | 2,491,787      | 28,830,214 | 81,715,808  | 4,238,461  | 1,837,468     | 33,588,456 | 39,411,728        | 1,576,726           |
| 1921...        | 28,912,111   | 1,901,505      | 15,157,094 | 57,356,651  | 1,934,117  | 1,114,220     | 30,562,229 | 33,230,460        | 1,754,955           |
| 1922...        | 25,923,499   | 2,203,692      | 17,646,529 | 65,866,029  | 2,258,942  | 1,255,470     | 27,872,136 | 39,423,962        | 1,785,573           |
| 1923...        | 29,645,939   | 2,402,457      | 20,308,763 | 80,825,851  | 1,768,037  | 1,047,583     | 31,257,536 | 43,757,388        | 2,972,823           |
| 1924...        | 28,820,352   | 1,909,260      | 19,136,504 | 86,398,669  | 1,534,249  | 1,288,100     | 22,344,040 | 32,295,533        | 552,812             |
| 1925...        | 17,925,912   | 1,743,858      | 24,284,527 | 87,980,496  | 2,270,759  | 1,076,392     | 25,318,566 | 64,435,242        | 1,791,641           |
| 1926...        | 28,873,792   | 1,811,104      | 25,956,193 | 84,702,296  | 3,073,528  | 1,193,394     | 26,977,027 | 65,622,976        | 2,226,813           |
| 1927...        | 30,111,221   | 2,148,535      | 28,870,403 | 89,982,962  | 2,888,912  | 1,455,225     | 29,309,233 | 60,501,170        | 1,789,044           |
| 1928...        | 30,524,392   | 2,198,919      | 37,037,420 | 99,584,718  | 4,186,853  | 1,719,461     | 32,531,416 | 64,490,351        | 2,709,957           |
| 1929...        | 30,904,453   | 2,439,072      | 46,358,285 | 117,662,506 | 5,423,825  | 2,258,500     | 34,739,986 | 68,162,378        | 2,905,736           |
| 1930...        | 27,019,367   | 2,383,571      | 41,215,220 | 113,530,976 | 5,453,182  | 2,368,612     | 30,427,742 | 64,953,320        | 2,521,538           |
| 1931...        | 21,081,157   | 2,176,910      | 35,964,537 | 97,975,915  | 10,087,808 | 1,831,880     | 23,580,901 | 35,480,701        | 2,184,917           |
| 1932...        | 16,201,279   | 2,225,505      | 25,638,466 | 85,910,030  | 9,058,365  | 1,631,728     | 21,174,051 | 27,326,173        | 2,014,615           |
| 1933...        | 16,966,183   | 2,107,632      | 28,141,482 | 110,205,021 | 9,020,951  | 2,477,425     | 19,702,953 | 30,794,504        | 2,073,052           |
| 1934...        | 23,310,729   | 2,156,151      | 31,209,945 | 145,565,871 | 9,776,934  | 2,977,061     | 20,228,351 | 41,206,905        | 1,669,083           |
| 1935...        | 23,183,128   | 2,821,027      | 39,124,606 | 158,934,269 | 13,052,417 | 3,816,943     | 22,289,681 | 48,692,050        | 1,430,246           |
| 1936...        | 26,672,278   | 2,687,891      | 49,736,919 | 184,532,892 | 11,315,527 | 6,970,397     | 23,305,726 | 54,407,036        | 2,390,706           |
| 1937...        | 30,309,665   | 2,788,439      | 65,043,971 | 229,938,108 | 16,055,743 | 10,280,180    | 25,328,640 | 73,143,717        | 3,904,797           |

<sup>1</sup> Includes a production from the Northwest Territories in 1932-37.

<sup>2</sup> Figures for 1937 are subject to revision.

The quantities and values of the minerals produced in each province during 1936 are shown in Table 5. This table shows the different minerals which make up the mineral production of each province and also the particular province or provinces which contribute to the production of each mineral in Canada.

## 5.—Detailed Mineral Production of Canada, by Provinces, calendar year 1936.

NOTE.—The mineral production of Yukon and the Northwest Territories during the calendar year 1936 was as follows, in quantities and values: gold 50,359 fine oz., \$1,764,076 (including premium); lead 2,568,699 lb., \$109,513; silver 1,100,430 fine oz., \$496,591; coal 510 tons, \$2,286; petroleum 5,399 bbl., \$26,995; total, \$2,390,706. Radium and uranium salts were produced in Canada in 1936 from ores mined in the N.W.T., but statistics pertaining to those minerals are not available for publication. For Dominion totals by individual minerals, see Table 2. Dashes in this table indicate that there was no production reported for those provinces.

| Mineral.  | Nova Scotia.      | New Brunswick.   | Quebec.           | Ontario.           | Manitoba.        | Saskatchewan.    | Alberta.          | British Columbia. |
|---|-------------------|------------------|-------------------|--------------------|------------------|------------------|-------------------|-------------------|
| <b>METALLICS.</b>                                       |                   |                  |                   |                    |                  |                  |                   |                   |
| Arsenic (As <sub>2</sub> O <sub>3</sub> ).....lb.       | -                 | -                | -                 | 1,365,606          | -                | -                | -                 | -                 |
| \$  | -                 | -                | -                 | 42,491             | -                | -                | -                 | -                 |
| Bismuth.....lb.   | -                 | -                | -                 | 3,552              | -                | -                | -                 | 360,613           |
| \$  | -                 | -                | -                 | 3,510              | -                | -                | -                 | 357,007           |
| Cadmium.....lb.   | -                 | -                | -                 | -                  | 148,133          | 111,749          | -                 | 526,034           |
| \$  | -                 | -                | -                 | -                  | 131,838          | 99,457           | -                 | 468,170           |
| Chromite.....ton  | -                 | -                | 545               | 5,070              | -                | -                | -                 | -                 |
| \$  | -                 | -                | 8,508             | 87,691             | -                | -                | -                 | -                 |
| Cobalt.....lb.  | -                 | -                | -                 | 804,676            | -                | -                | -                 | -                 |
| \$  | -                 | -                | -                 | -                  | -                | -                | -                 | -                 |
| Copper.....lb.  | 779,307           | -                | 66,340,175        | 287,914,078        | 29,853,220       | 14,971,609       | -                 | 21,169,343        |
| \$  | 73,855            | -                | 6,287,058         | 26,898,920         | 2,829,190        | 1,418,859        | -                 | 2,006,219         |
| Gold.....fine oz.                                       | 11,960            | -                | 666,905           | 2,378,503          | 139,273          | 48,981           | 109               | 451,938           |
| \$  | 247,235           | -                | 13,786,150        | 49,168,019         | 2,879,028        | 1,012,527        | 2,253             | 9,842,387         |
| Estimated exchange equalization on gold produced.....\$ | 171,724           | -                | 9,575,533         | 34,150,941         | 1,900,705        | 703,277          | 1,565             | 6,489,001         |
| Lead.....lb.  | 1,901,712         | -                | 2,047,689         | 17,443             | -                | -                | -                 | 876,645,367       |
| \$  | 74,414            | -                | 80,126            | 683                | -                | -                | -                 | 14,738,133        |
| Manganese ore.....ton                                   | -                 | 221              | -                 | -                  | -                | -                | -                 | -                 |
| \$  | -                 | 1,596            | -                 | -                  | -                | -                | -                 | -                 |
| Nickel.....lb.  | -                 | -                | -                 | 169,739,393        | -                | -                | -                 | -                 |
| \$  | -                 | -                | -                 | 43,876,525         | -                | -                | -                 | -                 |
| Palladium, rhodium, iridium, etc.....fine oz.           | -                 | -                | -                 | 103,671            | -                | -                | -                 | -                 |
| \$  | -                 | -                | -                 | 2,483,075          | -                | -                | -                 | -                 |
| Platinum.....fine oz.                                   | -                 | -                | -                 | 131,551            | -                | -                | -                 | 20                |
| \$  | -                 | -                | -                 | 5,319,922          | -                | -                | -                 | 800               |
| Selenium.....lb.  | -                 | -                | 168,417           | 106,300            | 50,760           | 25,380           | -                 | -                 |
| \$  | -                 | -                | 298,008           | 188,151            | 89,845           | 44,923           | -                 | -                 |
| Silver.....fine oz.                                     | 107,642           | -                | 724,339           | 5,219,360          | 791,489          | 642,497          | 9                 | 9,748,715         |
| \$  | 48,576            | -                | 326,872           | 2,355,349          | 357,175          | 289,940          | 4                 | 4,399,308         |
| Tellurium.....lb.                                       | -                 | -                | 19,502            | 10,197             | 3,028            | 1,964            | -                 | -                 |
| \$  | -                 | -                | 34,519            | 18,049             | 6,953            | 3,479            | -                 | -                 |
| Titanium ore.....ton                                    | -                 | -                | 2,566             | -                  | -                | -                | -                 | -                 |
| \$  | -                 | -                | 18,318            | -                  | -                | -                | -                 | -                 |
| Zinc.....lb.  | 6,180,219         | -                | 6,890,123         | -                  | 36,744,951       | 27,692,869       | -                 | 255,668,574       |
| \$  | 204,874           | -                | 228,606           | -                  | 1,215,095        | 918,019          | -                 | 8,475,413         |
| <b>Totals, Metals.....\$</b>                            | <b>820,678</b>    | <b>1,596</b>     | <b>30,643,788</b> | <b>165,315,351</b> | <b>9,511,829</b> | <b>4,490,478</b> | <b>3,822</b>      | <b>46,276,442</b> |
| <b>NON-METALLICS.</b>                                   |                   |                  |                   |                    |                  |                  |                   |                   |
| <i>Fuels.</i>   |                   |                  |                   |                    |                  |                  |                   |                   |
| Coal.....ton  | 6,649,102         | 368,616          | -                 | -                  | 4,029            | 1,020,792        | 5,696,660         | 1,489,171         |
| \$  | 22,973,281        | 1,190,032        | -                 | -                  | 9,525            | 1,463,680        | 14,059,705        | 5,499,425         |
| Natural gas M cu.ft.                                    | -                 | 600,246          | -                 | 10,066,743         | 600              | 90,839           | 17,407,820        | -                 |
| \$  | -                 | 298,819          | -                 | 6,062,294          | 180              | 33,986           | 4,376,720         | -                 |
| Peat.....ton  | -                 | -                | 45                | 1,296              | -                | -                | -                 | -                 |
| \$  | -                 | -                | 255               | 7,121              | -                | -                | -                 | -                 |
| Petroleum, crude.....bbl.                               | -                 | 17,112           | -                 | 165,495            | -                | -                | 1,312,368         | -                 |
| \$  | -                 | 24,075           | -                 | 350,767            | -                | -                | 3,019,930         | -                 |
| <b>Totals, Fuels.....\$</b>                             | <b>22,973,281</b> | <b>1,512,920</b> | <b>255</b>        | <b>6,410,182</b>   | <b>9,705</b>     | <b>1,497,665</b> | <b>22,056,355</b> | <b>5,499,425</b>  |
| <i>Other Non-Metallics.</i>                             |                   |                  |                   |                    |                  |                  |                   |                   |
| Asbestos.....ton  | -                 | -                | 301,287           | -                  | -                | -                | -                 | -                 |
| \$  | -                 | -                | 958,183           | -                  | -                | -                | -                 | -                 |

<sup>1</sup> Not available.

## 5.—Detailed Mineral Production of Canada, by Provinces, calendar year 1936—con.

| Mineral.   | Nova<br>Scotia. | New<br>Brunswick. | Quebec.    | Ontario.  | Mani-<br>toba. | Saskat-<br>chewan. | Alberta.   | British<br>Columbia. |
|--|-----------------|-------------------|------------|-----------|----------------|--------------------|------------|----------------------|
| <i>Other Non-Metallies</i><br>—concluded.              |                 |                   |            |           |                |                    |            |                      |
| Diatomite. .... ton                                    | 565             | —                 | —          | 40        | —              | —                  | —          | 10                   |
| \$   | 11,300          | —                 | —          | 2,000     | —              | —                  | —          | 350                  |
| Feldspar..... ton                                      | —               | —                 | 8,115      | 8,409     | 1,322          | —                  | —          | —                    |
| \$   | —               | —                 | 75,703     | 70,849    | 7,932          | —                  | —          | —                    |
| Floorspar..... ton                                     | —               | —                 | —          | 75        | —              | —                  | —          | —                    |
| \$   | —               | —                 | —          | 900       | —              | —                  | —          | —                    |
| Graphite..... ton                                      | —               | —                 | —          | 88,812    | —              | —                  | —          | —                    |
| \$   | —               | —                 | —          | —         | —              | —                  | —          | —                    |
| Grindstones (in-<br>cludes pulp-<br>stones, etc.). ton | 70              | 412               | —          | —         | —              | —                  | —          | 87                   |
| \$   | 2,242           | 17,982            | —          | —         | —              | —                  | —          | 4,500                |
| Gypsum..... ton  | 729,019         | 38,470            | —          | 40,191    | 12,064         | —                  | —          | 14,078               |
| \$   | 808,294         | 123,560           | —          | 182,783   | 37,076         | —                  | —          | 77,258               |
| Iron oxides<br>(ochre)..... ton                        | —               | —                 | 5,458      | —         | —              | —                  | —          | 396                  |
| \$   | —               | —                 | 65,630     | —         | —              | —                  | —          | 4,000                |
| Magnesitic<br>dolomite..... \$                         | —               | —                 | 768,742    | —         | —              | —                  | —          | —                    |
| Magnesium<br>sulphate..... ton                         | —               | —                 | —          | —         | —              | —                  | —          | 654                  |
| \$   | —               | —                 | —          | —         | —              | —                  | —          | 13,712               |
| Mica..... lb.  | —               | —                 | 544,214    | 1,057,343 | —              | —                  | —          | —                    |
| \$   | —               | —                 | 63,123     | 11,433    | —              | —                  | —          | —                    |
| Mineral<br>waters, Imp. gal.                           | —               | —                 | 131,186    | 23,100    | —              | —                  | —          | —                    |
| \$   | —               | —                 | 17,399     | 1,117     | —              | —                  | —          | —                    |
| Nepheline-<br>syenite..... \$                          | —               | —                 | —          | 37,426    | —              | —                  | —          | —                    |
| Phosphate..... ton                                     | —               | —                 | 525        | —         | —              | —                  | —          | —                    |
| \$   | —               | —                 | 4,927      | —         | —              | —                  | —          | —                    |
| Quartz..... ton  | 6,764           | —                 | 78,975     | 884,538   | 90             | 76,059             | —          | 146                  |
| \$   | 10,819          | —                 | 320,634    | 210,037   | 45             | 49,468             | —          | 788                  |
| Salt..... ton  | 38,774          | —                 | —          | 350,044   | 2,498          | —                  | —          | —                    |
| \$   | 183,915         | —                 | —          | 1,557,078 | 32,161         | —                  | —          | —                    |
| Silica brick.... M                                     | 1,922           | —                 | —          | 471       | —              | —                  | —          | —                    |
| \$   | 70,570          | —                 | —          | 26,715    | —              | —                  | —          | —                    |
| Soapstone..... \$                                      | —               | —                 | 32,770     | —         | —              | —                  | —          | —                    |
| Sodium<br>carbonate..... ton                           | —               | —                 | —          | —         | —              | —                  | —          | 192                  |
| \$   | —               | —                 | —          | —         | —              | —                  | —          | 1,677                |
| Sodium<br>sulphate..... ton                            | —               | —                 | —          | —         | —              | 75,598             | —          | —                    |
| \$   | —               | —                 | —          | —         | —              | 552,681            | —          | —                    |
| Sulphur <sup>2</sup> ..... ton                         | —               | —                 | 43,084     | 14,152    | —              | —                  | —          | 64,896               |
| \$   | —               | —                 | 282,743    | 141,520   | —              | —                  | —          | 608,792              |
| Talc..... ton  | —               | —                 | —          | 14,461    | —              | —                  | —          | 47                   |
| \$   | —               | —                 | —          | 143,701   | —              | —                  | —          | 799                  |
| Totals, Other<br>Non-Metallies. \$                     | 1,087,140       | 141,542           | 11,589,854 | 2,480,362 | 127,204        | 602,139            | —          | 711,876              |
| Totals, Non-<br>Metallies.... \$                       | 24,060,421      | 1,654,468         | 11,590,109 | 8,890,544 | 136,909        | 2,099,894          | 22,656,355 | 6,205,301            |
| CLAY PRODUCTS<br>AND OTHER<br>STRUCTURAL<br>MATERIALS. |                 |                   |            |           |                |                    |            |                      |
| Clay Products.   |                 |                   |            |           |                |                    |            |                      |
| Brick—   |                 |                   |            |           |                |                    |            |                      |
| Soft Mud Pro-<br>cess—                                 |                 |                   |            |           |                |                    |            |                      |
| Face..... M  | 676             | —                 | 215        | 4,914     | —              | —                  | 58         | 234                  |
| \$   | 14,026          | —                 | 2,363      | 84,219    | —              | —                  | 1,332      | 9,447                |
| Common... M  | 4,546           | 1,477             | 2,482      | 8,443     | 2,639          | —                  | 2,504      | 2,089                |
| \$   | 52,702          | 20,653            | 22,057     | 113,088   | 40,958         | —                  | 23,928     | 29,304               |

<sup>1</sup> Not available.<sup>2</sup> Sulphur content of pyrites shipped and estimated sulphur contained in sulphuric acid made from waste smelter gases.

## 5.—Detailed Mineral Production of Canada, by Provinces, calendar year 1936—concl.

| Mineral.   | Nova Scotia.           | New Brunswick. | Quebec.    | Ontario.    | Manitoba.  | Saskatchewan. | Alberta.   | British Columbia. |
|--|------------------------|----------------|------------|-------------|------------|---------------|------------|-------------------|
| Clay Products—concluded.                                   |                        |                |            |             |            |               |            |                   |
| Brick—concluded.   |                        |                |            |             |            |               |            |                   |
| Stiff Mud Process (wirecut)—                               |                        |                |            |             |            |               |            |                   |
| Face..... M  | 53                     | 128            | 9,808      | 19,271      | 283        | 855           | 18         | 312               |
| Common.. M   | 901                    | 3,188          | 191,035    | 352,053     | 7,012      | 11,534        | 227        | 9,405             |
| ..... \$   | 606                    | 658            | 18,922     | 13,644      | -          | 824           | 110        | 1,233             |
| ..... \$   | 8,379                  | 8,279          | 248,647    | 197,475     | -          | 3,355         | 780        | 17,133            |
| Dry Press—   |                        |                |            |             |            |               |            |                   |
| Face..... M  | -                      | -              | 2,161      | 5,341       | -          | 87            | 1,372      | -                 |
| Common.. M   | -                      | -              | 52,096     | 95,755      | -          | 3,746         | 14,327     | -                 |
| ..... \$   | -                      | -              | -          | 8,905       | -          | 11            | 6,324      | -                 |
| ..... \$   | -                      | -              | -          | 57,079      | -          | 210           | 43,496     | -                 |
| Fancy or ornamental brick..... M                           | -                      | -              | -          | 24          | -          | -             | 1          | -                 |
| ..... \$   | -                      | -              | -          | 1,295       | -          | -             | 79         | -                 |
| Sewer brick. M   | -                      | -              | -          | 416         | -          | -             | -          | 2                 |
| ..... \$   | -                      | -              | -          | 6,723       | -          | -             | -          | 55                |
| Paving brick M   | -                      | -              | -          | -           | -          | -             | 100        | 16                |
| ..... \$   | -                      | -              | -          | -           | -          | -             | 2,508      | 646               |
| Firebrick.... M  | 6                      | -              | -          | -           | -          | 395           | 14         | 2,133             |
| ..... \$   | 210                    | -              | -          | -           | -          | 19,070        | 755        | 98,282            |
| Fireclay..... ton  | 1,214                  | 35             | -          | -           | -          | 621           | -          | 567               |
| ..... \$   | 3,902                  | 1,415          | -          | -           | -          | 4,065         | -          | 7,657             |
| Fireclay blocks and shapes... \$                           | 471                    | 894            | -          | -           | -          | 46,963        | -          | 10,638            |
| Tile—  |                        |                |            |             |            |               |            |                   |
| Hollow blocks..... ton                                     | 4,058                  | 332            | 16,786     | 30,055      | 377        | 500           | 3,022      | 3,341             |
| ..... \$   | 39,990                 | 2,828          | 135,144    | 223,545     | 3,903      | 5,100         | 24,504     | 32,546            |
| Roofing tile. No.  | -                      | -              | -          | 43,600      | -          | -             | -          | 9,130             |
| ..... \$   | -                      | -              | -          | 1,856       | -          | -             | -          | 283               |
| Floor tile (quarries) sq. ft.                              | -                      | -              | -          | 95,540      | -          | -             | -          | 2,198             |
| ..... \$   | -                      | -              | -          | 13,434      | -          | -             | -          | 814               |
| Drain tile... M  | 135                    | 771            | 438        | 6,000       | 64         | -             | 27         | 713               |
| ..... \$   | 3,670                  | 35,392         | 13,714     | 131,041     | 3,691      | -             | 1,751      | 25,325            |
| Sewer pipe, copings, flue linings, etc.... \$              | 230,130                | -              | 26,659     | 235,238     | -          | -             | 67,604     | 23,854            |
| Pottery, glazed or unglazed.. \$                           | -                      | 29,529         | -          | 51,507      | -          | -             | 134,491    | 2,875             |
| Bentonite..... ton   | -                      | -              | -          | -           | -          | -             | -          | 120               |
| ..... \$   | -                      | -              | -          | -           | -          | -             | -          | 180               |
| Other clay products..... \$                                | 867                    | 78             | -          | 9,587       | -          | -             | -          | 1,387             |
| Totals, Clay Products..... \$                              | 355,254                | 102,256        | 691,765    | 1,573,936   | 55,564     | 95,584        | 315,777    | 280,891           |
| Other Structural Materials.                                |                        |                |            |             |            |               |            |                   |
| Cement..... bbl.   | -                      | -              | 2,093,130  | 1,542,463   | 348,042    | -             | 243,534    | 281,549           |
| ..... \$   | -                      | -              | 2,045,074  | 2,180,895   | 783,095    | -             | 482,197    | 518,931           |
| Lime..... ton  | 15,064                 | 17,842         | 133,254    | 246,593     | 21,700     | -             | 9,129      | 24,159            |
| ..... \$   | 119,230                | 128,016        | 718,585    | 1,946,060   | 211,035    | -             | 78,259     | 134,785           |
| Sand and gravel..... ton                                   | 1,947,471 <sup>1</sup> | 970,945        | 5,490,280  | 8,498,153   | 1,852,600  | 716,910       | 594,350    | 1,733,415         |
| ..... \$   | 941,360 <sup>1</sup>   | 567,797        | 1,418,231  | 2,227,620   | 545,130    | 284,531       | 339,028    | 506,706           |
| Slate..... ton   | -                      | -              | 803        | 260         | -          | -             | -          | 184               |
| ..... \$   | -                      | -              | 855        | 2,080       | -          | -             | -          | 2,479             |
| Stone..... ton   | 254,572                | 59,431         | 1,513,249  | 2,706,420   | 49,506     | -             | 13,916     | 384,571           |
| ..... \$   | 375,329                | 133,753        | 1,728,512  | 2,396,376   | 71,965     | -             | 29,388     | 393,411           |
| Totals, Other Structural Materials..... \$                 | 1,435,925              | 829,571        | 6,811,257  | 8,753,031   | 1,611,225  | 281,531       | 929,772    | 1,644,402         |
| Totals, Clay Products and Other Structural Materials... \$ | 1,791,179              | 931,827        | 7,503,022  | 10,326,967  | 1,666,789  | 380,115       | 1,245,549  | 1,925,293         |
| Grand Totals (Canadian Funds)..... \$                      | 26,672,278             | 2,587,891      | 49,736,919 | 134,532,892 | 11,315,527 | 6,970,397     | 23,305,726 | 54,402,036        |

<sup>1</sup> Includes 17,975 tons valued at \$2,063 from Prince Edward Island.

### Section 3.—Industrial Statistics of Mines and Minerals— Capital, Labour, Wages, etc., in Principal Industries.

Annual statistical reports on the mineral production of Canada have been published for many years, first by the Geological Survey, later by the Mines Branch of the Department of Mines, and, since 1921, by the Dominion Bureau of Statistics. Prior to that year the annual statistics of mines were confined chiefly to a presentation of the quantity production of each of the minerals and their value at average market prices for the year. The scope of the statistics now includes a general review of the principal mineral industries, such as the copper-gold, silver-lead-zinc, and nickel-copper industries, as well as a section on metallurgical works. The additional data include such features as capital employed, numbers of employees, wages and salaries paid, and net value of sales, while for 1934 and 1935 there was added a special survey of expenditures for equipment, supplies, freight, and insurance by the mining industry. The aim has been to extend the mining statistics beyond a summary of the production of individual minerals, by approaching the subject from the standpoint of industrial organization, definitely illustrating the place which mining holds in the scheme of Canadian productive enterprise.

A new figure "net income from sales" has been introduced since 1935 in accordance with a recommendation adopted by the Conference of Commonwealth Statisticians in Ottawa in 1935. The net income from sales is obtained by deducting the cost of fuel, electricity, and consumable supplies (explosives, lubricants, chemicals, etc.), consumed in the production process, from the net sales. In view of the fact that statistics of process supplies were not collected prior to 1935, it is impossible to present statistics of net income from sales for previous years comparable to this new figure beginning in 1935.

The net sales of the metallic industries given in Tables 6 and 7 are those reported by the operating companies, and are in each case the settlements received for shipments by mine operators and the additional values obtained when the smelting of these ores is completed in Canada. The totals indicate more nearly the actual return to the different industries than do the values for the several metals in Table 2 of this chapter, where, in the cases of copper, lead, zinc, and silver, the values are computed by applying the average prices for the year in the principal metal markets to the total production from mines and smelters with no reduction for stocks unsold at the end of the year. Some imported ores and concentrates are treated in Canadian non-ferrous smelting and refining works. The net sales of these plants include, therefore, the net value of the metals recovered from these imported ores and to this extent the net sales shown in Tables 6 and 7 include products not of Canadian origin.

The net sales of the fuel industries in Table 7 are less than the total production of fuels in Table 2, because the net sales are confined to products for which the operators receive some economic return, while the production of the fuel commodities includes all of those commodities produced, whether the producer actually receives payment in any form for them or not. Thus in coal mining, the industrial values in Table 7 include only coal sold, supplied to employees for domestic consumption, or used in making coke and briquettes, whereas the figures of coal production as shown in Table 2 include, in addition to the above, coal consumed for power and other purposes in the coal-mining operations and also the difference between coal put on the bank and lifted from the bank. Petroleum producers have a larger

monetary return than the actual value of the petroleum produced because many oil wells also produce large quantities of natural gas. On the other hand, the natural gas industry receives a smaller return than the total value of all natural gas produced because some of the gas is produced by the petroleum industry, because of leakage or other loss in piping gas to the consumers, and because a small amount of natural gas is produced by private individuals or groups from their own wells for their own consumption, without any industrial organization intervening between producer and consumer.

For other non-metallic minerals (if the small production of peat normally included with fuels is deducted) and clay products and structural materials, the sales of the producing industries are the same in each case as the total value of the mineral commodities produced.

### Subsection 1.—Principal Factors in the Mineral Industries.

**Capital.**—In connection with the item of capital, operators are requested to report *only the capital actually invested in the enterprises*, including: (1) present value of lands, buildings, plant, machinery, and tools; (2) cost of materials on hand, supplies, finished products, and ore on dump; and (3) cash, trading and operating accounts, and bills receivable. It should be specially noted that no estimate of ore reserves is included in the capital. Indeed, capital expenditures in mining ventures are frequently very difficult to designate. For instance, purely exploratory workings might properly be charged to current expenses, but if these exploratory workings open up new ore resources and become the channel by which such ore is utilized, such workings become part of the productive plant and as such their cost is an item of capital. On the other hand, after an ore body is exhausted, much of the mining plant has practically no resale value and, for this reason, many companies drastically write off the capital value of their plant during profitable years of operation. In these circumstances, the actual amount of capital employed in mining enterprises is uncertain and the figures of capital given in Tables 6 and 7 should be used with such reservations in mind.

**Employees.**—Tables 6 and 7 below also show the numbers of persons directly employed in the operating mineral industries. These figures, however, do not include those engaged in prospecting and exploration for individuals or small syndicates from whom no returns can be obtained, amounting probably in the aggregate to a considerable number. Neither do the figures include consulting geologists and mining engineers nor contract diamond drillers and their respective organizations.

**Commodities and Services Purchased.**—In addition to the expenditures for remuneration of those directly employed in the mineral industries, statistics are collected annually of expenditures for fuel and electricity, but the figures prior to 1935 given in Tables 6 and 7 are exclusive of the fuel and electricity used in metallurgical processes, such as reduction furnaces, electrolytic cells, etc. The mining industry expends annually large additional sums for the purchase of equipment, machinery, explosives, and a great variety of other supplies, and for freight and insurance. In a special investigation to obtain an estimate of these expenditures, firms engaged in the industry were circularized regarding such expenditures in 1934 and 1935. Returns received covered fairly completely the operating firms in the metal-mining and fuel industries, but in the other groups of mineral industries, where there are many small operators of gravel pits, small quarries, etc., the re-

turns were much less complete. Furthermore, no attempt was made to reach prospectors and small development parties whose expenditures in the aggregate, with so much exploratory activity as exists at present, would amount to a large sum. The figures resulting from these surveys\* must, therefore, be regarded as suggestive rather than by any means comprehensive. In 1935, the reported expenditures amounted to almost \$85,000,000, of which freight and express made up 14.7 p.c.; electric power, 12.6 p.c.; fuel and lubricants, 11.7 p.c.; timber and building materials, 7.8 p.c.; explosives, 6.5 p.c.; insurance, 6.0 p.c.; and the remaining 40 p.c. consisted of a great variety of purchases such as machinery and tools, railway equipment, electrical equipment, motor vehicles, rubber goods, chemicals, pipe, etc. The metal mines and smelters accounted for 77.7 p.c. of the expenditures and coal mines for 11.1 p.c. These expenditures were shown by commodity items, by industries, and by provinces at p. 356 of the 1937 Year Book.

### Subsection 2.—Growth of the Mining Industry in Recent Years.

**Growth, 1922-29.**—From 1922 to 1929, the output of the mineral industries increased by 72 p.c., capital investment by 76 p.c., employment by 53 p.c., and the salaries and wages by 65 p.c. Progress was most rapid in the metallic mineral industries, where the expansion in net production amounted to 170 p.c. with proportionate increases in capital and employment. The period from 1922 to 1929 was marked by a rising cycle of activity in construction. This was reflected in the expansion of industries engaged in the production of clay products and other structural materials. The output of this group of industries increased by 47 p.c. during the period, while, within the group, progress was much greater in industries producing cement, gravel, and stone than in the clay products industries. The group of non-metallic mineral industries remained relatively stationary in contrast to the other two main groups during this period of rapid expansion. This may be attributed to the fact that coal mining is the predominant industry in the non-metallic group and, under increasing competition from oil fuels and hydro-electric power, did not participate in the general industrial expansion of the period.

**Developments Since 1929.**—Following 1929 the mining industry in Canada was affected for some years by the world-wide economic disturbances and by a very drastic decline in the prices of most of the principal metals, especially copper, lead, zinc, and silver. In the case of gold, on the other hand, since 1931 the price has risen to a level about 69 p.c. above that formerly prevailing. Under the influence of the early decline in base-metal prices, the value of the net production of the metallic mineral industries declined by 27 p.c. from 1929 to 1932, with a decline of 29 p.c. in employees and 30 p.c. in salaries and wages paid. But, since the higher price for gold stimulated its production and the readjustment of costs stabilized the base-metal industries, metal production has expanded again, and while the net sales in 1936 were not comparable with those of 1929, employees were 49.3 p.c. above, and salaries and wages 43.3 p.c. above 1929. While industrial statistics for 1937 are not yet available, the production figures for this latest year indicate a continued rapid growth in metal production.

Among the non-metallic industries the demand for coal declined during the depression years owing to reduced requirements in industrial and transportation

\* The results of these surveys are given in the "Special Report on the Consumption of Supplies by the Canadian Mining Industry" for 1934 and 1935, published by and obtainable from the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics.

activities. Similarly, the demand for asbestos and gypsum was affected by the lower level of industrial and construction operations. Salt was an exception to the general rule, as its production was well maintained throughout, partly owing to its increased consumption in certain chemical industries. Indeed, the net sales of the salt-producing industry increased each year from 1929 to 1932 to a level about 23 p.c. above that of 1929. A large measure of recovery has taken place in this group of industries, especially in the production of non-metallic minerals other than fuels.

The production of clay products and other structural materials is directly dependent upon construction activities within Canada. During the early years of the depression, these activities were partly maintained by governmental relief projects and by the carrying to completion of some large operations which had commenced before 1930. As a result, construction reached its lowest level in Canada during 1933, and the group of industries producing clay products and other structural materials was at a lower level of operation in that year than in any other year recorded since 1921. From 1929 to 1933 there was a decline of 71 p.c. in net sales, 69 p.c. in employees, 74 p.c. in salaries and wages and 76 p.c. in expenditures for fuel and electricity, a large item in the cost of production in these industries. However, construction has been more active in Canada since 1933 (see Chapter XV) and this increased activity has been accompanied by a welcome change to a rising trend in the production of clay products and other structural materials, although these industries are still at a low level compared with their activity prior to 1929.

**6.—Summary of the Principal Statistics of the Mineral Industries in Canada, by Groups, 1929-36, and by Provinces, 1936.**

NOTE.—For the years 1921-28, see the 1936 Year Book, pp. 355-356. In the past, the net value of production, called "net sales", in these industries has been gross sales less freight and treatment charges in the case of mines, and less the value of ores charged in the case of smelters. According to a recommendation adopted by the Conference of Commonwealth Statisticians in Ottawa, 1935, the net figure, called the "net income from sales", is now obtained from net sales as defined above by a further deduction of the costs of fuel, electricity, and consumable supplies used in the production process. In the table below, however, to facilitate comparison with previous years, figures for 1935 are given to show deductions and resultant net by both methods, and figures for 1936 on the new basis only.

| Group and Year.               | Plants<br>or<br>Mines. | Capital<br>Employed. | Employees. | Salaries<br>and<br>Wages. | Fuel and<br>Electricity<br>for Heat<br>and<br>Power. <sup>1</sup> | Net<br>Sales. <sup>2</sup> |
|-------------------------------|------------------------|----------------------|------------|---------------------------|---|----------------------------|
|                               | No.                    | \$                   | No.        | \$                        | \$  | \$                         |
| <b>METALLIC MINERALS.</b>     |                        |                      |            |                           |   |                            |
| 1929.....                     | 528                    | 427,498,173          | 31,125     | 50,279,511                | 11,221,987  | 163,050,366                |
| 1930.....                     | 352                    | 427,439,265          | 30,623     | 48,851,303                | 11,323,313  | 137,015,982                |
| 1931.....                     | 327                    | 390,908,034          | 25,434     | 41,829,288                | 10,340,523  | 132,382,514                |
| 1932.....                     | 330                    | 269,180,404          | 21,931     | 34,983,704                | 8,551,463   | 119,790,072                |
| 1933.....                     | 402                    | 406,998,952          | 25,443     | 37,937,871                | 7,084,253   | 150,145,926                |
| 1934.....                     | 636                    | 465,833,818          | 34,143     | 50,818,448                | 8,144,600   | 186,785,532                |
| 1935.....                     | 619                    | 437,471,709          | 38,603     | 59,528,350                | 10,199,214  | 217,353,515                |
| 1936.....                     | 867                    | 507,796,987          | 46,455     | 72,016,670                | 151,845,099 <sup>3</sup>  | 173,558,815 <sup>3</sup>   |
|                               |                        |                      |            |                           | 188,372,443 <sup>1</sup>  | 211,444,303 <sup>2</sup>   |
| <b>NON-METALLIC MINERALS.</b> |                        |                      |            |                           |   |                            |
| 1929.....                     | 5,494                  | 317,302,496          | 40,080     | 55,602,313                | 6,033,773   | 93,596,188                 |
| 1930.....                     | 5,191                  | 328,776,596          | 38,355     | 47,852,075                | 5,785,483   | 80,063,355                 |
| 1931.....                     | 5,374                  | 325,168,359          | 34,075     | 36,031,233                | 4,870,074   | 61,829,210                 |
| 1932.....                     | 5,246                  | 302,294,837          | 31,654     | 29,918,319                | 4,497,502   | 54,359,856                 |
| 1933.....                     | 5,327                  | 283,796,783          | 30,532     | 27,309,607                | 4,695,254   | 54,012,205                 |
| 1934.....                     | 5,606                  | 266,120,280          | 32,195     | 31,765,492                | 5,219,565   | 60,550,554                 |
| 1935.....                     | 6,181                  | 244,237,709          | 32,755     | 33,150,704                | 5,152,971   | 62,407,314                 |
| 1936.....                     | 6,224                  | 257,057,806          | 34,768     | 37,280,814                | 16,705,125 <sup>1</sup>   | 45,739,144 <sup>2</sup>    |
|                               |                        |                      |            |                           | 12,270,755 <sup>1</sup>   | 59,475,472 <sup>2</sup>    |

For footnotes, see end of Table, p. 356.



6.—Summary of the Principal Statistics of the Mineral Industries in Canada, by Groups, 1929-36, and by Provinces, 1936—concluded.

| Group, Year and Province                             | Plants or Mines. | Capital Employed. | Employees. | Salaries and Wages. | Fuel and Electricity for Heat and Power. <sup>1</sup> | Net Sales. <sup>2</sup>                            |
|--|------------------|-------------------|------------|---------------------|---|--|
|  | No.              | \$                | No.        | \$                  | \$  | \$   |
| <b>CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.</b> |                  |                   |            |                     |   |  |
| 1929.....  | 3,126            | 122,220,364       | 23,897     | 18,608,687          | 9,495,825   | 58,534,834   |
| 1930.....  | 3,562            | 131,204,998       | 20,222     | 17,271,354          | 7,957,397   | 53,727,465   |
| 1931.....  | 3,877            | 125,983,627       | 13,300     | 14,108,778          | 6,298,151   | 44,158,295   |
| 1932.....  | 4,804            | 113,736,272       | 7,885      | 6,870,026           | 3,427,419   | 22,398,283   |
| 1933.....  | 5,144            | 109,496,612       | 7,359      | 4,784,327           | 2,245,397   | 16,696,687   |
| 1934.....  | 5,411            | 102,319,089       | 7,167      | 5,544,240           | 2,838,327   | 19,250,761   |
| 1935.....  | 6,068            | 95,790,621        | 8,698      | 7,401,505           | 3,004,647   | 23,215,400   |
| 1936.....  | 6,138            | 94,208,302        | 9,776      | 7,468,738           | 3,902,091<br>4,718,167 <sup>3</sup>                   | 19,253,309 <sup>3</sup><br>21,052,574 <sup>3</sup> |
| <b>Grand Totals, Mineral Industries—</b>             |                  |                   |            |                     |   |  |
| 1929.....  | 9,148            | 867,021,033       | 95,102     | 124,490,511         | 26,751,555  | 315,181,388  |
| 1930.....  | 9,105            | 887,420,559       | 89,200     | 113,975,333         | 25,066,193  | 270,866,712  |
| 1931.....  | 9,578            | 842,060,020       | 72,809     | 91,969,299          | 21,509,348  | 238,170,019  |
| 1932.....  | 10,380           | 685,211,573       | 61,470     | 71,772,049          | 16,476,484  | 196,578,211  |
| 1933.....  | 10,873           | 590,292,347       | 63,334     | 70,031,805          | 14,024,904  | 221,754,818  |
| 1934.....  | 11,652           | 531,023,187       | 73,505     | 88,126,156          | 17,202,492  | 266,652,847  |
| 1935.....  | 12,898           | 777,500,099       | 80,256     | 100,080,559         | 18,356,832<br>172,513,315 <sup>3</sup>                | 302,976,229<br>238,581,268 <sup>3</sup>            |
| 1936.....  | 13,229           | 859,063,095       | 90,999     | 116,766,222         | 205,361,375 <sup>3</sup>                              | 291,972,349 <sup>3</sup>                           |
| <b>1936.</b>   |                  |                   |            |                     |   |  |
| Nova Scotia.....                                     | 365              | 55,513,999        | 15,368     | 15,980,687          | 5,645,430 <sup>3</sup>                                | 19,136,304 <sup>3</sup>                            |
| New Brunswick.....                                   | 423              | 5,253,829         | 1,744      | 1,248,431           | 242,114 <sup>3</sup>                                  | 2,324,747 <sup>3</sup>                             |
| Quebec.....  | 4,011            | 140,537,708       | 14,225     | 15,774,302          | 48,436,965 <sup>3</sup>                               | 44,823,557 <sup>3</sup>                            |
| Ontario.....   | 6,296            | 334,535,666       | 31,105     | 46,899,805          | 108,353,709 <sup>3</sup>                              | 151,874,402 <sup>3</sup>                           |
| Manitoba.....  | 274              | 41,722,791        | 2,932      | 3,752,307           | 7,307,942 <sup>3</sup>                                | 9,366,490 <sup>3</sup>                             |
| Saskatchewan.....                                    | 219              | 14,074,371        | 1,828      | 1,937,825           | 3,826,768 <sup>3</sup>                                | 5,720,747 <sup>3</sup>                             |
| Alberta.....   | 504              | 104,118,831       | 10,376     | 11,850,463          | 2,357,005 <sup>3</sup>                                | 20,104,417 <sup>3</sup>                            |
| British Columbia.....                                | 1,029            | 103,483,250       | 12,827     | 17,908,553          | 28,554,615 <sup>3</sup>                               | 36,694,755 <sup>3</sup>                            |
| Yukon and N.W.T.....                                 | 18               | 8,922,650         | 594        | 1,413,729           | 636,820 <sup>3</sup>                                  | 1,926,864 <sup>3</sup>                             |

<sup>1</sup> Exclusive of fuel and electricity used in metallurgical processes, except for the footnoted figures for 1935 and 1936, which include all fuel and electricity (whether for metallurgical processes or not) and also the cost of consumable supplies. <sup>2</sup> See headnote. <sup>3</sup> This is "net income from sales". See headnote to table, p. 355.

### Subsection 3.—The Principal Mineral Industries.

A summary of the industrial statistics of the principal mineral industries operating in Canada in 1935 and 1936 is presented in Table 7. Coal mining has the largest labour force but is being rapidly overtaken by gold mining. Employment in the latter industry is, however, much less subject to seasonal fluctuations and its expenditures on salaries and wages are considerably greater than those of the coal-mining industry. The smelting and refining industry was third in the number of its employees and in salaries and wages paid.

## 7.—Summary of the Principal Statistics of the Mineral Industries of Canada, by Industries, 1935 and 1936.

NOTE.—See headnote to Table 6, p. 355.

| Industry and Year.                                  | Plants or Mines. | Capital Employed.  | Employees.    | Salaries and Wages. | Purchased Fuel, Electricity, and Consumable Supplies. | Net Income from Sales. <sup>1</sup> |
|---|------------------|--------------------|---------------|---------------------|---|-------------------------------------|
|   | No.              | \$                 | No.           | \$                  | \$  | \$                                  |
| <b>METALLIC MINERALS.</b>                           |                  |                    |               |                     |   |                                     |
| Alluvial gold.....1935                              | 86               | 9,198,533          | 702           | 1,227,971           | 91,737 <sup>2</sup>                                   | 2,106,025                           |
| 1936  | 85               | 10,965,524         | 853           | 1,519,059           | 167,677   | 2,893,981                           |
| Auriferous quartz.....1935                          | 384              | 193,728,802        | 19,834        | 31,523,907          | 10,594,031 <sup>2</sup>                               | 75,120,774                          |
| 1936  | 607              | 256,018,578        | 25,007        | 39,826,742          | 19,882,784  | 88,210,233                          |
| Copper-gold-silver.....1935                         | 18               | 38,461,682         | 3,430         | 5,040,196           | 3,433,284 <sup>2</sup>                                | 13,243,163                          |
| 1936  | 27               | 40,732,717         | 3,738         | 5,478,325           | 3,652,068   | 15,619,897                          |
| Silver-cobalt.....1935                              | 28               | 6,880,781          | 402           | 494,791             | 246,218 <sup>2</sup>                                  | 2,070,716                           |
| 1936  | 25               | 5,946,702          | 383           | 453,546             | 151,592   | 915,376                             |
| Silver-lead-zinc.....1935                           | 70               | 16,598,941         | 1,057         | 2,431,110           | 1,205,822 <sup>2</sup>                                | 10,553,088                          |
| 1936  | 89               | 19,372,000         | 1,870         | 2,917,832           | 1,594,495   | 18,814,645                          |
| Nickel-copper.....1935                              | 7                | 26,685,284         | 3,552         | 6,059,407           | 3,461,632 <sup>2</sup>                                | 11,030,621                          |
| 1936  | 9                | 30,131,192         | 4,406         | 7,331,542           | 4,102,807   | 18,710,379                          |
| Miscellaneous metals.....1935                       | 12               | 733,497            | 82            | 63,612              | 9,300 <sup>2</sup>                                    | 22,847                              |
| 1936  | 11               | 770,957            | 113           | 142,974             | 30,345  | 3,147                               |
| Smelting and refining.....1935                      | 14               | 145,086,299        | 8,944         | 12,687,856          | 126,804,075 <sup>2</sup>                              | 59,441,533                          |
| 1936  | 14               | 143,858,717        | 10,015        | 14,346,050          | 153,460,775   | 71,276,645                          |
| <b>Totals, Metallic Minerals.....1935</b>           | <b>619</b>       | <b>437,471,769</b> | <b>38,603</b> | <b>59,528,359</b>   | <b>151,846,099<sup>2</sup></b>                        | <b>173,588,815</b>                  |
| <b>1936</b>   | <b>867</b>       | <b>507,796,987</b> | <b>46,455</b> | <b>72,016,676</b>   | <b>188,372,443</b>                                    | <b>211,444,303</b>                  |
| <b>Non-METALLIC MINERALS.</b>                       |                  |                    |               |                     |   |                                     |
| <i>Fuels.</i>                                       |                  |                    |               |                     |   |                                     |
| Coal.....1935                                       | 550              | 110,516,517        | 26,198        | 26,565,344          | 12,851,633 <sup>2</sup>                               | 26,894,671                          |
| 1936  | 553              | 109,703,043        | 26,918        | 28,873,135          | 5,083,154   | 34,852,621                          |
| Natural gas.....1935                                | 3,190            | 60,221,051         | 1,719         | 1,032,937           | 215,915 <sup>2</sup>                                  | 6,880,061                           |
| 1936  | 3,253            | 77,666,568         | 2,075         | 2,456,918           | 79,034  | 9,002,657                           |
| Petroleum.....1935                                  | 2,285            | 33,398,894         | 940           | 1,046,040           | 808,500 <sup>2</sup>                                  | 3,217,927                           |
| 1936  | 2,209            | 33,289,876         | 1,052         | 1,298,592           | 510,010   | 3,430,317                           |
| <b>Totals, Fuels.....1935</b>                       | <b>6,031</b>     | <b>213,136,462</b> | <b>23,857</b> | <b>29,574,827</b>   | <b>13,876,051<sup>2</sup></b>                         | <b>36,002,659</b>                   |
| <b>1936</b>   | <b>6,072</b>     | <b>220,650,487</b> | <b>20,045</b> | <b>32,628,645</b>   | <b>5,677,204</b>                                      | <b>47,354,595</b>                   |
| <i>Other Non-Metallic Minerals.</i>                 |                  |                    |               |                     |   |                                     |
| Abrasives (natural).....1935                        | 9                | 114,114            | 42            | 25,135              | 6,326 <sup>2</sup>                                    | 60,824                              |
| 1936  | 8                | 77,279             | 30            | 17,442              | 3,528   | 24,846                              |
| Asbestos.....1935                                   | 9                | 10,805,583         | 2,072         | 1,904,053           | 2,058,451 <sup>2</sup>                                | 4,096,163                           |
| 1936  | 11               | 18,877,326         | 2,647         | 2,642,924           | 2,390,475   | 7,558,708                           |
| Feldspar and quartz.....1935                        | 28               | 1,151,986          | 260           | 182,792             | 58,012 <sup>2</sup>                                   | 511,200                             |
| 1936  | 34               | 1,400,024          | 324           | 238,848             | 160,913   | 628,769                             |
| Gypsum.....1935                                     | 13               | 5,737,114          | 467           | 307,067             | 187,027 <sup>2</sup>                                  | 745,176                             |
| 1936  | 14               | 8,954,654          | 514           | 440,297             | 218,800   | 1,060,102                           |
| Iron oxides.....1935                                | 5                | 175,836            | 32            | 26,748              | 12,294 <sup>2</sup>                                   | 64,836                              |
| 1936  | 6                | 167,499            | 39            | 30,281              | 11,419  | 58,211                              |
| Mica.....1935                                       | 24               | 145,557            | 92            | 45,217              | 695 <sup>2</sup>                                      | 81,343                              |
| 1936  | 22               | 221,800            | 101           | 44,550              | 4,824   | 69,732                              |
| Salt.....1935                                       | 10               | 3,776,333          | 473           | 597,785             | 213,940 <sup>2</sup>                                  | 1,667,038                           |
| 1936  | 9                | 3,856,187          | 506           | 640,644             | 212,097   | 1,560,447                           |
| Talc and soapstone.....1935                         | 8                | 639,501            | 94            | 69,803              | 37,414 <sup>2</sup>                                   | 134,121                             |
| 1936  | 7                | 647,929            | 85            | 70,935              | 33,392  | 143,878                             |
| Miscellaneous <sup>3</sup> .....1935                | 44               | 2,555,124          | 366           | 357,837             | 254,948 <sup>2</sup>                                  | 785,784                             |
| 1936  | 41               | 2,195,621          | 477           | 526,248             | 548,444   | 1,006,184                           |
| <b>Totals, Other Non-Metallic Minerals.....1935</b> | <b>150</b>       | <b>31,101,247</b>  | <b>3,898</b>  | <b>3,576,377</b>    | <b>2,829,074<sup>2</sup></b>                          | <b>9,046,485</b>                    |
| <b>1936</b>   | <b>152</b>       | <b>36,398,819</b>  | <b>4,723</b>  | <b>4,652,169</b>    | <b>3,593,561</b>                                      | <b>12,120,877</b>                   |
| <b>Totals, Non-Metallic Minerals.....1935</b>       | <b>6,181</b>     | <b>244,237,709</b> | <b>32,755</b> | <b>33,150,704</b>   | <b>16,705,125<sup>2</sup></b>                         | <b>45,739,144</b>                   |
| <b>1936</b>   | <b>6,224</b>     | <b>257,057,806</b> | <b>34,768</b> | <b>37,280,814</b>   | <b>12,270,765</b>                                     | <b>59,475,472</b>                   |

For footnotes, see end of table, p. 358.

**7.—Summary of the Principal Statistics of the Mineral Industries of Canada, by Industries, 1935 and 1936—concluded.**

| Industry and Year.   | Plants<br>or<br>Mines. | Capital<br>Employed. | Employees.    | Salaries<br>and<br>Wages. | Purchased<br>Fuel,<br>Electricity,<br>and<br>Consumable<br>Supplies. | Net<br>Income<br>from<br>Sales. <sup>1</sup> |
|--|------------------------|----------------------|---------------|---------------------------|--|--|
|  | No.                    | \$                   | No.           | \$                        | \$   | \$   |
| <b>CLAY PRODUCTS AND OTHER<br/>STRUCTURAL MATERIALS.</b>               |                        |                      |               |                           |  |  |
| <i>Clay Products.</i>  |                        |                      |               |                           |  |  |
| Brick, tile and sewer<br>pipe.....1935                                 | 136                    | 20,144,431           | 1,609         | 1,293,159                 | 666,163 <sup>2</sup>   | 2,127,241                                    |
| 1936   | 136                    | 19,487,227           | 1,551         | 1,397,325                 | 747,163  | 2,506,008                                    |
| Stoneware and pottery..1935  | 3                      | 357,575              | 119           | 94,765                    | 13,415 <sup>2</sup>  | 205,744                                      |
| 1936   | 4                      | 376,204              | 124           | 100,753                   | 19,171   | 195,665                                      |
| Totals, Clay<br>Products.....1935                                      | 139                    | 20,502,006           | 1,728         | 1,387,924                 | 679,578 <sup>2</sup>   | 2,332,955                                    |
| 1936   | 140                    | 19,863,431           | 1,775         | 1,498,148                 | 760,354  | 2,704,073                                    |
| <i>Other Structural Materials.</i>                                     |                        |                      |               |                           |  |  |
| Cement.....1935  | 9                      | 52,454,004           | 924           | 1,027,416                 | 1,621,674 <sup>2</sup>   | 3,958,369                                    |
| 1936   | 9                      | 53,343,991           | 1,052         | 1,196,604                 | 2,169,071  | 4,789,121                                    |
| Lime.....1935  | 54                     | 5,707,391            | 756           | 556,049                   | 810,437 <sup>2</sup>   | 2,115,354                                    |
| 1936   | 57                     | 6,106,901            | 799           | 640,322                   | 339,979  | 2,465,991                                    |
| Sand and gravel.....1935   | 5,400                  | 4,849,702            | 3,015         | 2,479,418                 | 116,003 <sup>2</sup>   | 6,378,377                                    |
| 1936   | 5,374                  | 2,994,127            | 3,638         | 2,090,388                 | 101,059  | 6,520,340                                    |
| Stone.....1935   | 496                    | 12,277,513           | 2,475         | 1,950,698                 | 734,339 <sup>2</sup>   | 4,573,224                                    |
| 1936   | 558                    | 11,899,852           | 2,512         | 2,043,216                 | 841,704  | 4,292,449                                    |
| Totals, Other Struc-<br>tural Materials....1935                        | 5,959                  | 75,288,615           | 7,170         | 6,013,581                 | 3,282,513 <sup>2</sup>   | 10,920,324                                   |
| 1936   | 5,998                  | 74,344,871           | 8,001         | 5,970,590                 | 3,951,813  | 18,347,901                                   |
| <b>Totals, Clay Products<br/>and Structural<br/>Materials.....1935</b> | <b>6,098</b>           | <b>95,790,621</b>    | <b>8,898</b>  | <b>7,401,505</b>          | <b>3,962,091<sup>2</sup></b>   | <b>19,253,309</b>                            |
| <b>1936</b>  | <b>6,138</b>           | <b>94,208,302</b>    | <b>9,776</b>  | <b>7,468,738</b>          | <b>4,718,167</b>   | <b>21,052,574</b>                            |
| <b>Grand Totals, Min-<br/>eral Industries...1935</b>                   | <b>12,898</b>          | <b>777,506,099</b>   | <b>86,256</b> | <b>100,080,559</b>        | <b>172,513,315<sup>2</sup></b>                                       | <b>238,581,268</b>                           |
| <b>1936</b>  | <b>13,229</b>          | <b>859,063,095</b>   | <b>99,099</b> | <b>116,766,222</b>        | <b>205,361,375</b>   | <b>291,973,349</b>                           |

<sup>1</sup>See headnote to Table 6, p. 355.  
a small production of peat, normally included in fuels.

<sup>2</sup>Revised since publication of the 1937 Year Book.

<sup>3</sup>Includes

## Section 4.—Production of Metallic Minerals.

### Subsection 1.—Gold.

Canada has been a gold-producing country for over 75 years. During the last half of the 19th century production was chiefly from placer operations in British Columbia and Yukon, while during the present century there has been a rapid growth of production from lode mining both of auriferous quartz and of gold in association with other metals. Gold production in Canada attained its earlier maximum in 1900, when the Yukon production reached its highest point and 1,350,057 fine oz. of gold were produced. The quantities and values of gold produced in Canada are given by provinces for 1911 and subsequent years in Tables 8 and 9. The official estimate for 1937 is 4,095,872 fine oz.

In 1931 the value of gold produced in Canada exceeded that of coal for the first time. Producers of gold have benefited in recent years not only from the general decline in the prices of other commodities, with a consequent reduction in their

operating costs, but also from the rise in the world price of gold itself. Under the stimulus of higher prices, prospecting for gold has been more active during recent years than ever before. Favourable results from these activities, with new mines coming into production and expansion in numerous producing mines, give every prospect for a continued increase in gold production.

**Nova Scotia.**—Gold was discovered in Nova Scotia in 1860. Two years after the discovery, gold valued at nearly \$142,000 was recovered from the quartz veins; an annual output has been reported since that time. Since 1933, gold-mining activities have been more widespread with the industry showing signs of a general revival.

**Quebec.**—Although Quebec produced gold as early as 1823, production consisted only of the small quantities recovered in the treatment of the lead and zinc ores of the Notre-Dame-des-Anges district and from the gravels of the Chaudière river. Important discoveries of copper-gold deposits, however, were more recently made at Rouyn, in the northwestern part of the province, adjacent to the Kirkland Lake district of Ontario. Smelting facilities became available for this region as the result of the opening of the Noranda smelter in December, 1927. The operation of this smelter, together with the development of gold properties in the northwestern part of the province, has established Quebec as the second largest gold-producing province. An important source is the copper-gold ores of the Noranda mine, but there is now a rapidly expanding production from auriferous-quartz properties operating in the same general section of the province.

**Ontario.**—Although gold was first discovered in 1866 in Hastings County and was later found and worked at points from there to the Lake of the Woods in the west, a distance of roughly 900 miles, no permanent gold-mining industry was established until 1911, when the Porcupine Camp was opened up. Soon afterwards the discovery of gold in the Kirkland Lake area, on what is now the Wright-Hargreaves mine, led to the development of this second camp. The Lake Shore mine in this camp has latterly had a larger production than that of any other Canadian gold mine. Active prospecting and development have been carried on during recent years in a number of Precambrian areas in Ontario. In addition to Porcupine and Kirkland Lake, producing mines are now established in the Michipicoten district, in the district east of lake Nipigon, at Matachewan, at Larder Lake, and in the district of Patricia and other northwestern parts of the province.

**Manitoba.**—The presence of gold-bearing ores in Manitoba has been known since before the War but continuous production is a post-war attainment. The major part of the gold of the province is produced as a by-product from the Flin Flon smelter which treats copper-zinc ores. However, an expanding production is coming from auriferous-quartz operations in the Rice Lake and Beresford Lake areas east of lake Winnipeg and the newer Gods Lake area in the northeastern part of the province.

**British Columbia.**—The discovery of gold in paying quantities was an epoch-making event in the history of British Columbia. In the late '50's, alluvial gold was discovered along the Thompson river and in 1858 the famous Fraser River rush took place. The extraordinarily rich deposits of Williams and Lightning creeks, in the Cariboo district, were discovered in 1860 and three years later the area had a production of alluvial gold valued at \$4,000,000. In the northern part of the province, the Atlin division of the Cassiar district was prospected in 1892. Then the introduction of lode mining resulted in a rapidly increasing production. The

copper-gold ores of the Rossland and Yale Boundary districts, of the Britannia mine on Howe sound, of mines in the Anyox section and the ores of the Premier mine on the Portland canal were largely responsible for the gold from lode mining which reached its highest pre-war peak with 297,459 fine oz. in 1913. As a result of the higher price of gold, production in the province has recovered from 160,069 fine oz. in 1931 to the estimate for 1937 of 503,403 fine oz. The mines of the Bridge River district, including the Pioneer, Bralorne and others, are contributing to this current expansion. Placer prospecting in British Columbia has experienced a distinct revival since 1932, especially in the Stikine, Liard, Cariboo, and Atlin districts.

**Yukon.**—The discovery of gold in the Yukon River valley was reported in 1869, and bar-mining on the tributaries of the Yukon was conducted with increasing profit between 1881 and 1886. Ten years later, rich discoveries were made in creeks of the Klondike river, a right-bank tributary joining the Yukon at what is now Dawson city, and one of the greatest rushes in history was made to this locality. The richest streams in the district were Bonanza creek and its principal tributary, the Eldorado. There is still a considerable production of gold from alluvial operations, principally in the form of dredging, and, recently, interesting explorations have been made of auriferous quartz veins in the Carmacks district.

#### 8.—Quantities of Gold Produced in Canada, by Provinces, calendar years 1911-37.

NOTE.—For the years 1862 to 1910, see Canada Year Book, 1916-17, pp. 268-269.

| Year.    | Nova<br>Scotia. | Quebec.   | Ontario.  | Manitoba.        | Saskat-<br>chewan. | Alberta.  | British<br>Columbia. | Yukon.              | Total.                 |
|----------|-----------------|-----------|-----------|------------------|--------------------|-----------|----------------------|---------------------|------------------------|
|          | oz. fine.       | oz. fine. | oz. fine. | oz. fine.        | oz. fine.          | oz. fine. | oz. fine.            | oz. fine.           | oz. fine.              |
| 1911.... | 7,781           | 613       | 2,062     | —                | —                  | 10        | 238,490              | 224,197             | 473,159                |
| 1912.... | 4,385           | 642       | 86,523    | —                | —                  | 73        | 251,815              | 208,447             | 611,885                |
| 1913.... | 2,174           | 701       | 219,801   | —                | —                  | Nil       | 297,459              | 282,838             | 802,973                |
| 1914.... | 2,904           | 1,292     | 268,264   | —                | —                  | 48        | 252,730              | 247,940             | 773,178                |
| 1915.... | 6,336           | 1,099     | 406,577   | —                | —                  | 195       | 273,378              | 230,173             | 918,056                |
| 1916.... | 4,562           | 1,034     | 492,481   | —                | —                  | 82        | 219,633              | 212,700             | 930,492                |
| 1917.... | 2,210           | 1,511     | 423,261   | 440 <sup>1</sup> | —                  | Nil       | 183,742              | 177,667             | 738,831                |
| 1918.... | 1,176           | 1,030     | 411,076   | 1,926            | —                  | 27        | 180,163              | 102,474             | 699,681                |
| 1919.... | 850             | 1,470     | 505,739   | 724              | —                  | 24        | 167,252              | 90,705              | 766,764                |
| 1920.... | 690             | 955       | 564,995   | 781              | —                  | Nil       | 124,808              | 72,778              | 765,007                |
| 1921.... | 439             | 659       | 708,213   | 207              | —                  | 49        | 150,792              | 65,994              | 921,329                |
| 1922.... | 1,042           | Nil       | 1,000,340 | 156              | —                  | Nil       | 207,370              | 54,466              | 1,263,364              |
| 1923.... | 655             | 667       | 971,704   | 31               | —                  | Nil       | 200,140              | 60,144              | 1,233,341              |
| 1924.... | 1,047           | 883       | 1,241,728 | 1,180            | —                  | Nil       | 245,719              | 34,825              | 1,525,382              |
| 1925.... | 1,626           | 1,602     | 1,461,039 | 4,424            | —                  | Nil       | 219,227              | 47,817              | 1,735,735              |
| 1926.... | 1,678           | 3,680     | 1,497,215 | 188              | —                  | Nil       | 225,866              | 25,601              | 1,754,228              |
| 1927.... | 3,151           | 8,331     | 1,627,060 | 182              | —                  | 42        | 183,094              | 30,935              | 1,852,785              |
| 1928.... | 1,290           | 60,006    | 1,578,434 | 19,813           | —                  | 68        | 196,617              | 34,304              | 1,890,592              |
| 1929.... | 2,687           | 90,798    | 1,622,267 | 22,455           | —                  | 5         | 154,204              | 35,892              | 1,928,398              |
| 1930.... | 1,272           | 141,747   | 1,736,012 | 23,189           | —                  | Nil       | 164,331              | 35,517              | 2,102,608              |
| 1931.... | 460             | 300,075   | 2,085,814 | 102,969          | —                  | 195       | 160,069              | 44,310              | 2,695,892              |
| 1932.... | 964             | 401,105   | 2,280,105 | 122,507          | 11 <sup>1</sup>    | 83        | 199,004              | 40,608              | 3,044,387              |
| 1933.... | 1,382           | 382,886   | 2,155,519 | 125,310          | 5,400              | 324       | 238,995              | 39,493              | 2,949,309              |
| 1934.... | 3,525           | 390,097   | 2,106,339 | 132,321          | 5,405              | 393       | 295,196              | 38,798              | 2,972,074              |
| 1935.... | 9,376           | 470,552   | 2,220,336 | 142,613          | 14,323             | 150       | 391,633              | 35,767 <sup>2</sup> | 3,234,890 <sup>2</sup> |
| 1936.... | 11,990          | 666,905   | 2,378,508 | 139,273          | 48,981             | 109       | 451,938              | 50,359 <sup>2</sup> | 3,745,028 <sup>2</sup> |
| 1937.... | 19,639          | 712,004   | 2,537,385 | 160,395          | 65,018             | 46        | 503,403              | 47,982 <sup>2</sup> | 4,065,872 <sup>2</sup> |

<sup>1</sup> First reported production in this province.

<sup>2</sup> Preliminary figures.

<sup>2</sup> Includes production of the Northwest Territories.

## 9.—Values of Gold Produced in Canada, by Provinces, calendar years 1911-37.

NOTE.—For the years 1862 to 1910, see Canada Year Book, 1916-17, p. 270.

| Year. <sup>1</sup>     | Nova<br>Scotia. | Quebec.    | Ontario.   | Manitoba.          | Saskat-<br>chewan. | Alberta. | British<br>Columbia. | Yukon.                 | Total.                   |
|------------------------|-----------------|------------|------------|--------------------|--------------------|----------|----------------------|------------------------|--------------------------|
|                        | \$              | \$         | \$         | \$                 | \$                 | \$       | \$                   | \$                     | \$                       |
| 1911....               | 160,854         | 12,672     | 42,625     | —                  | —                  | 207      | 4,930,145            | 4,634,574              | 9,781,077                |
| 1912....               | 90,638          | 13,270     | 1,788,596  | —                  | —                  | 1,509    | 5,205,485            | 5,549,296              | 12,648,794               |
| 1913....               | 44,935          | 14,491     | 4,543,690  | —                  | —                  | 2        | 6,149,027            | 5,846,780              | 10,598,923               |
| 1914....               | 60,031          | 26,708     | 5,545,509  | —                  | —                  | 992      | 5,224,393            | 5,125,374              | 15,983,007               |
| 1915....               | 137,180         | 22,720     | 8,404,693  | —                  | —                  | 4,026    | 5,651,184            | 4,758,038              | 18,977,901               |
| 1916....               | 94,305          | 21,375     | 10,180,485 | —                  | —                  | 1,695    | 4,540,216            | 4,390,900              | 19,234,976               |
| 1917....               | 45,685          | 31,235     | 8,749,581  | 9,095 <sup>2</sup> | —                  | 2        | 2,764,093            | 3,672,703              | 15,272,992               |
| 1918....               | 24,310          | 40,083     | 8,515,299  | 39,814             | —                  | 553      | 3,724,300            | 2,118,325              | 14,463,689               |
| 1919....               | 17,571          | 30,388     | 10,454,553 | 14,966             | —                  | 500      | 3,487,406            | 1,875,039              | 15,850,423               |
| 1920....               | 14,263          | 19,742     | 11,679,483 | 16,145             | —                  | 2        | 2,580,010            | 1,504,455              | 15,814,098               |
| 1921....               | 9,075           | 13,127     | 14,640,062 | 4,279              | —                  | 1,013    | 3,117,147            | 1,364,217              | 19,148,927               |
| 1922....               | 21,540          | 20,678,862 | 3,225      | —                  | —                  | 2        | 4,286,718            | 1,125,705              | 20,116,050               |
| 1923....               | 13,540          | 13,788     | 20,086,904 | 641                | —                  | 2        | 4,137,261            | 1,243,287              | 25,495,421               |
| 1924....               | 21,643          | 18,293     | 25,608,795 | 24,393             | —                  | 2        | 5,079,462            | 719,897                | 31,532,443               |
| 1925....               | 33,612          | 38,116     | 30,202,357 | 91,452             | —                  | 2        | 4,531,824            | 958,465                | 35,880,826               |
| 1926....               | 34,687          | 76,072     | 30,950,180 | 3,886              | —                  | 2        | 4,669,065            | 529,220                | 36,263,110               |
| 1927....               | 65,137          | 172,217    | 33,634,108 | 3,762              | —                  | 868      | 3,784,889            | 639,483                | 38,300,464               |
| 1928....               | 26,667          | 1,240,434  | 32,629,126 | 409,571            | —                  | 1,406    | 4,064,434            | 710,367                | 39,082,005               |
| 1929....               | 55,545          | 1,876,961  | 33,535,234 | 464,186            | —                  | 103      | 3,187,680            | 741,954                | 39,861,663               |
| 1930....               | 26,295          | 2,930,176  | 35,580,552 | 479,359            | —                  | 2        | 3,397,623            | 734,202                | 43,485,601               |
| 1931....               | 9,920           | 6,471,075  | 44,980,280 | 2,220,512          | —                  | 4,205    | 3,451,865            | 955,539                | 55,093,396               |
| 1932 <sup>3</sup> .... | 22,634          | 9,417,572  | 53,534,743 | 2,876,350          | 258 <sup>4</sup>   | 1,949    | 4,672,429            | 953,438                | 71,479,373               |
| 1933....               | 39,525          | 10,950,539 | 61,647,843 | 3,553,806          | 154,440            | 9,267    | 6,835,257            | 1,129,500              | 84,350,237               |
| 1934....               | 121,613         | 13,458,347 | 72,634,195 | 4,665,075          | 186,472            | 13,558   | 10,218,762           | 1,338,531              | 102,536,553              |
| 1935....               | 329,942         | 16,558,725 | 78,123,624 | 5,018,551          | 504,026            | 5,279    | 13,781,565           | 1,256,529 <sup>5</sup> | 115,595,279 <sup>5</sup> |
| 1936....               | 418,959         | 23,301,683 | 83,318,960 | 4,878,733          | 1,715,804          | 3,818    | 15,831,358           | 1,764,070 <sup>5</sup> | 131,293,421 <sup>5</sup> |
| 1937 <sup>5</sup> .... | 687,169         | 24,913,020 | 90,532,601 | 5,612,221          | 2,274,950          | 1,609    | 17,614,071           | 1,878,590 <sup>5</sup> | 143,314,561 <sup>5</sup> |

<sup>1</sup> From 1911 to 1931, inclusive, values calculated on basis 1 fine oz. = \$20.671834; since then, at world prices in Canadian funds.<sup>2</sup> None reported.<sup>3</sup> First reported production in this province.<sup>4</sup> Includes value of production of the Northwest Territories.<sup>5</sup> Preliminary figures.

**World Production.**—A sketch of the development of the gold-mining industry of the world since the discovery of America may refer to four successive periods. During the first period extending from 1493 to 1760, the annual production averaged nearly 337,000 fine oz. The placer mining of Brazil and Colombia swelled the average output of the last 60 years of the period to about 606,000 fine oz. per year.

The production of Russia from placer mining was a considerable factor in the next period, extending from 1761 to 1840, that country retaining first rank among the world's producers until 1837. The average annual production during the period was 565,500 fine oz.

The third period, extending from 1841 to 1890, was notable for the remarkable discoveries of gold in California and Australia in 1848 and 1851, respectively. The annual average during the 50 years was 4,937,000 fine oz. For the first decade the average was 1,761,000 fine oz. and for the second 6,448,000, while in the last decade it declined to 5,201,000. The production of the period was contributed chiefly by the United States, Australia, and Russia.

In the fourth period, extending from 1891 to the present time, covered by the figures of Table 10, the outstanding features were the entry of South Africa as an important and later as the leading producer, the increase in the output of most of the gold-producing countries through the introduction of the cyanide process and, more recently, the rapidly increasing world production as a result of the appreciation in the value of gold. The output was 6,320,000 fine oz. in 1891 and a steady increase was recorded until 1915, when 22,847,000 fine oz. were produced. Thereafter, the great increase in wages and in the other costs of production of an article of fixed value brought about a steady decline to a minimum production of 15,497,000 fine oz. in 1922. However, the notable decline in general commodity price levels which occurred in 1921 and 1922 again reduced the costs of gold production and the industry responded with a distinctly upward trend thereafter throughout the 1920's. The increased price of gold since 1930 has accelerated the expansion in world production during recent years with all previous records being exceeded.

#### 10.—Quantities and Values of World Production of Gold, 1891-1936.

(From the Annual Report of the Director of the United States Mint.)

| Year.     | Quantity.  | Value. <sup>1</sup> | Year.     | Quantity.  | Value. <sup>1</sup> | Year.     | Quantity.               | Value. <sup>1</sup>        |
|-----------|------------|---------------------|-----------|------------|---------------------|-----------|-------------------------|----------------------------|
|           | oz. fine.  | \$                  |           | oz. fine.  | \$                  |           | oz. fine.               | \$                         |
| 1891..... | 6,320,194  | 130,650,000         | 1907..... | 19,977,260 | 412,966,600         | 1923..... | 17,845,349              | 368,890,948                |
| 1892..... | 7,094,266  | 146,661,500         | 1908..... | 21,422,244 | 422,837,000         | 1924..... | 18,616,481              | 354,899,578                |
| 1893..... | 7,618,811  | 157,494,800         | 1909..... | 21,965,111 | 454,059,100         | 1925..... | 18,673,178              | 384,009,921                |
| 1894..... | 8,764,362  | 181,175,600         | 1910..... | 22,022,180 | 455,239,100         | 1926..... | 19,117,568              | 395,198,984                |
| 1895..... | 9,615,190  | 198,763,600         | 1911..... | 22,397,136 | 462,989,761         | 1927..... | 19,058,736              | 393,979,954                |
| 1896..... | 9,783,914  | 202,251,500         | 1912..... | 22,605,068 | 467,288,203         | 1928..... | 18,859,849              | 390,386,574                |
| 1897..... | 11,420,068 | 236,073,700         | 1913..... | 22,556,347 | 466,284,303         | 1929..... | 19,207,452              | 397,153,303                |
| 1898..... | 13,877,806 | 286,879,700         | 1914..... | 21,653,853 | 447,605,337         | 1930..... | 20,903,730              | 432,118,638                |
| 1899..... | 14,837,775 | 306,724,100         | 1915..... | 22,846,608 | 472,283,884         | 1931..... | 22,284,290              | 460,650,527                |
| 1900..... | 12,315,135 | 254,676,300         | 1916..... | 22,032,542 | 455,455,670         | 1932..... | 24,098,676              | 493,163,970                |
| 1901..... | 12,625,527 | 260,992,900         | 1917..... | 20,346,043 | 430,592,147         | 1933..... | 25,400,295              | 525,070,547                |
| 1902..... | 14,354,680 | 296,737,600         | 1918..... | 18,588,127 | 384,251,378         | 1934..... | 27,372,374              | 558,033,090 <sup>1</sup>   |
| 1903..... | 15,852,620 | 327,702,700         | 1919..... | 17,339,679 | 358,443,791         | 1935..... | 29,909,245 <sup>1</sup> | 1,049,973,580 <sup>2</sup> |
| 1904..... | 16,804,372 | 347,377,200         | 1920..... | 16,146,830 | 333,784,824         | 1936..... | 32,900,188              | 1,153,005,530              |
| 1905..... | 18,396,451 | 380,288,300         | 1921..... | 15,067,692 | 330,702,190         |           |                         |                            |
| 1906..... | 19,471,080 | 402,503,000         | 1922..... | 15,496,859 | 320,349,102         |           |                         |                            |

<sup>1</sup> At \$20-67+ per oz. fine, prior to 1934; at \$35 per oz. fine in 1934 and later years. since publication of the 1937 Year Book.

<sup>2</sup> Preliminary figures.

<sup>2</sup> Revised

In 1936 the world's chief producers were the Union of South Africa, with a production of 11,336,214 fine oz. or 34.4 p.c., U.S.S.R. (Russia), including Siberia, with 5,240,000 fine oz. or 15.9 p.c., United States with 3,759,645 fine oz. or 11.4 p.c. and Canada with 3,735,675\* fine oz. or 11.3† p.c. As Australia, Rhodesia, British West Africa, and British India were also important producers, about 55.6 p.c. of the world production of 1936 was produced in the British Empire.

Detailed statistics of world gold production for 1935 and 1936 appear in Table 11.

\* The revised figure for Canadian gold production in 1936 is 3,748,028 fine oz.

† This percentage, derived from world production as reported by the Director of the United States Mint, is slightly less than that derived from estimates of the Imperial Institute, as given on p. 343.

## 11.—Quantities and Values of the World Production of Gold and Silver, by Countries, calendar years 1935 and 1936.

(Abridged from the Annual Report of the Director of the United States Mint.)

| Country.                               | Calendar Year 1935.   |                          |                         |   | Calendar Year 1936. <sup>1</sup> |                          |                         |   |
|--|-----------------------|--------------------------|-------------------------|---|----------------------------------|--------------------------|-------------------------|---|
|  | Gold.                 |                          | Silver.                 |   | Gold.                            |                          | Silver.                 |   |
|  | Quantity.             | Value (\$35-00 per oz.). | Quantity.               | Value (\$0-64582 per oz.). <sup>2</sup> | Quantity.                        | Value (\$35-00 per oz.). | Quantity.               | Value (\$0-45399 per oz.). <sup>2</sup> |
|  | oz. fine.             | \$                       | oz. fine.               | \$                                      | oz. fine.                        | \$                       | oz. fine.               | \$                                      |
| <b>NORTH AMERICA—</b>                  |                       |                          |                         |   |                                  |                          |                         |   |
| U.S.A.....                             | 3,163,166             | 110,710,815              | 45,612,918              | 29,457,735                              | 3,759,645                        | 131,557,575              | 63,350,587              | 28,760,533                              |
| Canada.....                            | 3,284,590             | 114,971,150              | 16,618,558              | 10,732,597                              | 3,735,308                        | 130,735,675              | 18,231,419              | 8,276,882                               |
| Mexico.....                            | 682,338               | 23,881,830               | 75,589,199              | 48,817,016                              | 753,967                          | 26,388,845               | 77,463,901              | 35,167,836                              |
| Totals <sup>3</sup> ....               | 7,143,350             | 250,017,255              | 138,945,055             | 59,733,495                              | 8,263,987                        | 289,239,545              | 160,270,907             | 72,761,389                              |
| <b>CENTRAL AMERICA AND WEST INDIES</b> | 135,000               | 4,725,000                | 3,500,000               | 2,260,370                               | 140,000                          | 4,900,000                | 3,600,000               | 1,634,364                               |
| <b>SOUTH AMERICA—</b>                  |                       |                          |                         |   |                                  |                          |                         |   |
| Bolivia.....                           | 64,301 <sup>4</sup>   | 2,250,535                | 7,951,000               | 5,134,915                               | 32,151 <sup>5</sup>              | 1,125,285                | 10,723,333 <sup>6</sup> | 4,868,286                               |
| Brazil.....                            | 120,597               | 4,220,895                | 10,000                  | 6,458                                   | 125,405                          | 4,389,175                | 10,000 <sup>6</sup>     | 4,540                                   |
| Chile.....                             | 255,308               | 9,390,730                | 1,050,043               | 678,139                                 | 258,458                          | 9,046,030                | 1,451,353               | 649,534                                 |
| Colombia.....                          | 328,999               | 11,514,955               | 132,975                 | 85,878                                  | 339,500                          | 13,832,500               | 151,500                 | 68,779                                  |
| Peru.....                              | 98,863                | 3,460,205                | 17,432,968              | 11,258,559                              | 188,403                          | 6,594,105                | 19,901,309              | 9,039,995                               |
| Venezuela.....                         | 112,390               | 3,933,650                | 7,000 <sup>7</sup>      | 4,521                                   | 109,996                          | 3,849,850                | 7,000 <sup>7</sup>      | 3,178                                   |
| Totals <sup>3</sup> ....               | 1,163,643             | 40,727,505               | 26,720,638              | 17,256,723                              | 1,285,366                        | 44,987,810               | 32,839,151              | 14,908,646                              |
| <b>EUROPE—</b>                         |                       |                          |                         |   |                                  |                          |                         |   |
| Czechoslovakia....                     | 14,800                | 518,000                  | 1,325,352               | 855,958                                 | 16,248                           | 568,680                  | 1,088,718               | 494,267                                 |
| France.....                            | 91,593                | 3,205,920                | 509,605                 | 367,802                                 | 97,642                           | 3,417,470                | 569,608 <sup>8</sup>    | 258,565                                 |
| Germany.....                           | 5,945                 | 208,180                  | 6,257,788               | 4,041,405                               | 7,534                            | 265,440                  | 6,541,551               | 2,969,799                               |
| Italy.....                             | 3,215 <sup>9</sup>    | 112,525                  | 1,290,820 <sup>9</sup>  | 833,637                                 | 3,697                            | 129,395                  | 1,368,407               | 620,335                                 |
| Roumania.....                          | 143,424               | 5,019,840                | 484,319                 | 312,783                                 | 150,749                          | 5,276,110                | 485,373                 | 220,355                                 |
| Sweden.....                            | 218,721               | 7,655,235                | 608,967                 | 393,283                                 | 164,039                          | 5,741,365                | 588,282                 | 267,074                                 |
| U.S.S.R.....                           | 4,784,030             | 167,441,050              | 3,500,000 <sup>10</sup> | 2,260,370                               | 5,240,000                        | 183,400,000              | 4,000,000 <sup>10</sup> | 1,815,960                               |
| Yugoslavia.....                        | 74,172                | 2,596,020                | 1,753,534               | 1,132,467                               | 84,106                           | 2,943,710                | 1,785,620               | 810,654                                 |
| Totals <sup>3</sup> ....               | 5,343,014             | 187,005,490              | 17,199,118              | 11,107,534                              | 5,769,562                        | 201,934,670              | 18,001,202              | 8,172,366                               |
| <b>ASIA—</b>                           |                       |                          |                         |   |                                  |                          |                         |   |
| British India.....                     | 327,652               | 11,467,820               | 5,850,406               | 3,778,300                               | 333,239                          | 11,663,365               | 5,977,345               | 2,713,655                               |
| China.....                             | 154,966 <sup>11</sup> | 5,423,810                | 146,614 <sup>12</sup>   | 94,686                                  | 154,966 <sup>11</sup>            | 5,423,810                | 146,614 <sup>12</sup>   | 68,561                                  |
| Korea.....                             | 523,948               | 18,338,180               | 1,464,986               | 946,117                                 | 520,842                          | 18,229,470               | 1,500,000 <sup>13</sup> | 680,985                                 |
| Japan.....                             | 559,034               | 20,616,160               | 8,230,751               | 5,315,584                               | 678,531                          | 23,759,085               | 9,066,432               | 4,361,224                               |
| Philippine Is.....                     | 451,814               | 15,813,400               | 322,022                 | 207,968                                 | 597,266                          | 20,904,310               | 491,701                 | 223,227                                 |
| Totals <sup>3</sup> ....               | 2,267,221             | 79,352,735               | 16,774,958              | 10,833,603                              | 2,531,351                        | 88,597,285               | 18,526,743              | 8,410,956                               |
| <b>OCEANIA—</b>                        |                       |                          |                         |   |                                  |                          |                         |   |
| Australia.....                         | 1,212,383             | 42,433,405               | 11,995,715              | 7,747,072                               | 1,428,776                        | 50,007,160               | 13,321,247              | 6,047,713                               |
| New Zealand.....                       | 165,277               | 5,784,695                | 437,967                 | 282,848                                 | 164,575                          | 5,700,125                | 432,973                 | 196,565                                 |
| Totals <sup>3</sup> ....               | 1,384,388             | 48,453,580               | 12,434,343              | 8,030,347                               | 1,610,294                        | 56,300,290               | 13,755,410              | 6,244,818                               |
| <b>AFRICA—</b>                         |                       |                          |                         |   |                                  |                          |                         |   |
| Belgian Congo.....                     | 336,619               | 11,781,665               | 3,793,788               | 2,450,104                               | 386,934                          | 13,542,690               | 2,780,396               | 1,262,272                               |
| British W.A.....                       | 426,611               | 14,931,385               | 139,200                 | 89,898                                  | 499,811                          | 17,493,355               | 154,537                 | 70,158                                  |
| French W.A.....                        | 125,388               | 4,388,580                | —                       | —                                       | 104,490                          | 3,657,150                | —                       | —                                       |
| S. Rhodesia.....                       | 726,281               | 25,419,835               | 132,087                 | 85,305                                  | 797,061                          | 27,897,135               | 145,072                 | 65,861                                  |
| Union S.A.....                         | 10,773,991            | 377,069,685              | 1,042,203               | 673,070                                 | 11,330,214                       | 396,797,490              | 1,075,626               | 488,323                                 |
| Totals <sup>3</sup> ....               | 12,562,629            | 439,692,015              | 5,130,119               | 3,313,133                               | 13,359,598                       | 467,585,930              | 4,450,276               | 2,020,381                               |
| <b>Totals for World.....</b>           | <b>29,999,245</b>     | <b>1,049,973,580</b>     | <b>220,704,231</b>      | <b>1,425,352,265</b>                    | <b>32,960,188</b>                | <b>1,153,605,530</b>     | <b>251,443,689</b>      | <b>114,152,920</b>                      |

<sup>1</sup> Subject to revision.<sup>2</sup> Average price per oz. fine in New York.<sup>3</sup> Totals include other

countries not specified.

<sup>4</sup> Previous year's figures.<sup>5</sup> Estimate based on other years' production.<sup>6</sup> Amount exported.<sup>7</sup> Conjectural.<sup>8</sup> Including New Guinea and Papua.<sup>9</sup> None reported.



## Subsection 2.—Silver.

Although no official statistics of the production of silver were published prior to 1887, the annual reports of the operating companies showed that from 1869 to 1885 about 4,000,000 oz. of silver, with a probable value of \$4,800,000, were produced in the Port Arthur district in Ontario. The development of the silver-lead deposits of British Columbia largely accounted for an increase to a production worth over \$2,000,000 in 1896. From 1896 to 1905 annual production varied in value between \$2,000,000 and \$3,500,000, rising rapidly during the next five years to 32,869,264 fine oz. valued at \$17,580,455 in 1910, as a result of the discovery of the rich ores of the Cobalt district.

The silver production of Canada is chiefly derived from the silver-lead-zinc ores of British Columbia, the silver-cobalt ores of northern Ontario and the silver-lead ores exported from Yukon. An appreciable amount of silver also occurs in the gold ores of northern Ontario, the nickel ores of the Sudbury district, the copper-gold ores of Quebec, Manitoba, and British Columbia and the pitchblende ores of the Northwest Territories. Thus in Canada silver is produced chiefly in combination with other metals.

Since 1926 British Columbia has been the chief silver-producing province. Small amounts are recovered from alluvial gold and crude gold bullion, but the Sullivan and Premier mines have been responsible for the greater part of the output from this province. The Sullivan, primarily noted for its lead and zinc production, is the largest producer of silver in Canada. Silver is also recovered from the copper ores produced in British Columbia.

During 1931 much interest was created by the discovery at Echo Bay, Great Bear lake, of mineral deposits in which high-grade native silver was associated with uranium- and radium-bearing ores. The first commercial production from this area occurred in 1932, when shipments were made to the Trail smelter in British Columbia. Production from this new camp has continued with shipments of silver-radium ores to the refinery at Port Hope, Ontario.

Statistics of the quantities and values of silver produced in Canada are given for the years since 1911 in Table 12, while statistics of the quantities and values produced in the chief silver-producing provinces are given in Table 13.

## 12.—Quantities and Values of Silver Produced in Canada, calendar years 1911-37.

NOTE.—For figures for the years 1887-1910, see p. 361 of the 1933 Year Book.

| Year.     | Quantity.  | Value.     | Year.     | Quantity.  | Value.     | Year.     | Quantity.  | Value.     |
|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|
|           | oz. fine   | \$         |           | oz. fine   | \$         |           | oz. fine   | \$         |
| 1911..... | 32,559,044 | 17,355,272 | 1920..... | 13,330,357 | 13,450,330 | 1929..... | 23,143,261 | 12,264,308 |
| 1912..... | 31,955,560 | 19,440,165 | 1921..... | 13,543,198 | 8,465,355  | 1930..... | 26,443,823 | 10,089,376 |
| 1913..... | 31,945,803 | 19,040,924 | 1922..... | 18,626,439 | 12,576,758 | 1931..... | 20,562,247 | 6,141,943  |
| 1914..... | 28,449,821 | 15,593,631 | 1923..... | 18,601,744 | 12,067,509 | 1932..... | 18,347,907 | 5,811,081  |
| 1915..... | 26,625,960 | 13,228,842 | 1924..... | 19,735,323 | 13,180,113 | 1933..... | 15,187,950 | 5,746,027  |
| 1916..... | 26,459,741 | 16,717,121 | 1925..... | 20,228,988 | 13,971,150 | 1934..... | 16,415,282 | 7,790,840  |
| 1917..... | 22,221,274 | 18,001,895 | 1926..... | 22,371,924 | 13,894,531 | 1935..... | 16,618,558 | 10,767,148 |
| 1918..... | 21,383,979 | 20,683,704 | 1927..... | 22,730,698 | 12,816,677 | 1936..... | 18,334,487 | 8,278,804  |
| 1919..... | 16,020,657 | 17,802,474 | 1928..... | 21,936,407 | 12,761,725 | 1937..... | 22,683,032 | 10,180,371 |

† Preliminary figures.

### 13.—Quantities and Values of Silver Produced in Canada, by Provinces, calendar years 1911-37.

NOTE.—For the years 1887 to 1910, see Canada Year Book, 1916-17, p. 271. Nova Scotia, Saskatchewan, and Alberta have also shown a small production in recent years, production during 1936 being shown in Table 3 of this chapter, pp. 349-351.

| Year.  | Quebec.  |         | Ontario.   |            | Manitoba. |         | British Columbia. |           | Yukon and Northwest Territories. |           |
|--------|----------|---------|------------|------------|-----------|---------|-------------------|-----------|----------------------------------|-----------|
|        | oz. fine | \$      | oz. fine.  | \$         | oz. fine. | \$      | oz. fine.         | \$        | oz. fine.                        | \$        |
| 1911.. | 18,435   | 9,827   | 30,540,754 | 16,279,443 | Nil       | —       | 1,837,147         | 1,005,924 | 112,708                          | 60,078    |
| 1912.. | 9,465    | 5,758   | 29,214,025 | 17,772,352 | Nil       | —       | 2,551,002         | 1,012,737 | 81,008                           | 49,318    |
| 1913.. | 34,573   | 20,672  | 28,411,261 | 16,937,377 | Nil       | —       | 3,312,343         | 1,930,453 | 57,623                           | 52,393    |
| 1914.. | 57,737   | 31,640  | 25,139,214 | 13,779,055 | Nil       | —       | 3,159,897         | 1,731,971 | 62,973                           | 50,959    |
| 1915.. | 68,450   | 31,524  | 22,748,609 | 11,302,419 | Nil       | —       | 3,565,852         | 1,771,658 | 248,040                          | 123,241   |
| 1916.. | 98,610   | 64,748  | 21,608,158 | 14,188,133 | Nil       | —       | 3,392,872         | 2,227,794 | 360,101                          | 236,446   |
| 1917.. | 136,194  | 110,835 | 19,301,835 | 15,714,975 | 7,201     | 5,893   | 2,655,994         | 2,162,430 | 119,605                          | 97,379    |
| 1918.. | 178,676  | 172,907 | 17,193,737 | 16,043,562 | 13,310    | 12,836  | 3,921,336         | 3,794,755 | 71,915                           | 69,594    |
| 1919.. | 140,920  | 156,600 | 12,117,878 | 13,465,628 | 20,700    | 23,069  | 3,715,537         | 4,126,550 | 27,556                           | 30,621    |
| 1920.. | 61,003   | 61,552  | 9,907,626  | 9,996,795  | 15,510    | 15,649  | 3,327,028         | 3,556,971 | 19,190                           | 19,363    |
| 1921.. | 38,084   | 23,861  | 9,761,607  | 6,116,037  | 33        | 20      | 3,350,357         | 2,069,133 | 393,092                          | 240,288   |
| 1922.. | Nil      | —       | 10,811,903 | 7,300,305  | 20        | 14      | 7,150,937         | 4,828,384 | 663,493                          | 447,997   |
| 1923.. | 33,006   | 21,412  | 10,540,943 | 6,838,226  | 5         | 3       | 6,113,327         | 3,905,899 | 1,914,438                        | 1,241,053 |
| 1924.. | 83,814   | 55,972  | 11,272,557 | 7,527,933  | 140       | 93      | 8,153,008         | 5,444,657 | 226,755                          | 151,420   |
| 1925.. | 214,943  | 148,451 | 10,539,181 | 7,271,944  | 477       | 329     | 8,579,458         | 5,925,403 | 404,893                          | 624,946   |
| 1926.. | 375,989  | 233,513 | 9,274,905  | 5,760,402  | 18        | 11      | 10,625,816        | 6,599,376 | 2,095,027                        | 1,301,159 |
| 1927.. | 740,864  | 417,025 | 9,307,953  | 5,246,893  | 12        | 7       | 11,040,445        | 6,223,490 | 1,647,295                        | 923,580   |
| 1928.. | 908,959  | 528,790 | 7,242,601  | 4,213,456  | 1,763     | 1,026   | 10,943,367        | 6,356,413 | 2,839,633                        | 1,651,885 |
| 1929.. | 813,821  | 431,268 | 8,890,726  | 4,711,462  | 2,644     | 1,401   | 10,156,408        | 5,382,185 | 3,270,630                        | 1,737,922 |
| 1930.. | 571,164  | 217,922 | 10,205,633 | 3,893,876  | 94,653    | 36,114  | 11,825,930        | 4,512,065 | 3,746,326                        | 1,429,373 |
| 1931.. | 530,245  | 158,414 | 7,438,951  | 2,222,014  | 836,547   | 249,877 | 8,061,599         | 2,408,000 | 3,604,728                        | 1,103,615 |
| 1932.. | 628,902  | 199,184 | 6,335,788  | 2,006,648  | 1,036,497 | 328,275 | 7,293,463         | 2,309,953 | 3,053,188                        | 966,994   |
| 1933.. | 471,419  | 178,351 | 4,585,650  | 1,715,975  | 1,101,578 | 416,758 | 6,737,057         | 2,548,817 | 2,227,476                        | 842,717   |
| 1934.. | 470,254  | 223,187 | 5,321,100  | 2,525,470  | 1,252,920 | 594,647 | 8,720,721         | 4,143,204 | 555,320                          | 262,611   |
| 1935.. | 668,830  | 435,338 | 5,161,651  | 3,344,226  | 1,256,454 | 781,660 | 9,178,400         | 5,946,677 | 201,221                          | 130,371   |
| 1936.. | 724,339  | 326,872 | 5,219,366  | 2,355,343  | 791,489   | 357,175 | 9,748,715         | 4,399,303 | 1,100,430                        | 496,591   |
| 1937.. | 908,432  | 407,713 | 4,095,220  | 2,107,262  | 985,101   | 442,123 | 11,162,689        | 5,009,920 | 4,062,490                        | 1,832,262 |

<sup>1</sup> Preliminary figures.

**World Production of Silver.**—The world production of silver was estimated by the Director of the United States Mint, as shown in Table 11 of this chapter, at 251,443,689 fine oz. for 1936, an increase of 14 p.c. from 1935 and only 3.7 p.c. less than 1929, when world production reached a record maximum of 260,970,029 fine oz. The silver production of Canada in 1936 was 18,231,419 fine oz., or about 7.2\* p.c. of the estimated world total for that year. This placed Canada fourth, next to Mexico, the United States, and Peru.

In Table 14 the world production, value and average price of silver are given for each year from 1860 up to the present. During the period from 1860 to 1872, silver was still a monetary base in parts of the western world and the price remained fairly stable at about \$1.32 to \$1.35 per fine oz. (about 15½ oz. silver = 1 oz. gold), although production is estimated to have more than doubled during these 12 years. After the demonetization of silver in Germany and the United States, production continued to increase rapidly while the price declined to a generally lower level. During the disturbed conditions of the war period production was curtailed and the price rose to \$1.12 per fine oz. in 1919. However, in the period 1922-29 production increased to new records although the price declined to about half that of 1919. In the course of the depression the price declined further by nearly 50 p.c. and production contracted also, but both have tended to recover since 1932. The fact that silver is to a great extent a by-product in the mining of other metals, helps to explain its increasing production, in spite of lower prices, since 1872.

\* This percentage, based on the world estimate of the Director of the United States Mint, differs slightly from that on p. 348, based on the world estimate of the Imperial Institute.

### 14.—Quantities and Values of World Production of Silver, with Annual Average Prices, 1860-1936.

(From the Annual Report of the Director of the United States Mint.)

| Year.    | Quantity.      | Value.   | Average Price per Fine Oz. <sup>1</sup> | Year.    | Quantity.      | Value.   | Average Price per Fine Oz. <sup>1</sup> | Year.    | Quantity.      | Value.   | Average Price per Fine Oz. <sup>1</sup> |
|----------|----------------|----------|---|----------|----------------|----------|---|----------|----------------|----------|---|
|          | '000 oz. fine. | \$ '000. | \$                                      |          | '000 oz. fine. | \$ '000. | \$                                      |          | '000 oz. fine. | \$ '000. | \$                                      |
| 1860.... | 29,095         | 39,337   | 1.352                                   | 1886.... | 93,207         | 92,794   | 0.995                                   | 1912.... | 236,904        | 141,972  | 0.615                                   |
| 1861.... | 35,402         | 46,191   | 1.305                                   | 1887.... | 96,124         | 94,031   | 0.979                                   | 1913.... | 210,013        | 126,848  | 0.604                                   |
| 1862.... | 35,402         | 47,651   | 1.346                                   | 1888.... | 108,828        | 102,186  | 0.939                                   | 1914.... | 172,264        | 95,262   | 0.553                                   |
| 1863.... | 35,402         | 47,616   | 1.345                                   | 1889.... | 120,214        | 112,414  | 0.935                                   | 1915.... | 173,001        | 89,912   | 0.519                                   |
| 1864.... | 35,402         | 47,616   | 1.345                                   | 1890.... | 126,096        | 131,937  | 1.046                                   | 1916.... | 180,802        | 124,011  | 0.686                                   |
| 1865.... | 35,402         | 47,369   | 1.335                                   | 1891.... | 137,170        | 135,500  | 0.988                                   | 1917.... | 188,125        | 166,241  | 0.893                                   |
| 1866.... | 43,052         | 57,646   | 1.339                                   | 1892.... | 133,152        | 133,404  | 0.971                                   | 1918.... | 203,159        | 200,002  | 0.985                                   |
| 1867.... | 43,052         | 57,173   | 1.328                                   | 1893.... | 165,473        | 129,120  | 0.780                                   | 1919.... | 179,850        | 201,588  | 1.121                                   |
| 1868.... | 43,052         | 57,068   | 1.320                                   | 1894.... | 164,610        | 104,493  | 0.633                                   | 1920.... | 173,296        | 176,658  | 1.019                                   |
| 1869.... | 43,052         | 57,043   | 1.325                                   | 1895.... | 167,501        | 109,546  | 0.654                                   | 1921.... | 171,286        | 108,110  | 0.631                                   |
| 1870.... | 43,052         | 57,173   | 1.328                                   | 1896.... | 157,061        | 105,859  | 0.673                                   | 1922.... | 209,815        | 142,536  | 0.679                                   |
| 1871.... | 63,317         | 83,958   | 1.326                                   | 1897.... | 160,421        | 96,233   | 0.600                                   | 1923.... | 246,010        | 172,276  | 0.700                                   |
| 1872.... | 63,317         | 83,705   | 1.323                                   | 1898.... | 169,055        | 99,743   | 0.590                                   | 1924.... | 239,485        | 178,311  | 0.744                                   |
| 1873.... | 63,267         | 82,121   | 1.296                                   | 1899.... | 168,337        | 101,003  | 0.600                                   | 1925.... | 245,214        | 172,498  | 0.703                                   |
| 1874.... | 55,301         | 70,674   | 1.279                                   | 1900.... | 173,591        | 107,626  | 0.620                                   | 1926.... | 253,795        | 159,569  | 0.629                                   |
| 1875.... | 62,262         | 77,578   | 1.246                                   | 1901.... | 173,011        | 103,807  | 0.600                                   | 1927.... | 253,981        | 144,947  | 0.570                                   |
| 1876.... | 67,763         | 78,323   | 1.156                                   | 1902.... | 162,763        | 86,265   | 0.530                                   | 1928.... | 257,925        | 151,214  | 0.586                                   |
| 1877.... | 62,680         | 75,279   | 1.201                                   | 1903.... | 167,689        | 90,552   | 0.540                                   | 1929.... | 260,670        | 139,961  | 0.536                                   |
| 1878.... | 73,285         | 84,540   | 1.153                                   | 1904.... | 164,195        | 95,233   | 0.580                                   | 1930.... | 248,708        | 96,310   | 0.387                                   |
| 1879.... | 74,383         | 83,533   | 1.124                                   | 1905.... | 172,318        | 105,114  | 0.610                                   | 1931.... | 195,929        | 56,842   | 0.290                                   |
| 1880.... | 74,795         | 85,641   | 1.145                                   | 1906.... | 165,054        | 111,721  | 0.677                                   | 1932.... | 164,893        | 46,506   | 0.282                                   |
| 1881.... | 79,021         | 89,926   | 1.138                                   | 1907.... | 184,207        | 121,577  | 0.660                                   | 1933.... | 169,159        | 59,201   | 0.350                                   |
| 1882.... | 86,472         | 98,232   | 1.130                                   | 1908.... | 203,131        | 108,655  | 0.535                                   | 1934.... | 190,393        | 91,930   | 0.483                                   |
| 1883.... | 89,175         | 98,984   | 1.111                                   | 1909.... | 212,149        | 110,364  | 0.520                                   | 1935.... | 220,704*       | 142,535* | 0.646                                   |
| 1884.... | 81,568         | 90,755   | 1.113                                   | 1910.... | 221,716        | 119,727  | 0.540                                   | 1936.... | 251,444        | 114,153  | 0.454                                   |
| 1885.... | 91,610         | 97,519   | 1.065                                   | 1911.... | 226,193        | 122,144  | 0.540                                   |          |                |          |   |

<sup>1</sup> At the average par price of a fine ounce of silver in London, excepting the years 1918-22, inclusive, and 1931-36, for which the means of the New York bid and asked prices were used. <sup>\*</sup> Revised since the publication of the 1937 Year Book.

<sup>\*</sup> Preliminary figures.

### Subsection 3.—Copper.

The copper-mining industry has developed at a very rapid rate. A production of 3,505,000 lb. in 1886 had doubled 6 years later. By 1913, the output had increased over twenty-one fold, amounting to 76,976,925 lb. The extraordinary demand for war requirements resulted in an average production from 1916 to 1918 of 115,048,931 lb. In the post-war depression production dropped to less than 43,000,000 lb. in 1922, but recovered rapidly and by 1930 had risen to a new peak of 303,478,356 lb. In the two following years, as a result of the world-wide depression with very low prices prevailing for copper, production declined to 247,679,070 lb. in 1932. Since then output has grown to 421,027,732 lb. in 1936. Some Canadian copper producers, located principally in Manitoba, Ontario, and Quebec, were fortunate in possessing ores containing sufficiently high values in precious metals to permit of operation during the years of abnormally low copper prices prevailing from 1930 to 1935. However, the unfavourable copper market which existed during the depression did not encourage production and the search for and development of new copper properties was curtailed. In June of 1932 the United States instituted a duty of 4 cents per pound on foreign copper, which adversely affected copper production in British Columbia. On the other hand, Canadian copper enjoys a preference in the United Kingdom and a large part of Canadian production now goes there. The improvement in copper prices accompanying general industrial

recovery and rearmament requirements stimulated the production of the metal in 1936 and 1937.

**Quebec.**—Until 1894, when Ontario took the lead, Quebec was the chief copper-producing province of Canada, the principal mines being the Eustis and Huntingdon properties in the Eastern Townships. There is still an annual production from this field. Developments in the Rouyn Camp of northwestern Quebec have resulted in a greatly increased production of copper since 1927. Since 1931 the Canadian Copper Refiners Ltd., have treated blister copper in their electrolytic refinery located at Montreal East. This material comes from the Noranda smelter in Quebec and the Flin Flon smelter in Manitoba. Gold, silver, selenium, and tellurium are also products of the Montreal refinery.

**Ontario.**—The Sudbury deposits were first noted in 1856, but did not attract attention until 1883-84, when, during the construction of the C.P.R., a railway cutting was made through the small hill on which the Murray mine was afterwards located. During the first years the deposits were developed for their copper content alone; not until 1887 was the presence of nickel determined and the true value of the ores known. These nickel-copper ores of the Sudbury area are now the source of nearly all the copper produced in Ontario. Under the International Nickel Co. of Canada, an amalgamation of the former International Nickel Co. and the Mond Nickel Co., an extensive program of expansion in the mining and metallurgical facilities of the district has been carried out. A subsidiary company, the Ontario Refining Co., Ltd., operates a copper refinery at Copper Cliff where electrolytically refined copper, precious metals, selenium, and tellurium are produced from the blister copper smelted by the International Nickel Co., chiefly from ores from their own mines in the district. The Company also operates the Acton precious metals refinery situated near London, England, where it recovers, in a refined state, the gold, silver, and platinum metals contained in the concentrates produced at both the Swansea and Port Colborne nickel refineries. The Falconbridge Nickel Mines, operating a mine in Falconbridge township, make a copper-nickel matte which is shipped to Norway for refining. Adverse industrial conditions led to reductions in the copper production of Ontario in 1931 and 1932. There has been, however, a remarkable recovery in production since then.

**Manitoba and Saskatchewan.**—During the four years 1917-20, when high prices prevailed for copper, ores containing 9,866,328 lb. of copper were shipped by the Mandy mine. Much development has been carried on in the Flinflon district on the Manitoba-Saskatchewan boundary since the War, and large bodies of ore have been proven on the Flinflon property of the Hudson Bay Mining and Smelting Co. and the Sherritt-Gordon property. About 135 miles of branch line from the Hudson Bay railway provide these properties with transportation facilities. A copper smelter and electrolytic zinc plant are operated by the Hudson Bay Mining and Smelting Co. at Flinflon, while a large hydraulic development on the Churchill river provides the necessary power. Production from the plants of this Company has been continuous since 1930.

**British Columbia.**—Until 1930, British Columbia had been the leading copper producer among the provinces for many years, but it then gave first place to Ontario and since 1930 production has greatly declined, owing principally to the cessation in August, 1935, of mining and smelting operations at Anyox, as a result of the low price of copper and exhaustion of ore reserves. In 1937, the Granby Company resumed operations at its Copper Mountain mine, and an increase in British Columbia copper output resulted.

### 15.—Quantities of Copper Produced in Canada, by Provinces, with Total Values, calendar years 1911-37.

NOTE.—For the years 1886 to 1910, see Canada Year Book, 1916-17, p. 272.

| Year.     | Quebec.    | Ontario.    | Manitoba.              | Saskatchewan.          | British Columbia. | Yukon.                 | Totals.                 |
|-----------|------------|-------------|------------------------|------------------------|-------------------|------------------------|-------------------------|
|           | lb.        | lb.         | lb.                    | lb.                    | lb.               | lb.                    | \$                      |
| 1911..... | 2,496,190  | 17,993,263  | -                      | -                      | 35,279,558        | -                      | 6,886,998               |
| 1912..... | 3,232,210  | 22,250,001  | -                      | -                      | 50,526,656        | 1,772,660 <sup>1</sup> | 12,718,548              |
| 1913..... | 3,455,887  | 25,888,929  | -                      | -                      | 45,791,579        | 1,843,530              | 11,758,006              |
| 1914..... | 4,201,497  | 28,948,211  | -                      | -                      | 41,219,202        | 1,307,050              | 10,301,609              |
| 1915..... | 4,197,482  | 39,361,464  | -                      | -                      | 56,692,988        | 533,210                | 17,410,035              |
| 1916..... | 5,703,347  | 44,997,035  | -                      | -                      | 68,645,550        | 2,807,092              | 21,807,150              |
| 1917..... | 5,015,460  | 42,867,774  | 1,116,000 <sup>1</sup> | -                      | 57,730,359        | 2,460,097              | 20,657,989 <sup>2</sup> |
| 1918..... | 5,309,440  | 47,074,475  | 2,339,751              | -                      | 62,848,681        | 619,878                | 20,250,536              |
| 1919..... | 2,691,005  | 24,346,623  | 3,348,000              | -                      | 44,502,079        | 165,184                | 14,028,265              |
| 1920..... | 580,638    | 32,059,903  | 3,062,577              | -                      | 45,319,771        | 277,712                | 14,244,217              |
| 1921..... | 352,308    | 13,821,385  | Nil                    | -                      | 34,447,127        | Nil                    | 5,953,555               |
| 1922..... | Nil        | 10,949,636  | Nil                    | -                      | 31,936,182        | Nil                    | 5,738,177               |
| 1923..... | Nil        | 31,656,900  | Nil                    | -                      | 55,224,737        | Nil                    | 12,529,139              |
| 1924..... | 1,893,008  | 37,112,193  | Nil                    | -                      | 55,451,240        | Nil                    | 13,604,833              |
| 1925..... | 2,510,141  | 39,712,777  | Nil                    | -                      | 69,221,600        | Nil                    | 15,640,828              |
| 1926..... | 2,674,058  | 41,312,367  | Nil                    | -                      | 39,108,017        | Nil                    | 17,490,300              |
| 1927..... | 3,119,248  | 45,341,205  | Nil                    | -                      | 41,686,297        | Nil                    | 17,105,487              |
| 1928..... | 33,697,049 | 66,507,510  | Nil                    | -                      | 102,283,210       | 107,377,202            | 28,595,249              |
| 1929..... | 55,337,199 | 88,879,853  | Nil                    | -                      | 108,908,738       | Nil                    | 43,415,251              |
| 1930..... | 80,810,363 | 127,718,871 | 2,067,009              | -                      | 98,819,385        | 42,628,035             | 57,948,359              |
| 1931..... | 68,375,958 | 112,832,626 | 45,321,432             | -                      | 65,223,348        | Nil                    | 24,114,065              |
| 1932..... | 67,336,609 | 77,055,413  | 52,706,381             | -                      | 50,580,104        | Nil                    | 24,679,070              |
| 1933..... | 99,943,882 | 145,504,720 | 38,163,181             | 3,223,941 <sup>1</sup> | 43,146,724        | Nil                    | 299,932,448             |
| 1934..... | 73,905,545 | 205,059,539 | 30,867,141             | 6,618,913              | 43,246,924        | Nil                    | 364,701,062             |
| 1935..... | 79,090,906 | 252,027,928 | 38,011,371             | 11,429,433             | 38,478,043        | Nil                    | 418,997,700             |
| 1936..... | 66,340,175 | 287,914,078 | 29,853,220             | 14,971,609             | 21,169,344        | Nil                    | 521,027,722             |
| 1937..... | 94,653,158 | 322,039,208 | 45,932,000             | 22,400,000             | 45,899,004        | Nil                    | 531,041,578             |

<sup>1</sup> First reported production in this province or territory.

<sup>2</sup> Includes a small production from New Brunswick and Alberta.

<sup>3</sup> Includes 779,307 lb. valued at \$73,855 produced in Nova Scotia in 1936, and 188,531 lb. at \$24,656 in 1937.

<sup>4</sup> Preliminary figures.

**World Production of Copper.**—World production of copper was estimated at 1,881,600 short tons in 1936, as compared with 2,150,400 tons in 1929, the record year. Canada had an output of 210,514 tons in 1936, producing about 11.2 p.c. of the estimated world total and standing third among the nations.

### 16.—Copper Production of the Leading Countries and of the World, 1913-36.

(In short tons of 2,000 pounds.)

NOTE.—Figures in this table, except as indicated, are from the Imperial Institute's Statistical Summary.

| Year.                 | Canada. | Northern Rhodesia. | Belgian Congo.      | Chile.  | Japan.  | Mexico. | Peru.  | Spain and Portugal. | United States. | World Production. <sup>2</sup> |
|-----------------------|---------|--------------------|---------------------|---------|---------|---------|--------|---------------------|----------------|--------------------------------|
| 1913...               | 38,488  | -                  | -                   | 46,574  | 73,283  | 58,185  | 30,600 | 39,683              | 614,255        | 1,072,674                      |
| 1914...               | 37,908  | -                  | -                   | 49,221  | 77,650  | 40,043  | 29,853 | 29,652              | 579,133        | 1,021,233                      |
| 1915...               | 50,393  | -                  | -                   | 57,680  | 83,108  | 34,128  | 38,209 | 40,895              | 712,120        | 1,188,172                      |
| 1916...               | 58,575  | -                  | -                   | 75,559  | 100,960 | 60,751  | 47,472 | 39,021              | 971,123        | 1,533,294                      |
| 1917...               | 64,614  | -                  | -                   | 112,955 | 119,058 | 52,345  | 49,784 | 45,084              | 901,010        | 1,579,675                      |
| 1918...               | 59,835  | -                  | -                   | 117,351 | 99,593  | 38,233  | 45,944 | 50,890              | 968,087        | 1,569,522                      |
| 1919...               | 37,527  | -                  | -                   | 87,721  | 89,463  | 68,661  | 43,243 | 38,581              | 604,649        | 1,067,437                      |
| 1920...               | 40,800  | -                  | -                   | 109,075 | 74,727  | 49,866  | 30,350 | 25,353              | 635,248        | 1,082,052                      |
| 1921...               | 23,810  | -                  | -                   | 68,299  | 59,626  | 13,576  | 36,689 | 36,596              | 238,420        | 800,060                        |
| 1922...               | 21,440  | -                  | -                   | 142,330 | 59,663  | 38,842  | 40,133 | 40,234              | 511,970        | 965,045                        |
| 1923...               | 43,129  | -                  | -                   | 201,042 | 70,315  | 60,333  | 48,684 | 57,115              | 754,000        | 1,411,980                      |
| 1924...               | 52,229  | -                  | -                   | 209,856 | 69,378  | 49,150  | 38,466 | 60,713              | 819,000        | 1,622,984                      |
| 1925...               | 55,725  | 83 <sup>1</sup>    | 99,323 <sup>1</sup> | 209,654 | 72,413  | 59,123  | 41,130 | 63,993              | 854,000        | 1,589,717                      |
| 1926...               | 66,647  | 798                | 88,889              | 223,015 | 72,377  | 62,303  | 46,703 | 63,933              | 878,000        | 1,637,489                      |
| 1927...               | 70,074  | 3,685              | 98,278              | 264,242 | 73,331  | 63,760  | 52,438 | 60,351              | 847,419        | 1,682,381                      |
| 1928...               | 101,348 | 6,642              | 125,902             | 316,141 | 75,214  | 72,280  | 62,233 | 61,600              | 904,699        | 1,892,800                      |
| 1929...               | 124,000 | 6,122              | 151,007             | 383,434 | 83,190  | 65,409  | 61,555 | 75,404              | 997,555        | 2,150,400                      |
| 1930...               | 151,331 | 7,021              | 153,164             | 242,865 | 87,119  | 80,822  | 62,410 | 73,920              | 705,079        | 1,799,600                      |
| 1931...               | 146,152 | 25,536             | 132,180             | 247,620 | 88,008  | 80,767  | 63,822 | 62,720              | 538,575        | 1,553,200                      |
| 1932...               | 128,840 | 97,708             | 59,380              | 113,792 | 79,320  | 83,862  | 57,954 | 63,083              | 235,111        | 996,800                        |
| 1933...               | 146,992 | 144,954            | 73,408              | 180,112 | 76,095  | 43,900  | 34,466 | 34,720              | 190,643        | 1,422,400                      |
| 1934...               | 152,351 | 175,511            | 121,348             | 282,964 | 73,857  | 48,797  | 30,557 | 35,840              | 237,405        | 1,411,200                      |
| 1935...               | 209,499 | 188,898            | 118,699             | 294,408 | 76,401  | 43,401  | 33,865 | 35,840              | 380,491        | 1,648,400                      |
| 1936 <sup>1</sup> ... | 210,514 | 191,216            | 106,455             | 282,240 | 85,689  | 32,753  | 38,960 | 30,240              | 400,711        | 1,881,600                      |

<sup>1</sup> Dominion Bureau of Statistics figures.

<sup>2</sup> Totals include productions of other countries not specified.

<sup>3</sup> First reported production for this country.

<sup>4</sup> Preliminary figures.

## Subsection 4.—Lead.

Lead is obtained in Canada largely from the ores of British Columbia, where production began with 88,665 lb. in 1891. Bounties were paid on lead produced in Canada from 1899 to 1918 (see the 1920 Year Book, p. 454) but the highest production of this period was 56,900,000 lb. in 1905. However, as a result of developments in British Columbia mentioned below, production has increased greatly since the War, as shown in Table 17.

**British Columbia.**—In the East and West Kootenay districts there are many important mines, the principal of which is the Sullivan lead-zinc mine near Kimberley. The ore averages about 11 p.c. lead, 7 p.c. zinc, and 5 ounces of silver to the ton. The successful solving by the Consolidated Mining and Smelting Co. of the metallurgical problems connected with the separation and reduction of these lead-zinc ores accounts to a considerable extent for the rapid growth in lead production during recent years. As a result of the low prices prevailing from 1930 to 1935 for lead, zinc, and silver, many of the small silver-lead mines of the Slokan have remained idle.

**Other Provinces.**—Occurrences of lead have been found in Gaspe peninsula and in the Rouyn district of Quebec, but the only production of importance has come from the Notre-Dame-des-Anges district, Portneuf County, where the Tetreault mine produces lead and zinc concentrates. Lead production in Ontario has come chiefly from the Galetta mine and smelter, which closed down in the summer of 1931. An important production of lead came in recent years from the silver-lead ores of the Mayo district of Yukon, and in 1935 production of silver-lead-zinc concentrates was resumed at the Sterling mine, Richmond County, Nova Scotia.

## 17.—Quantities and Values of Lead Produced from Canadian Ores, calendar years 1911-37.

NOTE.—For figures for the years 1887-1910, see 1929 Year Book, p. 367.

| Year.     | Quantity.               | Value.    | Price per Pound. | Year.     | Quantity.   | Value.     | Price per Pound.   |
|-----------|-------------------------|-----------|------------------|-----------|-------------|------------|--------------------|
|           | lb.                     | \$        | cts.             |           | lb.         | \$         | cts.               |
| 1911..... | 23,784,969              | 827,717   | 3-480            | 1924..... | 175,485,400 | 14,221,345 | 8-104              |
| 1912..... | 35,763,476              | 1,597,554 | 4-467            | 1925..... | 253,590,578 | 23,127,450 | 9-129              |
| 1913..... | 37,662,703 <sup>1</sup> | 1,754,705 | 4-659            | 1926..... | 283,801,265 | 19,240,651 | 6-751 <sup>2</sup> |
| 1914..... | 36,337,765              | 1,627,568 | 4-479            | 1927..... | 311,423,161 | 16,477,139 | 5-256              |
| 1915..... | 46,316,450              | 2,593,721 | 5-600            | 1928..... | 337,946,088 | 15,553,231 | 4-576              |
| 1916..... | 41,497,615              | 3,532,692 | 8-513            | 1929..... | 326,532,560 | 16,544,248 | 5-063              |
| 1917..... | 32,576,281              | 3,628,020 | 11-137           | 1930..... | 332,694,163 | 13,102,635 | 3-933              |
| 1918..... | 51,368,002              | 4,754,315 | 9-250            | 1931..... | 267,342,482 | 7,260,153  | 2-710              |
| 1919..... | 43,827,669              | 3,053,037 | 6-966            | 1932..... | 255,947,378 | 5,409,704  | 2-114              |
| 1920..... | 35,953,717              | 3,214,262 | 8-940            | 1933..... | 266,475,191 | 6,372,998  | 2-392              |
| 1921..... | 66,679,592              | 3,828,742 | 5-742            | 1934..... | 346,275,576 | 8,436,655  | 2-436              |
| 1922..... | 93,307,171              | 5,817,702 | 6-219            | 1935..... | 339,106,079 | 10,624,772 | 3-133              |
| 1923..... | 111,234,466             | 7,985,522 | 7-179            | 1936..... | 383,180,909 | 14,993,869 | 3-913              |
|           |                         |           |                  | 1937..... | 411,221,232 | 21,013,404 | 5-110              |

<sup>1</sup> Previous to 1913 the figures reported show the metal content of the shipments and are somewhat in excess of the actual amounts recovered. Since 1919 the data given represent the quantities of lead produced in Canada from domestic ores, together with the estimated lead recovery from lead ores and concentrates exported.

<sup>2</sup> From 1911 to 1925, average prices at Montreal; from 1926 to 1936, average yearly prices at London, England.

<sup>3</sup> Preliminary figures.

**World Production.\***—The world production of lead in 1936 was about 1,490,000 long tons. The principal producers were the United States with 22.3 p.c., Australia 15.0 p.c., Mexico 14.2 p.c., Canada 11.5 p.c., India 6.0 p.c., Yugoslavia 4.9 p.c., Germany 4.1 p.c., and Spain 2.7 p.c.

### Subsection 5.—Nickel.

With the exception of the small amounts of nickel recovered from the ores of the Cobalt district and relatively small shipments in recent years of nickel-copper ore from the B.C. Nickel Mines, Ltd., the Canadian production of nickel has been derived entirely from the well-known nickel-copper deposits of the Sudbury district, Ontario. A brief description of the history and development of the nickel-copper mining industry will be found under "Copper" in Subsection 3 of this section. From 830,477 lb. in 1889, the production of nickel increased continually to a war-time peak of 92,507,293 lb. in 1918. After a slump to 17,597,123 lb. in 1922, production expanded rapidly again and in 1928 exceeded that of the war year 1918, while 1929 established a still higher record. The depression brought another decline to 30,327,968 lb. in 1932, but a remarkable recovery has again been made and new records established each year since 1933, as shown in Table 18.

### 18.—Quantities and Values of Nickel Produced in Canada, calendar years 1911-37.

NOTE.—For figures for the years 1889-1910, see 1929 Year Book, p. 363.

| Year.    | Quantity.  | Value.     | Year.    | Quantity.  | Value.                  | Year.                | Quantity.                | Value.     |
|----------|------------|------------|----------|------------|-------------------------|----------------------|--------------------------|------------|
|          | lb.        | \$         |          | lb.        | \$                      |                      | lb.                      | \$         |
| 1911.... | 34,098,744 | 10,229,623 | 1920.... | 61,335,706 | 24,534,282              | 1929....             | 110,275,912              | 27,115,461 |
| 1912.... | 44,841,542 | 13,452,463 | 1921.... | 10,293,060 | 6,752,571               | 1930....             | 103,768,857              | 24,455,133 |
| 1913.... | 40,676,772 | 14,903,032 | 1922.... | 17,597,123 | 6,158,993               | 1931....             | 65,666,320               | 15,267,453 |
| 1914.... | 45,517,937 | 13,655,381 | 1923.... | 62,463,843 | 18,332,077              | 1932....             | 30,327,968               | 7,179,862  |
| 1915.... | 68,908,657 | 20,492,597 | 1924.... | 69,536,350 | 12,126,739 <sup>1</sup> | 1933....             | 83,264,058               | 20,130,480 |
| 1916.... | 82,058,564 | 20,035,498 | 1925.... | 73,857,114 | 15,946,672              | 1934....             | 128,667,340              | 32,139,425 |
| 1917.... | 82,330,280 | 33,732,112 | 1926.... | 65,714,264 | 14,374,163              | 1935....             | 138,516,240              | 35,345,103 |
| 1918.... | 92,507,293 | 37,002,917 | 1927.... | 66,793,717 | 15,262,171              | 1936....             | 169,739,393              | 43,876,525 |
| 1919.... | 44,544,833 | 17,817,953 | 1928.... | 96,755,578 | 22,318,907              | 1937 <sup>2</sup> .. | 224,760,974 <sup>3</sup> | 59,507,176 |

<sup>1</sup> A change in the method of computing the value of nickel production accounts for the drop in value after 1923. <sup>2</sup> Preliminary figures. <sup>3</sup> Not including experimental shipments from British Columbia.

The nickel-bearing rocks of the Sudbury district, with a width of about two and one-half miles, form a wide ellipse 36 miles long and 13 miles broad. The ore of the district is mined principally for its nickel and copper content but gold, silver, selenium, tellurium, and metals of the platinum group, though present in relatively small quantities, are profitably recovered in the metallurgical processes. The proved deposits of nickel ore in Canada are estimated to be sufficient to provide for the world's requirements for many years, while there are still large reserves undeveloped.

In recent years the producing companies have instituted extensive researches to discover and encourage new peace-time uses for the metal. The success attending

\* From the Imperial Institute's Statistical Summary.

their efforts in that direction accounted very largely for the marked increase in production during the nineteen-twenties. The automobile industry, electrical machinery, cooking utensils, new submarine cables, and various nickel alloys all helped to absorb this increased production.

**World Production.\***—The world production of nickel was about 87,200 long tons in 1936, of which output about 87 p.c. was Canadian in origin, while the remainder was derived chiefly from New Caledonia.

#### Subsection 6.—Cobalt.

The major portion of the world supply of cobalt was for almost two decades prior to 1925 derived from the silver-cobalt-nickel arsenides of the Cobalt district, when the cobalt produced by refineries in southern Ontario practically controlled world production. Large deposits of cobalt-bearing ores occur in Africa in the Belgian Congo, Northern Rhodesia, and French Morocco, and the introduction into world markets of cobalt from this source has increased world production while Canadian production has declined since 1925.

The ore bodies at Cobalt, discovered in 1903, carry silver, cobalt, nickel, bismuth, and arsenic. The Deloro smelter treats ores and residues and disposes of cobalt oxide, metallic cobalt and unseparated oxides of nickel and cobalt. Production of cobalt, computed as the metallic cobalt and cobalt in oxides from Canadian smelters, together with the cobalt recovered in ores exported from the mines and including cobalt in any residues exported, amounted in 1936 to 887,591 lb. valued at \$804,676, as against 1,116,492 lb. valued at \$2,328,517 in 1925. Production in 1937 is estimated at 507,064 lb. valued at \$848,247.

#### Subsection 7.—Zinc.

The zinc-mining industry of Canada has recently made rapid strides, largely on account of the application of improved metallurgical methods in the treatment of the lead-zinc ores of British Columbia and the production of electrolytic zinc from the Flinflon copper-zinc ores of Manitoba. The growth of production since 1911 is shown in Table 19.

The principal zinc-mining regions of British Columbia are situated in the Kootenay district, where there are large deposits of silver-lead-zinc ore. The chief producing mine is the Sullivan near Kimberley, where the ore worked is a replacement deposit of considerable size. Other mines are located in the Ainsworth and Slocan divisions of the West Kootenay district. The Britannia mine on Howe sound, while primarily a copper-gold property, also produces zinc concentrates.

In northwestern Manitoba, the Flin Flon and Sherritt-Gordon mines have ores in which zinc is closely associated with copper and gold, and refined zinc has been made at the Flin Flon smelter since the autumn of 1930. In Quebec, zinc and lead concentrates are produced at the Tetreault mine, Notre-Dame-des-Anges, and zinc concentrates were shipped also during 1937 from the Waite-Amulet mine in the Rouyn district. At the Sterling mine, Richmond County, Nova Scotia, the production of lead and zinc concentrates was resumed in 1936.

\* From the Imperial Institute's Statistical Summary.



19.—Quantities<sup>1</sup> and Values of Zinc Produced in Canada, calendar years 1911-37.

| Year.     | Quantity. <sup>1</sup> | Value.    | Average Price per lb. | Year.     | Quantity. <sup>1</sup> | Value.     | Average Price per lb. |
|-----------|------------------------|-----------|-----------------------|-----------|------------------------|------------|-----------------------|
|           | lb.                    | \$        | cts.                  |           | lb.                    | \$         | cts.                  |
| 1911..... | 1,877,479              | 108,105   | 5-758                 | 1925..... | 109,268,511            | 8,323,446  | 7-622                 |
| 1912..... | 4,233,760              | 297,421   | 6-943                 | 1926..... | 149,038,105            | 11,110,413 | 7-410                 |
| 1913..... | 5,640,195              | 318,558   | 5-648                 | 1927..... | 165,495,525            | 10,250,793 | 6-194                 |
| 1914..... | 7,246,063              | 377,737   | 5-213                 | 1928..... | 184,647,374            | 10,143,050 | 5-493                 |
| 1915..... | 9,771,651              | 1,292,789 | 13-230                | 1929..... | 197,267,087            | 10,626,778 | 5-387                 |
| 1916..... | 23,364,790             | 2,991,623 | 12-804                | 1930..... | 267,643,505            | 9,635,166  | 3-600                 |
| 1917..... | 29,613,764             | 2,640,817 | 8-901                 | 1931..... | 287,948,451            | 6,059,249  | 2-554                 |
| 1918..... | 35,083,175             | 2,862,430 | 8-159                 | 1932..... | 172,283,558            | 4,144,454  | 2-406                 |
| 1919..... | 32,194,707             | 2,362,448 | 7-338                 | 1933..... | 199,131,984            | 6,393,132  | 3-211                 |
| 1920..... | 39,863,912             | 3,057,961 | 7-671                 | 1934..... | 298,579,683            | 9,087,671  | 3-044                 |
| 1921..... | 53,059,356             | 2,471,310 | 4-655                 | 1935..... | 320,649,859            | 9,936,908  | 3-099                 |
| 1922..... | 56,290,000             | 3,217,536 | 5-716                 | 1936..... | 333,182,736            | 11,045,007 | 3-315                 |
| 1923..... | 60,413,240             | 3,991,701 | 6-607                 | 1937..... | 370,418,073            | 18,157,594 | 4-902                 |
| 1924..... | 98,909,077             | 6,274,701 | 6-344                 |           |                        |            |                       |

<sup>1</sup> Estimated foreign smelter recoveries and refined zinc made in Canada.<sup>2</sup> Preliminary figures.

## Subsection 8.—Iron.\*

Iron ore is widely distributed in Canada and extensive deposits have been discovered from time to time, but none at present available can compete in low cost with high-grade external sources of supply.

Iron ore was first mined and smelted in the province of Quebec early in the eighteenth century, and from that time until 1883 the industry was carried on almost continuously at Three Rivers. Other furnaces using local ore were operated at Radnor Forges and Drummondville, the last to shut down being the Drummondville furnace in 1911. At the present time only titaniferous iron ore is mined in Quebec; this ore is produced near Baie St. Paul and is shipped for its titanium content.

More iron ore has been produced in Ontario than in any other province. Large quantities of red hematite were taken from the Helen mine in the Michipicoten district, while the Maggie mine in the same district produced siderite which was roasted before being shipped to the blast furnaces at Sault Ste. Marie.

No ores for the production of iron have been mined in Canada since 1923. The large iron and steel industry of Nova Scotia draws its requirements from the easily accessible and abundant supplies of the high-grade Wabana deposit in Newfoundland. In Ontario, also, there has been a broad development of the primary iron and steel industry largely because cheap and high-grade supplies of iron ore are readily available from the Mesabi range of Minnesota, while coal supplies are drawn from the nearby coal-fields of Pennsylvania.

A revival in iron-ore mining in Ontario is indicated by the fact that, during the summer of 1937, the Algoma Properties Ltd. commenced rebuilding the surface equipment at the new Helen mine in the Michipicoten district, where reserves are estimated at 60,000,000 tons of iron carbonate rather high in sulphur and therefore requiring roasting to fit it for use in the blast furnace. An Act passed by the Ontario Legislature has provided for a bounty of two cents per unit of iron content for a period of 10 years commencing Jan. 1, 1939.

\* The known resources of iron ore were briefly described at p. 411 of the 1934-35 Year Book, and a sketch of the iron and steel industry of Canada was given on pp. 452-456 of the 1922-23 Year Book.

## 20.—Iron Ore Shipments and Production of Pig Iron, Ferro-Alloys, and Steel Ingots and Castings, calendar years 1911-37.

NOTE.—For the years 1880-1910, see Canada Year Book, 1936, p. 373.

| Calendar Year.          | Ore Shipments from Canadian Mines. | Production of Pig Iron. |                         |                         |                         | Production of Ferro-Alloys. | Production of Steel Ingots and Castings. |
|-------------------------|------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------------|--|
|                         |                                    | Nova Scotia.            | Quebec.                 | Ontario.                | Canada.                 |                             |  |
|                         | short tons. <sup>1</sup>           | long tons. <sup>1</sup> | long tons. <sup>1</sup> | long tons. <sup>1</sup> | long tons. <sup>1</sup> | long tons. <sup>1</sup>     | long tons. <sup>1</sup>                  |
| 1911.....               | 210,344                            | 348,430                 | 588                     | 470,210                 | 819,238                 | 6,703                       | 787,854                                  |
| 1912.....               | 218,883                            | 379,459                 | Nil                     | 526,422                 | 905,881                 | 6,995                       | 855,072                                  |
| 1913.....               | 307,034                            | 428,632                 | Nil                     | 579,374                 | 1,008,006               | 7,210                       | 1,043,744                                |
| 1914.....               | 244,854                            | 202,725                 | Nil                     | 496,629                 | 699,254                 | 6,718                       | 739,858                                  |
| 1915.....               | 398,112                            | 375,246                 | Nil                     | 440,635                 | 815,871                 | 9,638                       | 911,414                                  |
| 1916.....               | 275,176                            | 419,692                 | Nil                     | 624,287                 | 1,043,979               | 23,555                      | 1,275,232                                |
| 1917.....               | 215,302                            | 421,560                 | 12,224                  | 611,287                 | 1,045,071               | 38,808                      | 1,558,691                                |
| 1918.....               | 211,608                            | 371,313                 | 23,598                  | 667,545                 | 1,067,456               | 39,914                      | 1,672,964                                |
| 1919.....               | 197,170                            | 254,542                 | 6,876                   | 558,020                 | 819,447                 | 43,394                      | 919,948                                  |
| 1920.....               | 129,072                            | 296,869                 | 7,887                   | 668,812                 | 973,568                 | 27,781                      | 1,100,622                                |
| 1921.....               | 59,509                             | 151,843                 | 610                     | 441,876                 | 593,829                 | 23,608                      | 667,484                                  |
| 1922.....               | 17,971                             | 130,769                 | Nil                     | 262,198                 | 382,967                 | 21,602                      | 490,137                                  |
| 1923.....               | 30,752                             | 277,054                 | Nil                     | 602,168                 | 879,832                 | 41,887                      | 881,523                                  |
| 1924.....               | Nil                                | 177,078                 | Nil                     | 415,971                 | 593,049                 | 35,034                      | 659,767                                  |
| 1925.....               | Nil                                | 201,795                 | Nil                     | 368,971                 | 570,766                 | 25,709                      | 752,503                                  |
| 1926.....               | Nil                                | 250,238                 | Nil                     | 507,079                 | 757,317                 | 57,050                      | 776,262                                  |
| 1927.....               | Nil                                | 249,549                 | Nil                     | 460,148                 | 709,097                 | 56,230                      | 907,945                                  |
| 1928.....               | Nil                                | 362,750                 | Nil                     | 734,971                 | 1,037,727               | 44,462                      | 1,234,719                                |
| 1929.....               | Nil                                | 310,801                 | Nil                     | 769,359                 | 1,030,160               | 39,116                      | 1,375,024                                |
| 1930.....               | Nil                                | 212,636                 | Nil                     | 534,542                 | 747,178                 | 65,223                      | 1,009,578                                |
| 1931.....               | Nil                                | 101,393                 | Nil                     | 318,645                 | 420,038                 | 46,794                      | 672,109                                  |
| 1932.....               | Nil                                | 30,697                  | Nil                     | 113,433                 | 144,130                 | 16,161                      | 339,346                                  |
| 1933.....               | Nil                                | 118,514                 | Nil                     | 108,803                 | 227,317                 | 30,133                      | 409,979                                  |
| 1934.....               | Nil                                | 153,860                 | Nil                     | 271,635                 | 464,995                 | 29,940                      | 767,782                                  |
| 1935.....               | Nil                                | 208,002                 | Nil                     | 391,873                 | 599,875                 | 56,016                      | 941,537                                  |
| 1936.....               | Nil                                | 257,148                 | Nil                     | 421,083                 | 678,231                 | 76,234                      | 1,115,779                                |
| 1937 <sup>2</sup> ..... | Nil                                | 320,818                 | Nil                     | 578,537                 | 898,855                 | 75,288                      | 1,401,011                                |

<sup>1</sup> Although shipments of ore are expressed in short tons, the trade uses long tons as the quantity unit for pig iron, etc.

<sup>2</sup> Preliminary figures.

From Table 20 it will be observed that the tonnage of pig iron made in Canada in 1929 exceeded that of any previous year, while the 1929 quantities of steel ingots and castings made were exceeded only in the war years 1917 and 1918. Production declined greatly after 1929, but has been recovering since 1932. Production in the ferro-alloy industry (ferro-manganese, ferro-silicon, etc.) provides the chief source of exports of primary iron products from Canada.

## Section 5.—Production of Non-Metallic Minerals.

### Subsection 1.—Fuels.

#### COAL.

The fuel situation in Canada is somewhat anomalous, as, in spite of the enormous resources of coal in the country, about 50 p.c. of the consumption is imported. The Canadian coal areas are situated in the eastern and western provinces, while the areas of densest population and greatest industrial development in Ontario and Quebec are more easily and economically supplied with coal from the nearer coal-fields of Pennsylvania and Ohio.

**Dominion Fuel Board.**—The Board was created in 1922 to meet the need for a permanent organization responsible to the Government for a thorough and systematic study of the fuel situation and recurrent shortages experienced throughout Canada. It is composed of permanent members of the Dominion Civil Service and the staff of the Board constitutes a division in the Bureau of Mines and Geology, Department of Mines and Resources. In recent years the policy of the Government has been to extend the market for Canadian coal and to that end financial assistance in the form of subventions has been given to the coal industry since 1928, the Board being responsible for the administration of subvention payments. The amount of coal moved under these assisted rates has increased from 146,126 short tons in 1928 to 2,352,034 tons in 1936. Of the total moved under assisted rates in 1936, 1,677,096 tons were from Nova Scotia and 363,831 tons from Alberta and the Crownsnest district of British Columbia.

**Coal Production.**—During 1936 there was a further recovery from the low level of 1933. Production was, however, still 13.3 p.c. below that of 1928, the record year. The average price per ton, which had been \$3.63 in 1928, had dropped to \$3.02 in 1933, and was about the same in 1936. Nova Scotia was again the leading producer. The coal produced in Nova Scotia, New Brunswick, British Columbia, and Yukon is all classed as bituminous, while Alberta produces bituminous, sub-bituminous and lignite, and Saskatchewan and Manitoba lignite only. The division of the 1936 production among these classes is given in Table 25.

## 21.—Production of Coal in Canada, by Provinces, calendar years 1911-37.

NOTE.—For annual production from 1874-1910, by provinces, see 1911 Year Book, p. 419.

| Year.   | Nova Scotia. | New Brunswick. | Manitoba.   | Saskatchewan. | Alberta.    | British Columbia. | Yukon.      | Totals.     |            |
|---------|--------------|----------------|-------------|---------------|-------------|-------------------|-------------|-------------|------------|
|         |              |                |             |               |             |                   |             | Quantity.   | Value.     |
|         | short tons.  | short tons.    | short tons. | short tons.   | short tons. | short tons.       | short tons. | short tons. | \$         |
| 1911... | 7,004,420    | 55,781         | —           | 206,779       | 1,511,036   | 2,542,532         | 2,840       | 11,323,388  | 26,467,646 |
| 1912... | 7,753,838    | 44,780         | —           | 225,342       | 3,240,577   | 3,208,997         | 9,245       | 14,512,820  | 36,019,044 |
| 1913... | 7,950,073    | 70,311         | —           | 212,897       | 4,014,755   | 2,714,420         | 10,722      | 15,012,178  | 37,334,940 |
| 1914... | 7,370,924    | 98,049         | —           | 232,260       | 3,683,015   | 2,239,799         | 13,443      | 13,937,520  | 33,471,801 |
| 1915... | 7,403,370    | 127,391        | —           | 240,107       | 3,380,818   | 2,065,613         | 9,724       | 13,267,023  | 32,111,152 |
| 1916... | 6,912,140    | 143,540        | —           | 281,300       | 4,559,054   | 2,584,061         | 3,300       | 14,483,395  | 38,817,481 |
| 1917... | 6,337,091    | 189,095        | —           | 355,445       | 4,736,363   | 2,433,883         | 4,872       | 14,046,759  | 43,109,331 |
| 1918... | 5,813,502    | 203,212        | —           | 346,847       | 5,872,816   | 2,563,589         | 2,900       | 14,977,926  | 55,122,306 |
| 1919... | 5,790,196    | 156,377        | —           | 379,347       | 4,835,660   | 2,649,516         | NH          | 13,919,096  | 65,022,070 |
| 1920... | 6,437,156    | 171,610        | —           | 335,222       | 6,907,763   | 3,095,011         | NH          | 16,946,764  | 82,466,533 |
| 1921... | 5,724,828    | 187,192        | —           | 335,632       | 5,909,217   | 2,890,291         | 233         | 15,057,493  | 72,451,656 |
| 1922... | 5,569,072    | 287,513        | —           | 332,437       | 5,990,911   | 2,927,033         | 465         | 15,157,431  | 65,518,497 |
| 1923... | 6,597,838    | 276,617        | —           | 438,100       | 6,854,397   | 2,823,306         | 313         | 16,990,571  | 72,058,986 |
| 1924... | 5,557,441    | 208,121        | —           | 479,118       | 5,189,729   | 2,193,667         | 1,121       | 13,638,197  | 53,593,988 |
| 1925... | 5,842,978    | 215,012        | —           | 471,965       | 5,809,021   | 2,742,252         | 730         | 13,134,968  | 49,201,951 |
| 1926... | 6,747,477    | 173,111        | —           | 439,803       | 6,503,705   | 2,613,719         | 316         | 16,478,131  | 59,875,094 |
| 1927... | 7,071,870    | 203,950        | —           | 470,216       | 6,934,163   | 2,746,243         | 414         | 17,426,861  | 61,897,463 |
| 1928... | 6,743,504    | 207,738        | —           | 471,713       | 7,336,330   | 2,804,594         | 414         | 17,564,293  | 63,757,833 |
| 1929... | 7,056,133    | 218,706        | —           | 580,189       | 7,150,093   | 2,490,378         | 458         | 17,496,557  | 63,065,170 |
| 1930... | 6,263,552    | 209,349        | —           | 679,424       | 5,755,323   | 2,083,818         | 653         | 14,831,324  | 52,849,748 |
| 1931... | 4,955,563    | 182,181        | 1,300*      | 662,336       | 4,564,015   | 1,876,406         | 904         | 12,243,211  | 41,267,062 |
| 1932... | 4,094,581    | 212,695        | 1,552       | 837,139       | 4,870,648   | 1,681,490         | 808         | 11,738,912  | 37,471,695 |
| 1933... | 4,587,590    | 312,303        | 3,880       | 937,049       | 4,718,788   | 1,382,272         | 862         | 11,903,344  | 35,923,962 |
| 1934... | 6,341,625    | 314,750        | 4,113       | 909,288       | 4,753,810   | 1,485,969         | 638         | 13,810,193  | 42,045,942 |
| 1935... | 5,822,075    | 346,024        | 3,106       | 921,785       | 5,402,894   | 1,331,267         | 835         | 13,888,006  | 41,903,110 |
| 1936... | 6,649,102    | 368,618        | 4,029       | 1,020,792     | 5,096,080   | 1,489,171         | 510         | 15,229,182  | 45,791,934 |
| 1937... | 7,227,768    | 351,091        | 3,180       | 1,046,925     | 5,551,456   | 1,594,928         | 84          | 15,775,432  | 48,062,559 |

\* First reported production from Manitoba.

\* Preliminary figures.

## 22.—Imports into Canada of Anthracite, Bituminous, and Lignite Coal for Home Consumption, calendar years 1911-36.

NOTE.—Anthracite dust is included under anthracite coal. For previous years, see 1911 Year Book, p. 420.

| Year.     | Anthracite. |            | Bituminous. |            | Lignite.           |         | Totals.     |            |
|-----------|-------------|------------|-------------|------------|--------------------|---------|-------------|------------|
|           | short tons. | \$         | short tons. | \$         | short tons.        | \$      | short tons. | \$         |
| 1911..... | 4,020,577   | 18,794,192 | 10,538,315  | 20,498,399 | —                  | —       | 14,558,892  | 39,292,591 |
| 1912..... | 4,184,017   | 20,080,388 | 10,411,793  | 19,397,049 | —                  | —       | 14,595,810  | 39,478,037 |
| 1913..... | 4,642,057   | 22,034,839 | 13,559,896  | 25,614,280 | —                  | —       | 18,201,953  | 47,949,119 |
| 1914..... | 4,435,010   | 21,241,824 | 10,285,047  | 18,559,574 | —                  | —       | 14,721,057  | 39,801,403 |
| 1915..... | 4,072,192   | 18,758,980 | 8,393,710   | 9,591,623  | —                  | —       | 12,465,902  | 28,345,603 |
| 1916..... | 4,570,815   | 22,216,363 | 13,009,788  | 16,073,303 | —                  | —       | 17,580,603  | 38,289,666 |
| 1917..... | 5,320,198   | 28,109,580 | 15,537,262  | 42,452,771 | —                  | —       | 20,857,460  | 70,563,357 |
| 1918..... | 4,785,160   | 26,007,888 | 16,893,427  | 45,642,696 | —                  | —       | 21,678,587  | 71,650,584 |
| 1919..... | 4,937,095   | 31,595,694 | 12,356,162  | 29,685,105 | —                  | —       | 17,293,257  | 61,160,799 |
| 1920..... | 4,982,313   | 30,773,851 | 13,861,229  | 61,260,247 | —                  | —       | 18,843,542  | 98,033,958 |
| 1921..... | 4,553,820   | 40,293,639 | 13,748,242  | 48,031,095 | —                  | —       | 18,302,062  | 88,924,734 |
| 1922..... | 2,705,752   | 23,795,143 | 10,317,773  | 37,387,285 | —                  | —       | 13,023,525  | 61,182,428 |
| 1923..... | 5,165,382   | 46,457,962 | 15,822,240  | 49,896,099 | 2,331 <sup>1</sup> | 12,846  | 20,989,953  | 96,369,907 |
| 1924..... | 4,152,558   | 37,280,910 | 12,545,214  | 29,628,643 | 26,007             | 117,955 | 16,724,779  | 67,027,508 |
| 1925..... | 3,782,557   | 32,095,509 | 12,548,460  | 26,974,340 | 18,653             | 87,332  | 16,340,670  | 59,158,681 |
| 1926..... | 4,192,419   | 34,202,166 | 12,376,806  | 25,511,932 | 10,423             | 45,597  | 18,579,448  | 59,759,085 |
| 1927..... | 4,107,364   | 31,282,371 | 14,563,671  | 30,457,834 | 10,399             | 44,254  | 11,267,364  | 61,784,500 |
| 1928..... | 3,748,816   | 27,680,018 | 13,445,945  | 26,608,427 | 10,780             | 44,247  | 17,205,541  | 54,332,692 |
| 1929..... | 4,019,917   | 28,809,792 | 14,170,138  | 27,140,968 | 14,108             | 62,508  | 18,204,163  | 56,013,283 |
| 1930..... | 4,256,090   | 30,098,910 | 14,497,955  | 26,522,765 | 18,676             | 72,691  | 18,772,721  | 56,694,366 |
| 1931..... | 3,162,317   | 21,067,025 | 9,952,280   | 15,732,710 | 6,410              | 29,608  | 13,121,007  | 36,829,393 |
| 1932..... | 3,148,902   | 19,312,710 | 8,807,131   | 12,011,393 | 3,004              | 13,701  | 11,959,037  | 31,837,809 |
| 1933..... | 3,015,571   | 17,610,991 | 8,185,759   | 10,501,824 | 2,707              | 10,175  | 11,264,087  | 28,122,191 |
| 1934..... | 3,600,563   | 18,414,000 | 9,471,690   | 10,841,656 | 2,701              | 9,593   | 13,972,972  | 35,975,328 |
| 1935..... | 3,442,835   | 17,445,102 | 8,630,686   | 15,367,107 | 5,246              | 19,040  | 12,078,767  | 33,331,240 |
| 1936..... | 3,418,556   | 17,897,635 | 9,700,002   | 17,039,408 | 4,873              | 18,347  | 13,123,431  | 34,655,390 |

<sup>1</sup> First reported importation.

## 23.—Exports of Coal, the Produce of Canada, calendar years 1911-36.

NOTE.—For previous years, see 1911 Year Book, p. 421.

| Year.     | Quantity.   |            | Year.     | Quantity.   |           |
|-----------|-------------|------------|-----------|-------------|-----------|
|           | short tons. | \$         |           | short tons. | \$        |
| 1911..... | 1,500,639   | 1          | 1924..... | 773,246     | 4,836,848 |
| 1912..... | 2,127,133   | 1          | 1925..... | 785,910     | 4,329,173 |
| 1913..... | 1,562,020   | 3,951,351  | 1926..... | 1,028,200   | 5,739,436 |
| 1914..... | 1,423,126   | 3,780,175  | 1927..... | 1,113,330   | 5,890,269 |
| 1915..... | 1,766,543   | 5,406,058  | 1928..... | 868,241     | 4,469,999 |
| 1916..... | 2,135,359   | 7,096,387  | 1929..... | 849,972     | 4,375,328 |
| 1917..... | 1,733,156   | 7,387,192  | 1930..... | 624,512     | 3,245,998 |
| 1918..... | 1,817,195   | 9,405,423  | 1931..... | 359,853     | 1,909,922 |
| 1919..... | 2,070,050   | 12,438,885 | 1932..... | 285,487     | 1,433,036 |
| 1920..... | 2,558,174   | 18,014,899 | 1933..... | 259,233     | 1,188,225 |
| 1921..... | 1,987,251   | 13,896,370 | 1934..... | 306,335     | 1,400,978 |
| 1922..... | 1,818,582   | 11,159,060 | 1935..... | 418,391     | 1,906,647 |
| 1923..... | 1,654,406   | 10,661,399 | 1936..... | 411,574     | 1,792,594 |

<sup>1</sup> Not available.

**Coal Consumption.**—The sources of coal consumed in Canada in the calendar years 1911-36 are shown in Table 24, detailed figures of coal made available for consumption during 1936 are given in Table 25; the difference between the totals of the two tables in the same year is accounted for by the fact that coal received may be held in bond at Canadian ports and not "cleared for consumption" until required, while coal received in previous years may be taken out of bond (cleared for consumption) in a later year. Normally, the coal made available for consumption is greater than the

apparent domestic consumption, since coal is landed at Canadian ports and re-exported or ex-warehoused for ships' stores without being taken out of bond, but while remaining in bond at the port it is available for domestic consumption if required.

#### 24.—Annual Consumption of Canadian and Imported Coal in Canada, by Quantities and Percentages, calendar years 1911-36.

NOTE.—For the years 1886-1910, see 1921 Year Book, p. 354.

| Calendar Year. | Canadian Coal. <sup>1</sup> |      | Imported Coal "Entered for Consumption". |           |                          |             | Grand Total. | Per Capita. <sup>3</sup> |
|----------------|-----------------------------|------|--|-----------|--------------------------|-------------|--------------|--------------------------|
|                |                             |      | From U.S.A.                              |           | From the United Kingdom. |             |              |                          |
|                |                             |      | short tons.                              | p.c.      | short tons.              | short tons. | short tons.  | p.c.                     |
| 1911.....      | 9,822,749                   | 40.5 | 14,510,129                               | 48,963    | 14,424,949               | 59.5        | 24,247,698   | 3.364                    |
| 1912.....      | 12,385,696                  | 46.0 | 14,557,124                               | 38,068    | 14,549,104               | 54.0        | 26,934,800   | 3.645                    |
| 1913.....      | 13,450,158                  | 42.6 | 18,145,769                               | 37,825    | 18,132,387               | 57.4        | 31,582,945   | 4.138                    |
| 1914.....      | 12,244,408                  | 45.5 | 14,687,853                               | 33,101    | 14,687,920               | 54.5        | 26,859,329   | 3.408                    |
| 1915.....      | 11,500,490                  | 48.1 | 12,450,796                               | 15,098    | 12,466,212               | 51.9        | 23,906,692   | 2.995                    |
| 1916.....      | 12,348,036                  | 41.3 | 17,576,202                               | 4,401     | 17,517,820               | 58.7        | 29,865,856   | 3.733                    |
| 1917.....      | 12,313,098                  | 37.2 | 20,845,099                               | 9,451     | 20,810,132               | 62.8        | 33,123,735   | 4.110                    |
| 1918.....      | 13,160,781                  | 37.8 | 21,674,326                               | 3,761     | 21,611,191               | 62.2        | 34,771,332   | 4.268                    |
| 1919.....      | 11,611,168                  | 40.3 | 17,292,913                               | 344       | 17,236,269               | 59.7        | 28,847,437   | 3.471                    |
| 1920.....      | 14,025,506                  | 42.9 | 18,752,981                               | Nil       | 18,068,741               | 57.1        | 32,094,307   | 3.821                    |
| 1921.....      | 12,715,784                  | 41.1 | 18,300,031                               | 1,591     | 18,258,337               | 58.9        | 30,974,121   | 3.525                    |
| 1922.....      | 13,044,362                  | 50.2 | 12,255,555                               | 765,980   | 12,962,189               | 49.8        | 25,006,541   | 2.916                    |
| 1923.....      | 15,070,962                  | 41.8 | 20,417,239                               | 572,570   | 20,967,971               | 58.2        | 36,038,933   | 4.000                    |
| 1924.....      | 13,529,358                  | 42.8 | 16,405,344                               | 317,112   | 16,714,143               | 57.2        | 29,243,501   | 3.198                    |
| 1925.....      | 12,135,290                  | 42.6 | 15,744,957                               | 604,117   | 16,381,971               | 57.4        | 28,457,261   | 3.062                    |
| 1926.....      | 15,086,266                  | 47.7 | 16,204,405                               | 287,209   | 16,565,555               | 52.3        | 31,651,851   | 3.349                    |
| 1927.....      | 15,944,983                  | 46.7 | 17,266,434                               | 907,220   | 17,177,303               | 53.3        | 34,122,286   | 3.541                    |
| 1928.....      | 10,457,807                  | 50.0 | 15,830,688                               | 682,765   | 16,515,582               | 50.0        | 26,903,389   | 3.356                    |
| 1929.....      | 10,387,461                  | 48.0 | 16,780,452                               | 845,502   | 17,724,132               | 52.0        | 28,111,593   | 3.401                    |
| 1930.....      | 14,052,671                  | 43.3 | 16,971,938                               | 1,144,861 | 18,412,039               | 56.7        | 32,464,710   | 3.180                    |
| 1931.....      | 11,652,779                  | 47.7 | 11,769,708                               | 987,442   | 12,326,327               | 52.3        | 24,511,106   | 2.362                    |
| 1932.....      | 11,212,701                  | 49.0 | 9,889,866                                | 1,727,716 | 11,654,492               | 51.0        | 22,867,193   | 2.177                    |
| 1933.....      | 11,456,373                  | 51.5 | 8,895,935                                | 1,942,875 | 10,808,902               | 48.5        | 22,265,235   | 2.052                    |
| 1934.....      | 13,236,406                  | 51.1 | 10,530,710                               | 1,931,116 | 12,651,168               | 48.9        | 25,887,574   | 2.362                    |
| 1935.....      | 13,300,303                  | 53.1 | 9,618,515                                | 1,322,500 | 11,735,835               | 46.9        | 25,042,138   | 2.290                    |
| 1936.....      | 14,508,642                  | 53.3 | 10,801,643                               | 1,493,656 | 13,710,515               | 46.7        | 27,223,167   | 2.469                    |

<sup>1</sup> The sum of Canadian coal mines' sales, colliery consumption, coal supplied to employees, and coal used in making coke, etc., less the tonnage of coal exported.

<sup>2</sup> Includes small tonnages from countries other than the United Kingdom and the United States. Deductions have been made from this column to take account of foreign coal re-exported from Canada and bituminous coal ex-warehoused for ships' stores.

<sup>3</sup> Figures based on estimates of population given on p. 155.

<sup>4</sup> Revised since the publication of the 1937 Year Book.

#### 25.—Coal Output, Exports, Receipts from Other Countries, and Coal Made Available for Consumption in Canada during 1936.

NOTE.—For details by provinces, see the Bureau's annual report, "Coal Statistics for Canada".

| Grade of Coal.      | Canadian Coal. |             | Receipts from U.S.A. | Receipts from United Kingdom. | Receipts from Other Countries. | Coal Made Available for Consumption. |
|---------------------|----------------|-------------|----------------------|-------------------------------|--------------------------------|--------------------------------------|
|                     | Output.        | Exported.   |                      |                               |                                |                                      |
|                     | short tons.    | short tons. | short tons.          | short tons.                   | short tons.                    | short tons.                          |
| Anthracite.....     | Nil            | Nil         | 1,685,848            | 1,338,602                     | 510,590                        | 3,530,040                            |
| Bituminous.....     | 10,796,135     | 401,130     | 10,042,127           | 147,720                       | 10,406                         | 20,596,255                           |
| Sub-bituminous..... | 566,235        | Nil         | Nil                  | Nil                           | Nil                            | 566,235                              |
| Lignite.....        | 3,866,812      | 10,444      | 4,747                | Nil                           | Nil                            | 3,861,115                            |
| Totals.....         | 15,229,182     | 411,574     | 11,732,723           | 1,481,322                     | 520,996 <sup>1</sup>           | 28,533,648                           |

<sup>1</sup> Includes 269,415 tons from Germany, 88,702 tons from French Indo-China, 44,543 tons from Belgium, 16,266 tons from the Netherlands and 2,070 tons from other countries.

**World Production.**—The total estimated coal production of the world in 1936 amounted to about 1,420,000,000 long tons, an increase of 9.2 p.c. over the estimate for the previous year. Canada contributed 13,597,484 long tons or about 1.0 p.c. Table 26 shows the production of the British Empire and the chief foreign countries in units of 1,000 long tons during each of the years 1913 and 1921-36.

### 26.—Coal Produced in the Principal Countries of the World, 1913, 1921-36.

NOTE.—For corresponding figures for 1914-1920, see 1932 Year Book, p. 281. Figures in this table, except as indicated, are from the Imperial Institute's Statistical Summary.

#### BRITISH EMPIRE.

| Calendar Year.          | United Kingdom. | British India.  | Canada. <sup>1</sup> | Australia.      | New Zealand.    | Union of South Africa. |
|-------------------------|-----------------|-----------------|----------------------|-----------------|-----------------|------------------------|
|                         | '000 long tons. | '000 long tons. | '000 long tons.      | '000 long tons. | '000 long tons. | '000 long tons.        |
| 1913.....               | 287,431         | 16,208          | 13,404               | 12,418          | 1,888           | 9,583                  |
| 1921.....               | 193,251         | 19,303          | 13,444               | 12,878          | 1,500           | 10,945                 |
| 1922.....               | 249,607         | 19,011          | 13,533               | 12,290          | 1,585           | 9,120                  |
| 1923.....               | 276,001         | 19,658          | 15,170               | 12,634          | 1,970           | 11,075                 |
| 1924.....               | 267,118         | 21,174          | 12,180               | 13,885          | 2,053           | 11,033                 |
| 1925.....               | 243,176         | 20,904          | 11,723               | 14,563          | 2,115           | 12,127                 |
| 1926.....               | 220,279         | 20,083          | 14,694               | 14,308          | 2,240           | 12,745                 |
| 1927.....               | 251,232         | 22,082          | 15,550               | 14,973          | 2,337           | 12,332                 |
| 1928.....               | 237,763         | 25,543          | 15,683               | 13,432          | 2,437           | 12,408                 |
| 1929.....               | 257,907         | 23,419          | 15,622               | 12,100          | 2,536           | 12,813                 |
| 1930.....               | 243,882         | 23,803          | 13,287               | 11,363          | 2,542           | 12,080                 |
| 1931.....               | 219,459         | 21,716          | 10,931               | 10,595          | 2,158           | 10,709                 |
| 1932.....               | 208,733         | 20,153          | 10,431               | 11,157          | 1,942           | 9,764                  |
| 1933.....               | 207,112         | 20,284          | 10,628               | 11,672          | 1,821           | 10,545                 |
| 1934.....               | 220,728         | 22,608          | 12,331               | 12,197          | 2,060           | 12,002                 |
| 1935.....               | 222,252         | 23,017          | 12,400               | 13,109          | 2,115           | 13,360                 |
| 1936 <sup>2</sup> ..... | 228,454         | 22,611          | 13,597               | 14,415          | 2,140           | 14,007                 |

#### FOREIGN COUNTRIES.

| Calendar Year.         | Saar.           | Germany.        | Belgium.        | France.         | Czechoslovakia. | Poland.         | Netherlands.    | Japan.          | United States.  |
|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                        | '000 long tons. | '000 long tons. | '000 long tons. | '000 long tons. | '000 long tons. | '000 long tons. | '000 long tons. | '000 long tons. | '000 long tons. |
| 1913....               | *               | 274,264         | 22,474          | 40,188          | 4               | 4               | 1,843           | 20,973          | 508,893         |
| 1921....               | *               | 255,148         | 21,401          | 37,916          | 32,174          | 7,717           | 3,978           | 25,944          | 462,139         |
| 1922....               | *               | 262,878         | 20,868          | 43,118          | 28,385          | 24,300          | 4,525           | 27,420          | 425,849         |
| 1923....               | *               | 178,191         | 22,654          | 46,981          | 27,380          | 35,686          | 5,249           | 28,033          | 587,407         |
| 1924....               | *               | 239,494         | 22,986          | 55,065          | 35,066          | 31,793          | 5,975           | 29,801          | 510,369         |
| 1925....               | 12,785          | 267,970         | 22,726          | 47,249          | 30,663          | 28,677          | 6,943           | 31,121          | 519,827         |
| 1926....               | 13,465          | 280,666         | 24,913          | 51,607          | 32,491          | 35,139          | 8,677           | 31,080          | 591,720         |
| 1927....               | 13,381          | 299,511         | 27,130          | 52,021          | 33,106          | 37,500          | 9,374           | 33,177          | 535,625         |
| 1928....               | 12,900          | 312,092         | 27,108          | 51,601          | 34,459          | 40,947          | 10,941          | 33,445          | 514,399         |
| 1929....               | 13,365          | 332,560         | 26,514          | 54,109          | 38,465          | 45,686          | 11,552          | 34,479          | 541,232         |
| 1930....               | 13,027          | 284,148         | 26,982          | 54,163          | 33,098          | 36,968          | 12,160          | 31,007          | 479,385         |
| 1931....               | 11,187          | 247,971         | 26,615          | 51,280          | 30,544          | 37,699          | 12,818          | 27,661          | 394,406         |
| 1932....               | 10,273          | 223,796         | 21,075          | 46,511          | 26,394          | 28,412          | 12,677          | 27,717          | 321,040         |
| 1933....               | 10,394          | 232,752         | 24,900          | 47,223          | 25,191          | 26,957          | 12,471          | 32,969          | 342,118         |
| 1934....               | 11,139          | 257,990         | 25,972          | 47,889          | 25,451          | 28,797          | 12,237          | 36,568          | 371,907         |
| 1935....               | *               | 287,445         | 26,087          | 47,248          | 25,769          | 28,110          | 11,775          | 34,354          | 375,292         |
| 1936 <sup>2</sup> .... | *               | 315,927         | 27,433          | 45,418          | 27,737          | 29,291          | 12,688          | 37,466          | 436,456         |

<sup>1</sup> Dominion Bureau of Statistics figures.

<sup>2</sup> Preliminary figures.

<sup>3</sup> Included with Germany.

\* None reported.

\* Included with France.

## NATURAL GAS AND PETROLEUM.

**Natural Gas.**—The producing wells in Eastern Canada are in southwestern Ontario, and near Moncton, N.B. The principal producing fields in Alberta are the Turner Valley (about 35 miles southwest of Calgary), Medicine Hat, Viking (about 80 miles southeast of Edmonton), Redcliff, Foremost, Bow Island, and Wetaskiwin. Wainwright is supplied with gas from the Maple Leaf well in the Fabyan field. Near Lloydminster, in Saskatchewan, a well was brought into production during 1934 and is now supplying that town with gas. In 1936, Ontario was credited with about 56 p.c. of the total value but only 36 p.c. of the total quantity, while Alberta produced 41 p.c. by value and 62 p.c. of the total quantity. The production by provinces since 1920 is given in Table 27.

## 27.—Quantities and Values of Natural Gas Produced in Canada, by Provinces, calendar years 1920-37.

NOTE.—For the years 1892 to 1919, see "Mineral Production of Canada", 1923, p. 188.

| Year.                   | New Brunswick. |         | Ontario.   |           | Alberta.   |           | Canada. <sup>1</sup> |            |
|-------------------------|----------------|---------|------------|-----------|------------|-----------|----------------------|------------|
|                         | Quantity.      | Value.  | Quantity.  | Value.    | Quantity.  | Value.    | Quantity.            | Value.     |
|                         | M cu. ft.      | \$      | M cu. ft.  | \$        | M cu. ft.  | \$        | M cu. ft.            | \$         |
| 1920.....               | 682,502        | 130,500 | 10,529,374 | 2,920,731 | 5,033,442  | 1,181,345 | 10,845,518           | 4,232,642  |
| 1921.....               | 708,743        | 139,375 | 8,422,774  | 3,080,130 | 4,945,884  | 1,374,599 | 14,077,601           | 4,594,194  |
| 1922.....               | 753,898        | 148,040 | 8,060,114  | 4,076,296 | 5,868,439  | 1,622,103 | 14,682,651           | 5,846,501  |
| 1923.....               | 640,300        | 126,068 | 8,128,413  | 4,066,244 | 7,191,670  | 1,092,246 | 15,960,583           | 5,884,618  |
| 1924.....               | 599,972        | 113,577 | 7,150,078  | 3,798,381 | 7,131,030  | 1,706,618 | 14,881,336           | 5,703,636  |
| 1925.....               | 639,235        | 122,394 | 7,143,902  | 3,953,000 | 9,119,500  | 2,752,545 | 16,002,897           | 6,833,005  |
| 1926.....               | 648,316        | 128,300 | 7,704,996  | 4,409,593 | 10,794,697 | 3,019,221 | 19,208,209           | 7,557,174  |
| 1927.....               | 630,753        | 124,637 | 7,811,215  | 4,331,750 | 13,434,021 | 3,586,533 | 21,876,791           | 8,043,010  |
| 1928.....               | 669,931        | 134,344 | 7,632,300  | 4,335,312 | 14,288,605 | 3,764,466 | 22,582,836           | 8,614,132  |
| 1929.....               | 678,456        | 333,002 | 8,586,475  | 4,959,695 | 19,112,931 | 4,684,247 | 28,378,462           | 9,977,124  |
| 1930.....               | 661,975        | 325,751 | 7,965,761  | 5,034,328 | 20,748,583 | 4,929,230 | 29,376,919           | 10,289,985 |
| 1931.....               | 555,891        | 323,124 | 7,419,634  | 4,635,497 | 17,798,698 | 4,067,893 | 25,374,723           | 9,026,754  |
| 1932.....               | 602,452        | 326,191 | 7,380,154  | 4,719,297 | 15,370,968 | 3,853,794 | 23,420,174           | 8,899,462  |
| 1933.....               | 618,033        | 302,706 | 7,166,659  | 4,523,085 | 15,352,811 | 3,896,263 | 23,138,103           | 8,712,234  |
| 1934.....               | 623,601        | 306,005 | 7,622,851  | 4,741,368 | 14,841,491 | 3,707,270 | 23,162,324           | 8,759,652  |
| 1935.....               | 615,454        | 303,856 | 8,158,828  | 4,983,084 | 16,060,349 | 4,113,436 | 24,910,730           | 9,263,141  |
| 1936.....               | 606,249        | 298,819 | 10,066,743 | 6,052,294 | 17,407,820 | 4,376,720 | 28,113,348           | 10,762,243 |
| 1937 <sup>2</sup> ..... | 576,671        | 283,922 | 11,504,502 | 6,902,701 | 17,425,000 | 4,517,666 | 29,596,198           | 11,735,822 |

<sup>1</sup> Totals for Canada include small productions in Manitoba, Saskatchewan, and Northwest Territories.

<sup>2</sup> Preliminary figures.

**Petroleum.**—The Turner Valley field in Alberta is the principal source of production in Canada. The earlier wells in this field give a wet gas from which a very high grade of crude naphtha and casinghead gasolene is obtained. However, in June, 1936, a well on the west flank of the southern end of the Turner Valley field, completed with a depth of 6,823 feet, was brought into production with a heavier grade (44° A.P.I.) of crude oil than that formerly derived from the Turner Valley. The successful completion of this well resulted in much drilling activity on the west flank of the field and other producing wells were completed. Furthermore, the flow of oil was greatly increased by acidation of a number of these wells. The result of these developments has been a rapid rise in the production of the Turner Valley field during 1937. The Red Coulee field in southern Alberta, near the International Boundary, began to yield some petroleum in 1929, while a small production has been obtained for a number of years in the Wainwright field, about 120 miles east of Edmonton. Production from wells near Fort Norman

on the lower Mackenzie river increased from 910 barrels in 1932 to 5,399 barrels in 1936. This oil is treated locally in a small refining plant and is used to a large extent in connection with mining operations in the Great Bear Lake area.

The principal Ontario oil fields are situated in the southwestern peninsula between lake Huron and lake Erie. The maximum production of these fields was reached in the '90's and has since declined. New Brunswick's small production comes from the Stony Creek field, near Moncton. For the production by provinces in 1936, see Table 5 of this chapter.

## 28.—Quantities and Values of Crude Petroleum Produced in Canada, calendar years 1911-37.

NOTE.—For figures for the years 1886-1910, inclusive, see p. 377 of the 1933 Year Book.

| Year.    | Quantity.         | Value.  | Year.    | Quantity.         | Value.    | Year.    | Quantity.         | Value.    |
|----------|-------------------|---------|----------|-------------------|-----------|----------|-------------------|-----------|
|          | bbl. <sup>1</sup> | \$      |          | bbl. <sup>1</sup> | \$        |          | bbl. <sup>1</sup> | \$        |
| 1911.... | 261,092           | 357,073 | 1920.... | 196,251           | 822,235   | 1929.... | 1,117,368         | 3,731,764 |
| 1912.... | 243,336           | 345,050 | 1921.... | 187,541           | 641,533   | 1930.... | 1,522,220         | 5,033,820 |
| 1913.... | 228,080           | 406,439 | 1922.... | 179,068           | 611,176   | 1931.... | 1,542,573         | 4,211,974 |
| 1914.... | 214,805           | 343,124 | 1923.... | 170,100           | 522,018   | 1932.... | 1,044,412         | 3,022,502 |
| 1915.... | 215,464           | 300,572 | 1924.... | 160,773           | 467,400   | 1933.... | 1,145,833         | 3,138,791 |
| 1916.... | 198,123           | 392,284 | 1925.... | 332,001           | 1,250,705 | 1934.... | 1,410,895         | 3,440,162 |
| 1917.... | 213,832           | 542,339 | 1926.... | 364,444           | 1,311,665 | 1935.... | 1,446,620         | 3,492,188 |
| 1918.... | 304,741           | 885,143 | 1927.... | 476,691           | 1,516,043 | 1936.... | 1,500,374         | 3,421,767 |
| 1919.... | 240,466           | 736,324 | 1928.... | 624,184           | 2,035,300 | 1937*... | 2,973,268         | 5,370,981 |

<sup>1</sup> The barrel=35 Imperial gallons.

\* Preliminary figures.

### Subsection 2.—Other Non-Metallic Minerals.

**Asbestos.**—Canada produces more asbestos than any other country. The value of the annual output of asbestos increased from less than \$25,000 in 1880 to \$14,792,201 in 1920 and \$13,172,581 in 1929. Owing to trade depression, production was much curtailed from 1929 to 1932, as will be seen in Table 29. However, since 1932 production has shown a distinct improvement. The Imperial Institute's estimate for the world total of asbestos production in 1936 is 500,000 long tons. In 1936 Canada produced about 271,777 long tons, or more than half the world total, while other leading countries with their production in long tons were: Russia, 123,141; Southern Rhodesia, 50,309; Union of South Africa, 21,812; United States, 9,683; and Cyprus, 9,202.

The Eastern Townships of Quebec have for many years been the most productive asbestos-mining area in the world. The most important deposits are: at Black Lake, in Coleraine township; at Thetford and Robertsonville, in Thetford township; at East Broughton, in Broughton township; and at Danville, in Shipton township. The veins of chrysotile asbestos vary in width from  $\frac{1}{4}$  inch to  $\frac{1}{2}$  inch and occasionally fibre has been obtained several inches in length. The fibre is of good quality and well adapted for spinning. Both open-cut and underground methods of mining are employed throughout the Canadian asbestos fields. Nearly all the mining companies have installed machinery for the crushing, fibrizing, screening and grading of the mine product. Since 1935 development work has been con-



ducted on an asbestos property at Rahn lake, Bannockburn township, Ontario; the fibre in this deposit is reported as being of high quality and commercial shipments were commenced in 1937.

There are 13 plants in Canada which manufacture asbestos products, including the following commodities: asbestos paper and mill board; asbestos roofing of all kinds; asbestos rigid shingles; asbestos building materials; asbestos cellular and sponge-felted pipe insulation; insulating sheets and blocks; asbestos yarn; asbestos dryer felts; asbestos brake linings and clutch facings (woven on special looms); and asbestos packings for steam, oil, and hydraulic operations.

## 29.—Quantities and Values of Asbestos Produced in Canada, calendar years 1911-37.

NOTE.—Figures for the years 1896-1910 are given in the 1911 Year Book, p. 424.

| Year.    | Quantity. | Value.     | Year.                  | Quantity. | Value.     | Year.                  | Quantity. | Value.     |
|----------|-----------|------------|------------------------|-----------|------------|------------------------|-----------|------------|
|          | tons.     | \$         |                        | tons.     | \$         |                        | tons.     | \$         |
| 1911.... | 127,414   | 2,043,108  | 1921....               | 92,761    | 4,906,230  | 1930....               | 242,114   | 8,390,168  |
| 1912.... | 138,301   | 3,137,379  | 1922....               | 163,706   | 5,552,723  | 1931....               | 104,296   | 4,812,886  |
| 1913.... | 161,086   | 3,849,925  | 1923....               | 231,482   | 7,522,506  | 1932....               | 122,977   | 3,039,721  |
| 1914.... | 117,573   | 2,900,806  | 1924....               | 225,744   | 6,710,830  | 1933....               | 158,367   | 5,211,177  |
| 1915.... | 136,842   | 3,574,985  |                        |           |            | 1934....               | 155,980   | 4,936,326  |
| 1916.... | 154,149   | 5,238,869  | 1925 <sup>1</sup> .... | 273,524   | 8,977,546  | 1935....               | 210,407   | 7,054,614  |
| 1917.... | 153,781   | 7,230,383  | 1926....               | 279,403   | 10,099,423 | 1936....               | 301,287   | 9,958,188  |
| 1918.... | 158,259   | 8,970,797  | 1927....               | 274,778   | 10,621,013 | 1937 <sup>2</sup> .... | 410,026   | 14,505,791 |
| 1919.... | 159,236   | 10,975,369 | 1928....               | 273,083   | 11,238,360 |                        |           |            |
| 1920.... | 199,573   | 14,792,201 | 1929....               | 306,055   | 13,172,531 |                        |           |            |

<sup>1</sup> The quantities and values of sand, gravel, and rock separated as a by-product in milling asbestos are included in the totals for 1924 and previous years, but are excluded in later years.

<sup>2</sup> Preliminary figures.

**Gypsum.**—Many large deposits of gypsum occur throughout Canada, but the production is chiefly from Hants, Inverness, and Victoria Counties, Nova Scotia; Hillsborough, New Brunswick; Hagersville and Caledonia, Ontario; Gypsumville and Amaranth, Manitoba; and Falkland, British Columbia. The Hillsborough deposit of gypsum in New Brunswick is of very high grade. The greater part of Canada's production is exported in crude form from the Nova Scotia deposits, which are conveniently situated for ocean shipping and during recent years account for about 80 p.c. of the total Canadian production. Production of gypsum in Canada reached its highest point in 1928 with 1,246,368 tons valued at \$3,743,648. Production during 1936 was 833,822 tons valued at \$1,278,971, and preliminary figures for 1937 are 1,042,239 tons valued at \$1,536,587. The production by provinces during 1936 is shown in Table 5, p. 350.

**Salt.**—The greater part of the Canadian salt production comes from wells located in southwestern Ontario, but the Malagash deposits in Nova Scotia have shown an increasing production in recent years. The first production of commercial importance in Manitoba was recorded in 1932 and for Saskatchewan in 1933. Commercial shipments were recommenced in 1937 from deposits near McMurray in Alberta. An important part of Canadian salt production (42 p.c. in 1936) is used in the form of brine in chemical industries for the manufacture of caustic soda, liquid chlorine and other chemicals.

The Canadian production during the present century has shown fairly steady growth from 59,428 tons in 1901 to 91,582 in 1911, 164,658 in 1921, 262,547 in 1926 and a record at that time of 330,264 tons in 1929. Production declined to 259,047 tons in 1931 but has since recovered to 391,316 tons valued at \$1,773,144 in 1936. (See Tables 2 and 5 of this chapter.) The estimate for 1937 is 459,027 tons, valued at \$1,799,465.

## Section 6.—Production of Clay Products and Other Structural Materials.

Production of these materials is naturally dependent upon the activity of the construction industry in Canada. Building and construction work fluctuates widely with business cycles and during the recent depression dropped to a very low ebb. Under these circumstances, the production of clay products, cement, gravel and stone was severely curtailed. Some uncompleted large engineering construction operations and governmental relief projects eased the decline in the early years of the depression but the downward trend was still evident in 1933. With a slight recovery of construction activities since then (see Chapter XV) there has been a moderate increase in the production of the chief structural materials, the total estimated value of production being \$34,401,669 in 1937 as compared with \$16,696,887 in 1933.

**Brick and Tile.**—Although the brick and tile industry is established in every province of the Dominion, production is naturally greatest near the chief centres of population, that is, in Ontario and Quebec. Here the widespread clays of glacial and post-glacial age occurring over considerable areas of the St. Lawrence Lowlands have furnished the materials for numerous brick and tile industries. Production fluctuates with building activity and reached its highest point in the year 1912. Since that time the gradual substitution of steel and reinforced concrete for brick has reduced the production of brick so that, while the value of construction undertaken in 1928 or 1929 is estimated to have exceeded that of 1912, the quantity of brick produced in the later years was only about half that of 1912. On the other hand, as will be seen from Table 30, the production and consumption of cement in 1929 greatly exceeded that of 1912 or 1913. The production of building brick of various types in 1935 and 1936 is shown in Table 2 of this chapter, while the production by provinces in 1936 is given in Table 5. The estimated value of all clay products made in 1937 was \$4,589,933.

**Cement.**—The cement industry in Canada began with the manufacture of hydraulic or natural rock cement. The first production was probably at Hull, Quebec, between 1830 and 1840. The manufacture of Portland cement began about 1889. Owing to its superiority in uniformity and strength, it soon superseded the older product. Portland cement consists of an accurately proportioned mixture of lime, silica, and alumina. The lime is usually furnished by limestone and the silica and alumina by clay or shale. The cement industry has naturally become established where these materials are situated and where fuel supplies and transportation are readily available. The largest production is in Quebec and Ontario, although there are also active plants in Manitoba, Alberta, and British Columbia. As may be seen from Table 30, production declined greatly from 1929 to 1933, but has recovered somewhat since then. Production by provinces in 1936 is given in Table 5 of this chapter.

30.—Production,<sup>1</sup> Imports, Exports, and Apparent Consumption of Portland Cement, by Quantities and Values, calendar years 1910-37.

| Year.      | Production. <sup>1</sup> |            | Imports.          |           | Exports.          |           | Apparent Consumption. |            |
|------------|--------------------------|------------|-------------------|-----------|-------------------|-----------|-----------------------|------------|
|            | Quantity.                | Value.     | Quantity.         | Value.    | Quantity.         | Value.    | Quantity.             | Value.     |
|            | bbl. <sup>2</sup>        | \$         | bbl. <sup>2</sup> | \$        | bbl. <sup>2</sup> | \$        | bbl. <sup>2</sup>     | \$         |
| 1910.....  | 4,753,976                | 6,412,215  | 349,415           | 463,895   | "                 | 12,914    | 5,103,285             | 6,867,096  |
| 1911.....  | 5,093,015                | 7,644,537  | 669,532           | 849,880   | "                 | 4,007     | 6,354,831             | 8,481,456  |
| 1912.....  | 7,132,732                | 9,106,550  | 1,434,413         | 1,909,629 | "                 | 2,436     | 8,567,145             | 11,073,649 |
| 1913.....  | 8,658,605                | 11,019,418 | 254,003           | 409,303   | "                 | 1,736     | 8,912,898             | 11,426,955 |
| 1914.....  | 7,172,480                | 9,187,924  | 96,022            | 147,158   | "                 | 2,223     | 7,270,502             | 9,332,859  |
| 1915.....  | 5,081,032                | 6,977,024  | 28,194            | 40,426    | "                 | 5,161     | 5,709,222             | 7,012,269  |
| 1916.....  | 5,309,500                | 6,547,728  | 20,596            | 31,621    | "                 | 2,424     | 5,390,156             | 6,576,925  |
| 1917.....  | 4,768,483                | 7,724,240  | 8,580             | 19,646    | "                 | 15,857    | 4,777,068             | 7,727,035  |
| 1918.....  | 3,591,481                | 7,076,503  | 5,913             | 19,851    | "                 | 13,752    | 3,597,394             | 7,082,602  |
| 1919.....  | 4,905,257                | 9,302,432  | 14,066            | 61,314    | 177,506           | 465,054   | 4,331,817             | 9,387,793  |
| 1920.....  | 6,651,880                | 14,798,070 | 32,903            | 112,466   | 835,667           | 2,103,626 | 5,849,276             | 12,716,910 |
| 1921.....  | 5,753,885                | 14,195,143 | 12,067            | 75,070    | 242,345           | 650,658   | 5,522,597             | 13,620,155 |
| 1922.....  | 6,943,972                | 15,438,481 | 30,914            | 83,037    | 425,137           | 699,738   | 6,549,740             | 14,821,780 |
| 1923.....  | 7,542,589                | 15,004,001 | 17,697            | 75,284    | 439,751           | 824,511   | 7,007,535             | 14,315,144 |
| 1924.....  | 7,408,624                | 13,308,411 | 27,672            | 69,320    | 153,520           | 213,845   | 7,372,776             | 13,253,886 |
| 1925.....  | 8,116,597                | 14,046,704 | 21,849            | 63,067    | 997,915           | 1,498,496 | 7,140,551             | 12,611,276 |
| 1926.....  | 6,707,021                | 13,013,232 | 21,114            | 77,806    | 265,932           | 358,231   | 8,442,203             | 12,732,918 |
| 1927.....  | 10,005,865               | 14,391,937 | 19,334            | 87,541    | 249,694           | 308,144   | 9,835,525             | 14,171,284 |
| 1928.....  | 11,023,928               | 16,739,103 | 34,047            | 146,104   | 207,325           | 340,624   | 10,790,650            | 16,544,703 |
| 1929.....  | 12,284,051               | 19,337,235 | 55,980            | 189,169   | 284,111           | 252,955   | 12,105,950            | 19,273,440 |
| 1930.....  | 11,032,638               | 17,713,067 | 143,436           | 569,845   | 108,730           | 212,071   | 10,977,238            | 18,070,844 |
| 1931.....  | 10,161,658               | 16,836,243 | 38,302            | 143,401   | 114,094           | 124,267   | 10,083,988            | 16,545,467 |
| 1932.....  | 4,493,721                | 6,930,721  | 21,351            | 58,062    | 53,333            | 33,921    | 4,496,739             | 6,949,892  |
| 1933.....  | 3,007,432                | 4,536,935  | 10,119            | 37,768    | 52,531            | 47,369    | 2,974,020             | 4,527,334  |
| 1934.....  | 3,783,226                | 5,067,946  | 14,341            | 45,548    | 70,046            | 55,181    | 3,727,521             | 5,058,313  |
| 1935.....  | 3,648,036                | 5,580,043  | 17,738            | 60,079    | 55,007            | 44,365    | 3,610,217             | 5,505,757  |
| 1936.....  | 4,508,718                | 6,906,192  | 39,867            | 107,180   | 68,929            | 56,909    | 4,479,656             | 6,958,463  |
| 1937*..... | 6,168,971                | 9,095,867  | 61,082            | 134,113   | 72,568            | 82,978    | 6,157,455             | 9,147,002  |

<sup>1</sup> 'Production' as used here means quantity and value of sales.

or 31 cwt.

<sup>2</sup> Not available.<sup>3</sup> Preliminary figures.<sup>4</sup> The barrel of cement=350 lb.

**Sand and Gravel, and Stone.**—The mining, Metallurgical, and Chemical Branch of the Bureau of Statistics presents details of production and organization of the stone industry separately from that of sand and gravel, but for the sake of brevity they are here discussed together. However, the figures of stone production shown do not include the limestone used to produce lime and cement, nor the quartz and other rock minerals, which are shown separately in Table 2, pp. 344-345. Production of these materials increased greatly up to the recent world depression. The expansion in the stone industry was chiefly in crushed stone. Thus a production of crushed stone in 1922 of 3,044,399 tons had increased by 1930 to 8,062,330 tons, while in the same period the production of sand and gravel increased from 11,666,374 tons to 28,547,511 tons. During the depression the output contracted sharply, but since 1933 there has been some recovery. Among the developments in Canada that resulted in increased production of these materials prior to the depression may be mentioned: (1) the tendency for brick to be replaced by reinforced concrete, cement blocks, etc., as indicated on p. 381 by a decline in brick production and an increase in that of cement; (2) the vast improvement during the past decade in the mileage and character of roads and highways in Canada; and (3) the improvement of railway roadbeds.

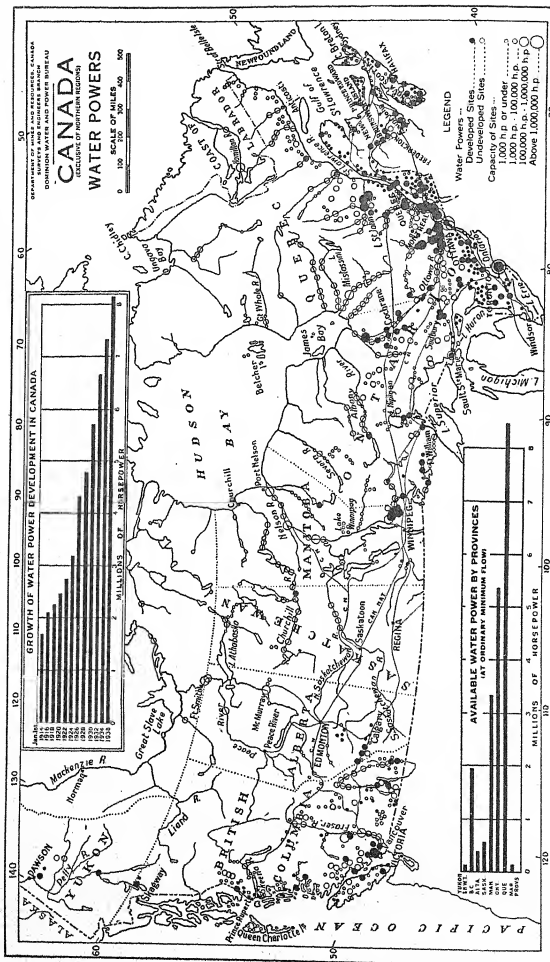
The provincial distribution of the 1936 production of stone, sand and gravel is shown in Table 5, p. 351, while the chief purposes for which these materials were produced are shown in Table 31 below.

31.—Production of Sand and Gravel, and Stone in Canada, Showing the Principal Purposes, calendar years 1934-36.

| Material and Purpose.                  | 1934.             |                  | 1935.             |                  | 1936.             |                  |
|--|-------------------|------------------|-------------------|------------------|-------------------|------------------|
|  | Quantity.         | Gross Value.     | Quantity.         | Gross Value.     | Quantity.         | Gross Value.     |
|  | tons.             | \$               | tons.             | \$               | tons.             | \$               |
| <b>Sand—</b>                           |                   |                  |                   |                  |                   |                  |
| Moulding sand.....                     | 13,229            | 13,415           | 13,213            | 14,674           | 16,725            | 16,951           |
| For building, concrete, roads, etc.... | 686,631           | 209,002          | 787,412           | 204,435          | 955,502           | 302,542          |
| Other.....                             | 49,519            | 12,391           | 44,052            | 10,609           | 15,096            | 5,795            |
| <b>Sand and Gravel—</b>                |                   |                  |                   |                  |                   |                  |
| For railway ballast.....               | 1,454,618         | 266,292          | 2,267,195         | 415,002          | 6,318,681         | 1,054,703        |
| For concrete, roads, etc.....          | 12,418,408        | 3,411,751        | 17,531,947        | 5,357,331        | 14,339,640        | 5,216,042        |
| Crushed gravel.....                    | 231,754           | 122,020          | 570,540           | 327,269          | 480,516           | 294,466          |
| <b>Totals, Sand and Gravel.....</b>    | <b>14,854,159</b> | <b>4,035,477</b> | <b>21,313,489</b> | <b>6,389,440</b> | <b>22,124,160</b> | <b>6,921,399</b> |
| <b>Stone—</b>                          |                   |                  |                   |                  |                   |                  |
| Building.....                          | 52,665            | 490,095          | 200,399           | 1,258,741        | 42,335            | 714,616          |
| Monumental and ornamental.....         | 9,359             | 316,366          | 15,163            | 342,950          | 8,975             | 281,656          |
| Limestone for agriculture.....         | 81,564            | 142,129          | 87,884            | 134,716          | 94,031            | 116,397          |
| <b>Chemical Uses—</b>                  |                   |                  |                   |                  |                   |                  |
| Flux.....                              | 237,362           | 177,015          | 260,629           | 186,858          | 279,299           | 187,240          |
| Pulp and paper.....                    | 149,997           | 144,362          | 160,870           | 165,784          | 197,957           | 197,523          |
| Other.....                             | 102,221           | 126,052          | 107,300           | 131,057          | 137,951           | 168,534          |
| Rubble and riprap.....                 | 175,405           | 108,192          | 314,484           | 198,537          | 475,845           | 250,581          |
| Crushed.....                           | 3,229,888         | 2,486,463        | 3,132,884         | 2,723,191        | 3,702,153         | 3,045,407        |
| <b>Totals, Stone<sup>1</sup>.....</b>  | <b>4,077,016</b>  | <b>4,152,329</b> | <b>4,316,515</b>  | <b>5,363,234</b> | <b>4,981,665</b>  | <b>5,128,739</b> |

<sup>1</sup> Totals include minor items not specified.

The quantities and values of stone produced, given in the table above, represent only the production of those establishments which actually quarry their own stone and are exclusive of the products of the stone-dressing industry comprising those establishments which buy rough stone and dress, polish or finish it; although dressing operations are frequently carried on right at the quarry and to that extent cannot be separated from the primary production. Of the total quantity of stone produced in 1936 about 75 p.c. was limestone, 19 p.c. granite, less than 6 p.c. sandstone and less than 0.5 p.c. marble. The average value per ton was \$0.84 for limestone, \$1.40 for granite, \$1.74 for sandstone and \$7.42 for marble. Prices averaged lower in 1936 than in 1935 because a larger proportion of all stone except marble was used for riprap and crushed stone. The marble was used chiefly for stucco dash, in pulp and paper mills and other industrial processes, and for poultry grit and building stone. Large quantities of limestone were used for fluxing and other chemical purposes, but by far the largest part of all stone except marble was used as crushed stone.



## CHAPTER XIII.—WATER POWERS.

The freshwater area of Canada is officially estimated at 228,307 square miles—an area nearly twice as large as the whole land area of the British Isles, and certainly larger than the freshwater area of any other country in the world. As many parts of this well-watered country are situated at considerable heights above sea-level, there are great sources of potential energy in the rapids and waterfalls of the rivers conveying the waters from these areas to the sea. Water power, therefore, is among the chief natural resources of Canada, and its development has in recent years contributed materially to swell the volume of Canadian production.

This Water Power chapter of the Year Book is divided into three sections: the first describes our water powers, their development and use in industry; the second deals with the Canadian central electric station industry, which is based almost wholly upon hydro-electric power; the third treats of the public ownership of hydro-electric power in Ontario, the chief manufacturing area, and also describes the policies of the Hydro-Electric or Power Commissions in other provinces.

### Section 1.—The Water Powers of Canada.\*

The progress of civilization in its material aspects may be measured by the extent to which the resources of nature are adapted to the uses of mankind. These resources yield, in the first instance, raw materials such as coal and iron, cotton and lumber, hides and wool, which enter into so many things that they are spoken of as basic commodities. Energy, until comparatively recently, was largely secured by the combustion of coal and was therefore looked upon as a secondary product, whereas, when produced from falling water, it is just as much a primary product as coal itself. Energy now enters so largely into the scheme of modern existence that it is recognized as a basic element. Statistics concern themselves with kilowatt hours of electric energy produced just as with the production of pig iron, coal or cotton, and take note of undeveloped water power as being a source of raw material just as important as uncut forests or untapped oil fields. The relationship of power to production is now so vital, that those associated with power development in any country are keenly interested in methods and progress in other parts of the world. To facilitate a study of world power conditions, three Plenary World Power Conferences have already been held to consider the technical, economic, and statistical aspects of power development. The latest of these Conferences was held at Washington in September, 1936, and was composed of representatives of more than fifty member States. Following the first and second Conferences, sectional meetings were held to consider special problems related to the production and supply of energy.

Canada is richly endowed with water-power resources and is in the forefront as regards their utilization. In fact, practically every large industrial centre throughout the Dominion is now served with hydro-electric energy and has within practical transmission distance substantial reserves for the future. More than 95 p.c. of the

\* By J. T. Johnston, Controller, Dominion Water and Power Bureau, Surveys and Engineering Branch, Department of Mines and Resources.

total main-plant equipment of the central electric stations of Canada is hydro-power, and this equipment generates more than 98 p.c. of the total electrical output. Indeed, water power is a mainspring of industrial progress in the central provinces, which have no indigenous coal supplies. Table 1 shows the provincial distribution of available and developed power in Canada at Dec. 31, 1937.

1.—Available and Developed Water Power in Canada, by Provinces, Dec. 31, 1937.

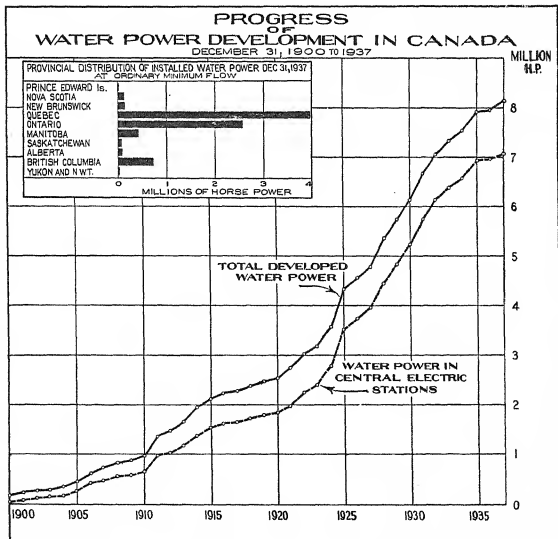
| Province.                            | Available 24-Hour<br>Power at 80 p.c.<br>Efficiency. |                                      | Turbine<br>Installation. |
|--------------------------------------|--|--------------------------------------|--------------------------|
|                                      | At<br>Ordinary<br>Minimum<br>Flow.                   | At<br>Ordinary<br>Six-Month<br>Flow. |                          |
|                                      | h.p.   | h.p.                                 | h.p.                     |
| Prince Edward Island.....            | 3,000  | 5,300                                | 2,439                    |
| Nova Scotia.....                     | 20,800   | 128,300                              | 123,437                  |
| New Brunswick.....                   | 68,600   | 100,100                              | 133,681                  |
| Quebec.....                          | 8,459,000  | 13,064,000                           | 3,999,686                |
| Ontario.....                         | 5,330,000  | 6,940,000                            | 2,577,380                |
| Manitoba.....                        | 3,309,000  | 5,344,500                            | 405,325                  |
| Saskatchewan.....                    | 542,000  | 1,082,000                            | 61,035                   |
| Alberta.....                         | 390,000  | 1,049,500                            | 71,597                   |
| British Columbia.....                | 1,031,000  | 5,103,500                            | 719,972                  |
| Yukon and Northwest Territories..... | 294,000  | 731,000                              | 18,199                   |
| <b>Canada.....</b>                   | <b>20,347,400</b>                                    | <b>33,617,200</b>                    | <b>8,112,751</b>         |

The figures of available power in the above table are based upon rapids, falls, and power sites of which the actual existent drop, or the head of possible concentration, is definitely known or at least well established. Innumerable rapids and falls of greater or smaller power capacity, not as yet recorded, are scattered on rivers and streams from coast to coast and will only become available for tabulation as more detailed survey work is undertaken and completed. This is particularly true of the less explored northern districts. Nor is any consideration given to the power concentrations which are feasible on rivers and streams of gradual gradient, where economic heads may be created by the construction of power dams, excepting only at points where definite studies have been carried out and the results made matters of record.

The turbine installation in the above table represents the actual water wheels installed throughout the Dominion, but these figures should not be placed in direct comparison with the available power figures for the purpose of deducing therefrom

the percentage of the available water-power resources developed to date. The actual water-wheel installation throughout the Dominion averages 30 p.c. greater than corresponding maximum available power figures calculated at ordinary six-month flow. The figures quoted above, therefore, indicate that the "at present recorded water-power resources" of the Dominion will permit of a turbine installation of about 43,700,000 h.p. In other words, the present turbine installation represents only slightly more than 18½ p.c. of the present recorded water-power resources and the figures of available power in Table 1 may be said to represent the minimum water-power possibilities of the Dominion.

**Growth of Water-Power Development.**—The commencement of the long distance transmission of electricity at the beginning of the present century resulted in the extensive development of hydro-electricity for distribution over wide areas. The growth of installation during the period from 1900 to 1937 is shown, by provinces, in Table 2.





2.—Hydraulic Turbine Horse-Power Installed in Canada, by Provinces, as at Dec. 31, 1900-37.

| Year.    | P.E.I. | Nova Scotia. | New Brunswick. | Quebec.   | Ontario.  | Manitoba. | Saskatchewan. | Alberta. | British Columbia. | Total. <sup>1</sup> |
|----------|--------|--------------|----------------|-----------|-----------|-----------|---------------|----------|-------------------|---------------------|
|          | h.p.   | h.p.         | h.p.           | h.p.      | h.p.      | h.p.      | h.p.          | h.p.     | h.p.              | h.p.                |
| 1900.... | 1,521  | 10,810       | 4,601          | 82,864    | 53,876    | 1,000     | -             | 280      | 9,366             | 173,323             |
| 1901.... | 1,581  | 20,132       | 4,601          | 139,149   | 62,788    | 1,000     | -             | 280      | 9,366             | 238,902             |
| 1902.... | 1,641  | 21,944       | 4,636          | 152,783   | 77,022    | 1,000     | -             | 280      | 13,266            | 272,577             |
| 1903.... | 1,641  | 23,518       | 7,427          | 164,258   | 79,909    | 1,000     | -             | 355      | 20,346            | 298,450             |
| 1904.... | 1,641  | 26,228       | 8,450          | 179,468   | 111,697   | 1,000     | -             | 355      | 26,396            | 355,249             |
| 1905.... | 1,663  | 26,563       | 8,594          | 183,799   | 202,896   | 1,000     | -             | 355      | 29,334            | 454,200             |
| 1906.... | 1,701  | 26,632       | 10,134         | 205,211   | 279,038   | 38,800    | -             | 355      | 45,816            | 608,002             |
| 1907.... | 1,701  | 27,977       | 10,172         | 242,582   | 345,404   | 38,800    | -             | 355      | 58,570            | 727,646             |
| 1908.... | 1,701  | 28,419       | 10,407         | 268,614   | 410,079   | 38,800    | -             | 655      | 58,610            | 820,580             |
| 1909.... | 1,734  | 29,381       | 10,507         | 305,550   | 437,613   | 38,800    | -             | 655      | 63,048            | 890,489             |
| 1910.... | 1,760  | 31,470       | 11,197         | 334,763   | 490,821   | 38,800    | 300           | 655      | 64,474            | 977,171             |
| 1911.... | 1,760  | 32,226       | 13,635         | 468,977   | 634,268   | 64,800    | 30            | 14,855   | 119,393           | 1,363,134           |
| 1912.... | 1,785  | 32,773       | 15,135         | 513,635   | 659,190   | 64,800    | 30            | 15,035   | 165,883           | 1,451,466           |
| 1913.... | 1,825  | 32,964       | 15,183         | 551,871   | 751,545   | 64,800    | 30            | 32,835   | 224,680           | 1,658,930           |
| 1914.... | 1,843  | 33,469       | 15,380         | 664,139   | 858,534   | 78,850    | 30            | 33,110   | 252,690           | 1,911,244           |
| 1915.... | 1,942  | 33,596       | 15,405         | 803,786   | 871,309   | 78,850    | 30            | 33,110   | 254,265           | 2,105,492           |
| 1916.... | 1,962  | 33,656       | 15,480         | 836,394   | 921,158   | 78,850    | 30            | 33,110   | 288,330           | 2,322,169           |
| 1917.... | 1,989  | 34,031       | 16,261         | 856,769   | 955,055   | 78,850    | 30            | 33,122   | 297,169           | 2,287,395           |
| 1918.... | 2,198  | 34,818       | 16,311         | 905,305   | 981,513   | 85,325    | 35            | 33,122   | 307,533           | 2,378,657           |
| 1919.... | 2,233  | 35,199       | 19,126         | 996,908   | 1,096,550 | 85,325    | 35            | 33,122   | 308,364           | 2,470,050           |
| 1920.... | 2,233  | 37,623       | 21,976         | 955,090   | 1,057,422 | 85,325    | 35            | 33,122   | 309,534           | 2,515,550           |
| 1921.... | 2,252  | 48,908       | 20,970         | 1,050,338 | 1,165,910 | 90,125    | 35            | 33,122   | 310,262           | 2,754,157           |
| 1922.... | 2,274  | 49,142       | 42,051         | 1,099,404 | 1,305,536 | 134,025   | 35            | 33,122   | 329,557           | 3,008,345           |
| 1923.... | 2,274  | 50,331       | 43,101         | 1,135,481 | 1,396,166 | 102,025   | 35            | 33,122   | 358,118           | 3,191,852           |
| 1924.... | 2,274  | 65,572       | 44,521         | 1,312,550 | 1,595,396 | 102,025   | 35            | 34,532   | 300,462           | 3,590,590           |
| 1925.... | 2,274  | 65,637       | 42,271         | 1,749,975 | 1,802,562 | 153,925   | 35            | 34,532   | 443,832           | 4,338,262           |
| 1926.... | 2,274  | 66,147       | 47,131         | 1,886,042 | 1,808,246 | 227,925   | 35            | 34,532   | 463,852           | 4,549,383           |
| 1927.... | 2,274  | 68,416       | 47,131         | 2,069,513 | 1,832,656 | 255,925   | 35            | 34,532   | 475,232           | 4,798,917           |
| 1928.... | 2,439  | 74,356       | 67,131         | 2,387,118 | 1,903,705 | 311,925   | 35            | 34,532   | 554,792           | 5,349,232           |
| 1929.... | 2,439  | 109,124      | 112,631        | 2,595,430 | 1,952,055 | 311,925   | 35            | 70,532   | 559,792           | 5,727,162           |
| 1930.... | 2,439  | 114,224      | 133,681        | 2,718,130 | 2,088,055 | 311,925   | 42,035        | 70,532   | 630,792           | 6,125,012           |
| 1931.... | 2,439  | 111,999      | 133,681        | 3,100,330 | 2,145,205 | 390,925   | 42,035        | 70,532   | 655,092           | 6,666,337           |
| 1932.... | 2,439  | 112,187      | 133,681        | 3,357,320 | 2,208,105 | 390,925   | 42,035        | 71,597   | 713,792           | 7,045,200           |
| 1933.... | 2,439  | 112,167      | 133,681        | 3,493,320 | 2,355,105 | 390,925   | 42,035        | 71,597   | 717,602           | 7,332,070           |
| 1934.... | 2,439  | 118,367      | 133,681        | 3,703,320 | 2,355,755 | 390,925   | 42,035        | 71,597   | 717,717           | 7,547,035           |
| 1935.... | 2,439  | 116,367      | 133,681        | 3,853,320 | 2,560,155 | 392,825   | 42,035        | 71,597   | 718,497           | 7,909,115           |
| 1936.... | 2,439  | 120,667      | 133,681        | 3,883,320 | 2,561,905 | 392,825   | 42,035        | 71,597   | 718,922           | 7,945,590           |
| 1937.... | 2,439  | 123,437      | 133,681        | 3,999,686 | 2,577,380 | 405,325   | 61,035        | 71,597   | 719,072           | 8,112,751           |

<sup>1</sup> Includes totals for Yukon. Turbine horse-power in Yukon was 5 from 1900 to 1906, 2,055 in 1907, 2,095 in 1908, 3,195 in 1909 and 1910, 13,196 from 1911 to 1913, 13,199 from 1914 to 1934, and 18,189 from 1935 to 1937.

<sup>2</sup> First reported installation in Saskatchewan.

**Distribution of Developed Water Power.**—An analysis is made in Table 3 of the distribution of developed water power among central electric stations, pulp and paper mills and other industries. The extent to which pulp and paper manufacturing is dependent on water power is clearly shown by the figures there given, which indicate that 8.4 p.c. of the developed power is installed by pulp and paper companies, in comparison with 4.4 p.c. developed by all other industries (excluding central electric stations). The pulp and paper industry also purchases a large amount of power from the central electric stations, and about 95 p.c. of its machinery is driven by water power. The bulk of the water power used in other industries is developed by central electric stations, converted into electricity and delivered to the various industrial plants.

### 3.—Developed Water Power in Canada: Distribution, by Provinces and Industries, and per 1,000 Population, as at Dec. 31, 1937.

| Province.                                   | Turbine Installation in H.P.                     |   |   |                  | Population,<br>June 1,<br>1937. <sup>4</sup> | Total<br>Installation<br>per 1,000<br>Population. |
|---|--|---|---|------------------|--|---|
|   | In Central<br>Electric<br>Stations. <sup>1</sup> | In Pulp<br>and Paper<br>Mills. <sup>2</sup> | In<br>Other<br>Industries. <sup>3</sup> | Total.           |  |   |
| Prince Edward Island.....                   | 376  | Nil   | 2,063                                   | 2,439            | 93,000                                       | 26  |
| Nova Scotia.....                            | 88,502   | 19,348                                      | 15,587                                  | 123,437          | 542,000                                      | 238   |
| New Brunswick.....                          | 104,960  | 19,778                                      | 8,943                                   | 133,681          | 440,000                                      | 304   |
| Quebec.....                                 | 3,570,375  | 293,026                                     | 136,285                                 | 3,999,686        | 3,135,000                                    | 1,275   |
| Ontario.....                                | 2,226,633  | 240,880                                     | 109,877                                 | 2,577,380        | 3,711,000                                    | 694   |
| Manitoba.....                               | 405,325  | Nil   | Nil                                     | 405,325          | 717,000                                      | 565   |
| Saskatchewan.....                           | 61,000   | Nil   | 35                                      | 61,035           | 939,000                                      | 65  |
| Alberta.....                                | 70,326   | Nil   | 1,277                                   | 71,603           | 778,000                                      | 92  |
| British Columbia.....                       | 547,160  | 105,950                                     | 66,882                                  | 719,972          | 751,000                                      | 960   |
| Yukon and Northwest Ter-<br>ritories.....   | Nil  | Nil   | 18,199                                  | 18,199           | 14,000                                       | 1,300   |
| <b>Canada.....</b>                          | <b>7,074,641</b>                                 | <b>678,982</b>                              | <b>359,128</b>                          | <b>8,112,751</b> | <b>11,120,000</b>                            | <b>730</b>  |
| Percentages of total instal-<br>lation..... | 87.2   | 8.4   | 4.4                                     | 100.0            | -  | -   |

<sup>1</sup> Includes only hydro-electric stations which develop power for sale.

<sup>2</sup> Includes only water

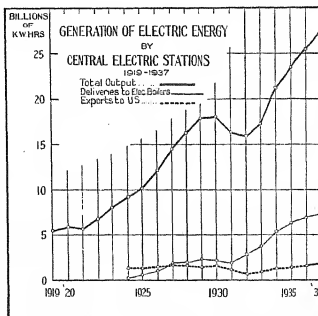
power actually developed by pulp and paper companies. In addition to this turbine installation, pulp and paper companies have motor equipment for operation by hydro-electricity purchased from the central electric stations aggregating more than 1,105,000 h.p., making a total of more than 1,785,000 h.p. actually developed for the manufacture of pulp and paper. Large amounts of electricity are also purchased for use in electric boilers.

<sup>3</sup> Includes only water power actually developed in connection with industries other than the central electric station and pulp and paper industries. These industries also purchase power from the central electric stations.

<sup>4</sup> Estimated by the Dominion Bureau of Statistics.

## Section 2.—Central Electric Stations.\*

The rapid growth of the central electric station industry has been stimulated by the large demand for power from the manufacturing industries, particularly pulp and paper plants, and from the domestic and commercial light customers, and also by the many improvements in generating and transmitting equipment and in electrical appliances and motors. In Table 4 will be found statistics of the number of central electric stations, capital invested, revenue from sale of power, total horse-power, kilowatt hours generated and number of customers for the 20 years ended 1936, together with the number of persons employed and the amount expended for salaries and wages. The total output for 1936 amounted to 25,402,282,000 kilowatt hours and, based on preliminary figures from the large stations, the total production in 1937 is estimated at 27,000,000,000 kilowatt hours. This, if achieved, will be a new high record for the industry, and will exceed the 1936 output by 8.5 p.c.



\* Revised by G. S. Wrong, B.Sc., Chief, Transportation and Public Utilities Branch, Dominion Bureau of Statistics. For a list of publications of this Branch, see Chapter XXIX.

Exports to the United States reached a low point in 1932 with 467,215,000 kilowatt hours, but they began a steady increase about the middle of 1933 and continued to increase each year, the total for 1937 being 1,847,100,000 kilowatt hours, or four times the low record of 1932. The use of electric energy in electric boilers in various industries and particularly in the pulp and paper mills has increased rapidly and fairly steadily. In 1937 it reached a high record of 7,313,014,000 kilowatt hours, or 26 p.c. of the total output, and more than double the quantity so used in 1932. This power is partly off-peak power available at various times each day and partly surplus power available continuously until a better market develops. The domestic service consumption or the electricity used in residences has also increased steadily even during the years 1930-33 and in 1937 amounted to 1,887,116,000 kilowatt hours, an increase of 27 p.c. over the 1930 consumption and 7 p.c. over the 1936 consumption.

Interesting factors affect the relative per capita consumptions of electricity from central electric stations in Canada and the United States. An abundant supply of low-priced coal in the industrial area of the United States, and no coal but an excellent supply of water power in the central provinces of Canada, tend to favour the generation of power in central stations in Canada. Again, the pulp and paper industry is proportionately a smaller industry in the United States than in Canada. While the average consumption for domestic use is 64 p.c. higher in Canada than in the United States, the total consumption for domestic or residential use is about 7.4 p.c. of the total output of central electric stations for Canada and 16.6 p.c. for the United States.

#### 4.—Summary Statistics of Central Electric Stations, calendar years 1917-36.

| Year.     | Number of Stations. <sup>1</sup> | Capital Invested. | Revenue from Sale of Power. <sup>2</sup> | Total Horse-Power. <sup>3</sup> | Kilowatt Hours Generated. | Cus-tomers. | Persons Em-ployed. | Salaries and Wages. |
|-----------|----------------------------------|-------------------|--|---------------------------------|---------------------------|-------------|--------------------|---------------------|
|           |                                  | \$                | \$                                       | h.p.                            | '000                      | No.         | No.                | \$                  |
| 1917..... | 666                              | 356,004,168       | 4  | 1,844,571                       | 4                         | 4           | 8,847              | 7,777,715           |
| 1918..... | 795                              | 401,942,402       | 43,908,085                               | 1,841,114                       | 4                         | 4           | 9,696              | 10,354,242          |
| 1919..... | 805                              | 416,512,010       | 47,933,490                               | 1,907,135                       | 5,497,204                 | 4           | 9,656              | 11,497,132          |
| 1920..... | 505                              | 448,273,642       | 53,436,082                               | 1,897,024                       | 5,894,867                 | 894,155     | 10,693             | 14,620,709          |
| 1921..... | 510                              | 484,699,451       | 58,271,622                               | 1,977,857                       | 5,614,132                 | 973,212     | 10,714             | 15,234,678          |
| 1922..... | 522                              | 568,068,752       | 62,173,179                               | 2,258,398                       | 6,740,750                 | 1,053,545   | 10,684             | 14,495,250          |
| 1923..... | 532                              | 581,780,611       | 67,496,883                               | 2,423,845                       | 8,099,192                 | 1,112,517   | 11,094             | 14,784,038          |
| 1924..... | 532                              | 628,555,093       | 74,616,863                               | 2,949,450                       | 9,315,277                 | 1,200,950   | 12,956             | 17,946,584          |
| 1925..... | 563                              | 726,721,087       | 79,341,584                               | 3,569,527                       | 10,110,459                | 1,279,731   | 13,203             | 18,765,907          |
| 1926..... | 595                              | 756,220,060       | 88,933,733                               | 3,769,323                       | 12,093,445                | 1,337,562   | 13,406             | 19,943,000          |
| 1927..... | 629                              | 866,835,285       | 104,033,207                              | 4,173,349                       | 14,549,069                | 1,331,966   | 14,708             | 22,946,315          |
| 1928..... | 601                              | 956,919,603       | 112,326,819                              | 4,627,667                       | 16,336,518                | 1,464,005   | 15,855             | 24,253,820          |
| 1929..... | 587                              | 1,055,731,532     | 122,833,446                              | 4,925,535                       | 17,962,515                | 1,555,883   | 16,104             | 24,831,821          |
| 1930..... | 587                              | 1,138,200,016     | 126,038,145                              | 5,401,108                       | 18,093,802                | 1,607,796   | 17,887             | 27,287,443          |
| 1931..... | 550                              | 1,229,988,951     | 122,510,730                              | 5,706,737                       | 16,330,667                | 1,632,792   | 17,014             | 20,806,956          |
| 1932..... | 572                              | 1,335,886,987     | 121,212,679                              | 6,343,654                       | 16,052,057                | 1,657,454   | 15,395             | 23,261,166          |
| 1933..... | 575                              | 1,386,532,055     | 117,532,061                              | 6,616,006                       | 17,338,999                | 1,666,882   | 14,717             | 21,431,877          |
| 1934..... | 573                              | 1,430,852,166     | 124,463,613                              | 6,854,161                       | 21,197,124                | 1,660,079   | 14,974             | 21,829,491          |
| 1935..... | 566                              | 1,459,821,168     | 127,177,954                              | 7,104,142                       | 23,283,033                | 1,694,703   | 15,342             | 22,519,993          |
| 1936..... | 561                              | 1,493,116,649     | 135,865,173                              | 7,119,272                       | 25,402,282                | 1,740,763   | 16,087             | 23,367,091          |

<sup>1</sup> Excluding non-generating stations in 1920 and subsequent years.

<sup>2</sup> Not including auxiliary plant equipment which is included in installation shown in central electric stations in Table 9 of the Manufactures chapter, pp. 424-429.

<sup>3</sup> Revised to exclude duplications.

<sup>4</sup> Data not available.

**Equipment of Central Electric Stations.**—The main-plant primary power equipment of all central electric stations aggregated 7,119,272 h.p. in 1936. This included water wheels and turbines, steam reciprocating engines and turbines, and internal combustion engines. The hydraulic power machines greatly predominated over the other prime movers, providing 95.7 p.c. of the total capacity, with steam turbines, steam reciprocating engines and internal combustion engines making up the remaining 4.3 p.c. Not included in the above were steam engines and internal combustion engines with a capacity of 200,621 h.p., or 2.8 p.c. of the total power capacity, installed as auxiliary or standby equipment.

Central electric stations that have no water power, but are operated by steam and internal combustion engines, are on the whole small stations. Of the 52 main-plant steam reciprocating engines in central electric stations in 1936, only 9 in number were over 500 h.p. The steam turbines averaged approximately 4,400 h.p. with 18 units averaging 9,500 h.p., but there were only 60 steam turbines in the industry and these were confined to 22 stations, whereas the 809 water wheels and turbines averaged 8,400 h.p., including 4 at 65,000 h.p. and 5 at 66,000 h.p. each.

The majority of the fuel-using stations are primarily for lighting purposes, using the cheapest fuel procurable, generally local coal. In the Prairie Provinces bituminous and lignite coals are used for the steam engines and gasoline, oil distillates and producer gas for the internal combustion engines.

Of the 340 main-plant internal combustion engines in central electric stations in 1936, 189, or 56 p.c., were in Saskatchewan, 62 or 18 p.c. in Alberta, and 30 or 9 p.c. in Manitoba.

During 1936, the thermal engines produced 496,577,000 kilowatt hours at a cost for fuel of \$2,303,786, an average of 0.46 cents per kilowatt hour. This production was, however, less than 2 p.c. of the total output.

#### 5.—Main-Plant Equipment of Central Electric Stations, by Provinces, and Total Auxiliary Equipment, 1936.

Note.—K.V.A. means Kilo-volt-amperes.

| Type of Equipment and Province. | No. of Power Plants. | Water Wheels and Turbines. |           |                   | Steam Engines, Steam Turbines and Internal Combustion Engines. |           |                   | Dynamios. |           |                   |
|---------------------------------|----------------------|----------------------------|-----------|-------------------|--|-----------|-------------------|-----------|-----------|-------------------|
|                                 |                      | No.                        | Capacity. | Average Capacity. | No.  | Capacity. | Average Capacity. | No.       | Capacity. | Average Capacity. |
|                                 |                      |                            | h.p.      | h.p.              |  | h.p.      | h.p.              |           | K.V.A.    | K.V.A.            |
| MAIN-PLANT EQUIPMENT.           |                      |                            |           |                   |  |           |                   |           |           |                   |
| P. E. Island.....               | 9                    | 7                          | 336       | 48                | 7  | 5,730     | 819               | 13        | 4,069     | 359               |
| Nova Scotia.....                | 45                   | 54                         | 84,094    | 1,574             | 26   | 55,963    | 2,154             | 80        | 122,038   | 1,525             |
| New Brunswick....               | 14                   | 17                         | 105,985   | 6,234             | 15   | 33,387    | 2,226             | 32        | 118,490   | 3,703             |
| Quebec.....                     | 96                   | 260                        | 3,352,776 | 12,895            | 8  | 2,640     | 330               | 268       | 2,998,210 | 11,169            |
| Ontario.....                    | 133                  | 339                        | 2,201,136 | 6,493             | 16   | 1,365     | 853               | 351       | 1,799,280 | 5,041             |
| Manitoba.....                   | 27                   | 39                         | 437,800   | 11,226            | 39   | 3,556     | 912               | 78        | 354,352   | 4,546             |
| Saskatchewan.....               | 115                  | Nil                        | -         | -                 | 216  | 143,112   | 663               | 212       | 121,362   | 572               |
| Alberta.....                    | 62                   | 18                         | 69,920    | 3,884             | 96   | 59,799    | 623               | 107       | 105,033   | 982               |
| British Columbia and Yukon..... | 60                   | 75                         | 557,713   | 7,430             | 29   | 3,060     | 106               | 106       | 437,365   | 4,126             |
| Totals.....                     | 561                  | 809                        | 6,810,669 | 8,419             | 452  | 368,612   | 682               | 1,247     | 6,025,999 | 4,832             |
| AUXILIARY-PLANT EQUIPMENT.      |                      |                            |           |                   |  |           |                   |           |           |                   |
|                                 | -                    | Nil                        | -         | -                 | 132  | 200,621   | 1,520             | 127       | 172,327   | 1,357             |
| Grand Totals.....               | 561                  | 809                        | 6,810,669 | 8,419             | 584  | 569,233   | 872               | 1,374     | 6,198,326 | 6,189             |

**Provincial Distribution of Electric Energy.**—The distribution by provinces of the electric energy generated in central electric stations throughout Canada is shown in Table 6 for the calendar years 1931-36. In the latest year over 82 p.c. of the total generated electric energy was produced in the leading industrial provinces

of Ontario and Quebec. From Table 7 it is seen that the total electric energy exported in the calendar year 1937 was 1,847,100,000 kilowatt hours, or 6.7 p.c. of the estimated production by central electric stations in that year; in 1936 it had amounted to 1,578,100,000 kilowatt hours, or 6.2 p.c. of the total amount generated in central electric stations.

6.—Electric Energy Generated in Central Electric Stations, by Provinces, calendar years 1931-36.

| Province.                 | Kilowatt Hours.   |                   |                   |                   |                   |                   |
|---------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                           | 1931.             | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|                           | '000              | '000              | '000              | '000              | '000              | '000              |
| Prince Edward Island..... | 4,413             | 4,662             | 4,765             | 4,902             | 5,127             | 5,769             |
| Nova Scotia.....          | 257,573           | 279,854           | 330,436           | 339,049           | 339,144           | 412,291           |
| New Brunswick.....        | 404,350           | 427,004           | 375,087           | 394,100           | 390,003           | 425,849           |
| Quebec.....               | 8,096,026         | 8,401,123         | 9,351,084         | 11,335,957        | 12,625,062        | 13,019,908        |
| Ontario.....              | 4,948,819         | 4,258,012         | 4,381,094         | 6,113,595         | 6,653,219         | 7,927,044         |
| Manitoba.....             | 1,084,763         | 1,087,010         | 1,077,210         | 1,183,381         | 1,342,093         | 1,574,808         |
| British Columbia.....     | 134,014           | 135,898           | 131,164           | 134,033           | 138,479           | 145,219           |
| Alberta.....              | 205,082           | 195,467           | 182,963           | 193,002           | 208,054           | 210,770           |
| Yukon.....                | 1,225,827         | 1,172,392         | 1,241,587         | 1,449,075         | 1,523,252         | 1,674,531         |
| <b>Totals.....</b>        | <b>16,330,867</b> | <b>16,052,057</b> | <b>17,338,990</b> | <b>21,197,124</b> | <b>23,283,033</b> | <b>25,402,282</b> |

**Electric Light and Power.**—Electric light and power companies are subject to registration and inspection under the Electricity Inspection Act, 1907 (6-7 Edw. VII, c. 14), and the export of electric energy is regulated by the Electricity and Fluid Exportation Act, 1907 (6-7 Edw. VII, c. 16). Both Acts were administered by the Department of Inland Revenue until Sept. 1, 1918, when, by Order in Council of June 3, 1918, their administration was transferred to the Department of Trade and Commerce. (See cc. 54 and 55, R.S.C., 1927.)

In previous Year Books, Table 7 showed the quantities produced for export, including the line losses between the power houses and the International Boundary, and the data were on a fiscal year basis. The data below in Table 7 are the quantities actually exported and are for calendar years.

7.—Electric Energy Exported under Authority of the Electricity and Fluid Exportation Act, calendar years 1934-37.

| Company.  | 1934.                | 1935.                | 1936.                | 1937.                |
|---|----------------------|----------------------|----------------------|----------------------|
|   | K.W.H.               | K.W.H.               | K.W.H.               | K.W.H.               |
| Hydro-Electric Power Commission of Ontario.....           | 367,953,300          | 372,001,692          | 372,415,114          | 386,310,900          |
| Hydro-Electric Power Commission of Ontario (surplus)..... | 193,449,610          | 178,944,660          | 290,400,823          | 439,491,214          |
| Canadian Niagara Power Company.....                       | 313,193,550          | 328,112,617          | 350,028,172          | 379,904,201          |
| Canadian Niagara Power Company (surplus).....             | 23,324,309           | 25,498,800           | 34,706,000           | 12,109,200           |
| Ontario and Minnesota Power Co.....                       | 13,581,600           | 15,229,400           | 23,635,200           | 35,215,850           |
| Maine and New Brunswick Electric Power Co.....            | 12,370,806           | 13,239,529           | 14,072,901           | 16,700,587           |
| British Columbia Electric Railway Co.....                 | 153,654              | 177,095              | 183,727              | 188,113              |
| Western Power Company of Canada.....                      | 2,400                | 34,200               | Nil                  | Nil                  |
| Southern Canada Power Co.....                             | 372,576              | 386,846              | 590,286              | 444,398              |
| Cedar Rapids Manufacturing and Power Co.....              | 317,347,143          | 423,628,950          | 475,789,253          | 570,733,439          |
| Maritime Electric Company, St. Stephen, N.B.....          | 817,620              | 1,180,280            | 1,708,860            | 894,963 <sup>1</sup> |
| Fraser Companies, Ltd.....                                | 5,719,000            | 5,566,000            | 4,129,000            | 3,873,000            |
| Northport Power and Light Co.....                         | 230,140              | 291,072              | 289,246              | 305,958              |
| Northern B.C. Power Co.....                               | 42,190               | 40,970               | 53,660               | 39,270               |
| Detroit and Windsor Subway Co.....                        | 239,900              | 254,400              | 257,300              | 277,800              |
| Manitoba Power Commission.....                            | Nil                  | Nil                  | 140,700              | 610,894              |
| <b>Totals.....</b>  | <b>1,248,797,705</b> | <b>1,364,586,541</b> | <b>1,578,109,242</b> | <b>1,847,099,787</b> |

<sup>1</sup> Exported by Canadian Cottons, Ltd., from April, 1937.

### Section 3.—Public Ownership of Hydro-Electric Power.

When, in the early years of the twentieth century, it became evident that the development of hydro-electric power would become a "key industry" in Canada, more especially in its coal-less central provinces of Ontario and Quebec, a strong movement arose in favour of conserving the water powers of the country for the public benefit instead of allowing them to pass into the hands of private corporations. This "public ownership" movement developed especial strength in Ontario and finally led to the establishment of the Hydro-Electric Power Commission, the operating statistics of which are given in Subsection 1. More recently, Manitoba, Nova Scotia, New Brunswick, and Saskatchewan have established Hydro-Electric Commissions on the model of the Ontario system. In Quebec and British Columbia, on the other hand, the development of hydro-electric power has been left in the hands of private corporations.

#### Subsection 1.—The Hydro-Electric Power Commission of Ontario.\*

The publicly-owned hydro-electrical undertaking of Ontario—known in the province as the "Hydro"—is an organization of a large number of partner-municipalities, co-ordinated into groups or systems for securing common action with respect to power supplies. It had its beginning in 1903, when, as a result of public agitation to ensure the provision of adequate supplies of electric power for distribution throughout the province at low cost, seven municipalities united under statutory authority in appointing an investigating commission to deal with power problems. This commission, known as the Ontario Power Commission, completed its work in 1906, and in the same year the Ontario Government, by special Act, created the present Hydro-Electric Power Commission of Ontario. The operations of the undertaking have grown rapidly and in 1936 electrical service was supplied by the Commission to about 782 municipalities, comprising nearly all of the cities and towns of the province, as well as many small communities and rural areas.

The providing of the power, either by generation or purchase, its transformation, transmission, and delivery to the individual municipalities and to large industrial consumers, and the operation of rural power districts are carried on by the municipalities acting *collectively* through their agent and trustee, the Hydro-Electric Power Commission of Ontario. The local operations involved in the retail distribution of the electric energy to the consumers within the limits of the various urban municipalities are performed by the municipalities *individually* through municipal utility commissions acting under the general supervision of the Hydro-Electric Power Commission.

Capital required for plant to generate and transmit power is lent by the province, and the municipalities are under contract to repay, over a period of 40 years, the moneys thus lent, with interest in full. The local distribution systems are financed individually by the issue of municipal debentures. Provision is made, in the rates charged to the ultimate consumers, for revenue with which to retire these bonds in from 20 to 30 years. The rates at which power is supplied by the Commission to the various municipalities vary with the amounts of power used, the distances from the sources of supply, and other factors. The basic principle underlying the operations of the undertaking is the provision of service 'at cost'. The rates charged by the municipal utilities for retail service are under the control of

\* Revised by R. T. Jeffery, Chief Municipal Engineer, Hydro-Electric Power Commission of Ontario, Toronto, Ontario.

the Commission and are designed to ensure that each class of consumer bears its appropriate share of the expenses of the undertaking. Each type of consumer is charged with the cost of the service received as far as is practicable.

**Power Supplies.**—To meet the constantly expanding power demands of the undertaking, the Commission has constructed its own generating plants, and has acquired several privately-owned generating plants. Of the 41 hydro-electric power plants operated by the Commission in 1936, the largest is the Queenston-Chippawa development on the Niagara river which was constructed by the Commission and has a normal operating capacity of 500,000 h.p. Provision for the needs of the near future has been made—including existing plants, plants under construction and power under contract for present and future delivery—up to an aggregate of about 1,600,000 h.p.

**Hydro-Electric Power Commission Statistics.**—The Canada Year Book of 1910 (p. xliii) described the turning on, at Berlin (now Kitchener), Ontario, on Oct. 11, 1910, of electric energy generated by Niagara falls. The small initial load of less than 1,000 h.p. increased rapidly and by 1915 had reached 100,000 h.p. In 1920 the total power distributed exceeded 350,000 h.p. and in 1930 it was over 1,260,000 h.p. Table 8 shows the growth of the co-operative municipal electrical undertaking of Ontario. It will be noted that the total capital of the undertaking, which includes investments of the Hydro-Electric Power Commission in power-producing and transmitting equipment, etc., and investments of the municipalities in distributing systems and other assets, aggregated nearly \$414,000,000 in 1936.

**8.—Summary Statistics Representative of the Growth of the Ontario Hydro-Electric Power Commission's Undertaking, fiscal years ended Oct. 31, 1910-36.**

| Year.     | Municipalities Served. | Customers Served. | Total Power Distributed by Commission. | Capital of Commission and Assets of Municipal Utilities. |
|-----------|------------------------|-------------------|--|--|
|           | No.                    | No.               | h.p.                                   | \$   |
| 1910..... | 10                     | 1                 | 2,500                                  | 2,521,000  |
| 1911..... | 26                     | 1                 | 15,200                                 | 4,020,000  |
| 1912..... | 36                     | 1                 | 31,000                                 | 4,576,000  |
| 1913..... | 58                     | 58,961            | 45,000                                 | 17,608,000   |
| 1914..... | 95                     | 96,744            | 77,000                                 | 25,023,000   |
| 1915..... | 131                    | 116,892           | 104,000                                | 29,791,000   |
| 1916..... | 191                    | 155,052           | 167,000                                | 34,917,000   |
| 1917..... | 215                    | 181,711           | 333,000                                | 74,701,000   |
| 1918..... | 236                    | 194,382           | 316,000                                | 87,812,000   |
| 1919..... | 262                    | 230,472           | 328,000                                | 103,591,000  |
| 1920..... | 266                    | 261,582           | 355,000                                | 128,334,000  |
| 1921..... | 301                    | 288,923           | 529,000                                | 193,918,000  |
| 1922..... | 348                    | 364,968           | 605,000                                | 220,594,000  |
| 1923..... | 393                    | 337,983           | 655,486                                | 236,023,000  |
| 1924..... | 418                    | 415,922           | 691,198                                | 254,139,000  |
| 1925..... | 444                    | 439,702           | 816,295                                | 265,998,000  |
| 1926..... | 501                    | 448,241           | 928,032                                | 274,972,000  |
| 1927..... | 530                    | 499,572           | 949,700                                | 286,165,000  |
| 1928..... | 560                    | 522,770           | 1,032,500                              | 297,204,000  |
| 1929..... | 607                    | 552,321           | 1,136,689                              | 314,237,000  |
| 1930..... | 668                    | 586,267           | 1,263,512                              | 359,648,000  |
| 1931..... | 721                    | 600,297           | 1,107,227*                             | 373,010,000  |
| 1932..... | 747                    | 611,955           | 1,108,037*                             | 382,558,000  |
| 1933..... | 757                    | 621,418           | 1,366,735                              | 394,061,000  |
| 1934..... | 760                    | 624,801           | 1,451,099                              | 398,225,000  |
| 1935..... | 766                    | 636,134           | 1,625,733                              | 408,001,000  |
| 1936..... | 782                    | 649,517           | 1,509,667                              | 413,710,000  |

\* Information not available.

\* Revised since the publication of the 1937 Year Book.

Table 9 shows the growth in load in the various systems during the past five years.

**9.—Distribution of Power to Systems of the Ontario Hydro-Electric Power Commission, fiscal years ended Oct. 31, 1932-36.**

(20-minute peak horse-power—system coincident peaks.)

| System and District.                | 1932.            | 1933.            | 1934.            | 1935.            | 1936.            |
|-------------------------------------|------------------|------------------|------------------|------------------|------------------|
|                                     | h.p.             | h.p.             | h.p.             | h.p.             | h.p.             |
| Niagara system.....                 | \$67,446         | 1,055,697        | 1,071,046        | 1,177,346        | 1,006,166        |
| Dominion Power and Transmission.... | 43,968           | 45,710           | 50,670           | 54,155           | 54,021           |
| Georgian Bay system.....            | 25,666           | 28,887           | 24,488           | 27,534           | 26,555           |
| Eastern Ontario system.....         | 80,544           | 86,890           | 121,823          | 133,733          | 117,969          |
| Thunder Bay system.....             | 65,700           | 90,450           | 99,806           | 113,673          | 133,914          |
| Manitoulin district.....            | 1                | 80               | 88               | 114              | 138              |
| Northern Ontario Properties—        |                  |                  |                  |                  |                  |
| Nipissing district.....             | 3,751            | 3,539            | 3,840            | 3,921            | 4,115            |
| Sudbury district.....               | 7,574            | 12,466           | 12,466           | 13,070           | 14,021           |
| Abitibi district.....               | 11,340           | 45,389           | 64,075           | 96,814           | 146,783          |
| Patricia district.....              | 2,048            | 2,627            | 2,828            | 3,512            | 4,182            |
| Espanola district.....              | 1                | 1                | 509              | 547              | 101              |
| St. Joseph district.....            | 1                | 1                | 1                | 1,314            | 1,702            |
| <b>Totals.....</b>                  | <b>1,108,037</b> | <b>1,366,735</b> | <b>1,451,699</b> | <b>1,625,733</b> | <b>1,509,667</b> |

<sup>1</sup> Not then in operation.

The initial capital expenditure to serve some twelve municipalities amounted to about \$3,600,000. Table 10 shows for the latest five years the capital investment in the respective systems of the undertaking and in the associated municipal undertakings.

**10.—Capital Investments in Ontario's Hydro Undertakings, fiscal years ended Oct. 31, 1932-36.**

| Item.   | 1932.              | 1933.              | 1934.              | 1935.              | 1936.              |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|
|   | \$                 | \$                 | \$                 | \$                 | \$                 |
| Investments by Commission on behalf of Co-operating Municipalities, in Generating Plants, Transmission Systems, etc.—                                       |                    |                    |                    |                    |                    |
| Niagara system.....   | 202,008,895        | 201,975,671        | 202,429,411        | 210,332,868        | 210,746,186        |
| Dominion Power and Transmission   | 1                  | 1                  | 1                  | 1                  | 1                  |
| Chats Falls development.....  | 5,878,494          | 6,167,750          | 6,197,129          |                    |                    |
| Georgian Bay system.....  | 8,329,026          | 8,394,645          | 8,427,279          | 8,478,202          | 8,615,788          |
| Eastern Ontario system.....   | 21,060,824         | 19,372,834         | 19,851,632         | 20,096,488         | 19,504,227         |
| Thunder Bay system.....   | 18,480,739         | 18,630,772         | 18,679,611         | 18,069,882         | 18,820,351         |
| Manitoulin district.....  |                    | 32,626             | 35,473             | 35,816             | 35,722             |
| Northern Ontario Properties—  | 10,758,686         | 23,790,137         | 25,143,854         | 30,767,010         | 31,870,335         |
| Hydro-electric railways.....  | 1,985,113          | 2,076,925          | 2,173,064          | 2,263,182          | 2,352,559          |
| Office and service buildings, construction plant, inventories, etc.....   | 4,629,053          | 4,562,603          | 4,449,914          | 5,117,511          | 4,985,730          |
| Miscellaneous, engineering, storage, etc.....   | 4                  | 4                  | 4                  | 4                  | 933,237            |
| <b>Totals, Investments by Commission</b>  | <b>273,248,830</b> | <b>285,003,969</b> | <b>287,387,957</b> | <b>295,760,459</b> | <b>297,864,135</b> |
| Investments by municipalities in distributing systems and other assets (exclusive of sinking fund equity in H.E.P.C. systems, included above), all systems. | 109,309,934        | 109,657,574        | 110,836,805        | 112,240,516        | 115,845,676        |
| <b>Grand Totals.....</b>  | <b>382,558,764</b> | <b>394,661,543</b> | <b>398,224,762</b> | <b>408,000,975</b> | <b>413,709,811</b> |

<sup>1</sup> Included in the Niagara system. <sup>2</sup> Not in operation. <sup>3</sup> The Northern Ontario properties include the Nipissing district, the Sudbury district, the Patricia district, the Abitibi district, the St. Joseph district, and the Espanola district. These properties are owned by the Government of Ontario and operated on behalf of the province by the H.E.P.C. <sup>4</sup> Not segregated prior to 1936.



The total reserves of the Commission and of the municipal electrical utilities for sinking fund, renewals, contingencies, and insurance purposes are shown in Table 11.

**11.—Accumulated Reserves of the Ontario Hydro-Electric Power Commission and of the Local Electrical Utilities of the Co-operating Municipalities, fiscal years ended Oct. 31, 1932-36.**

| Item.  | 1932.              | 1933.              | 1934.              | 1935.              | 1936.              |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
|  | \$                 | \$                 | \$                 | \$                 | \$                 |
| Niagara system.....  | 50,900,344         | 52,380,601         | 55,092,548         | 57,655,921         | 65,716,034         |
| Georgian Bay system.....   | 2,482,837          | 2,822,302          | 3,153,809          | 3,449,255          | 3,813,421          |
| Eastern Ontario system.....  | 5,228,591          | 5,338,116          | 5,984,350          | 6,063,122          | 7,403,232          |
| Thunder Bay system.....  | 2,739,224          | 3,104,609          | 3,821,486          | 3,960,712          | 4,521,100          |
| Northern Ontario properties.....   | 164,784            | 625,282            | 808,009            | 1,475,621          | 2,130,914          |
| Nipissing rural power districts and Manitoulin rural power district..... | 1                  | 7,560              | 12,714             | 15,930             | 19,376             |
| Bonnechère storage.....  | 1,734              | 3,537              | 5,417              | 7,373              | 9,406              |
| Service buildings and equipment.....                                     | 664,714            | 703,819            | 750,936            | 797,256            | 861,804            |
| Hydro-electric railways.....   | 100,240            | 121,482            | 134,722            | 144,873            | 165,392            |
| Insurance—workmen's compensation and staff pension insurance.....        | 3,854,019          | 4,322,862          | 4,690,163          | 5,107,636          | 5,645,004          |
| Totals, reserves of the Commission.....                                  | 66,145,487         | 69,433,260         | 74,214,794         | 79,367,609         | 90,255,773         |
| Totals, reserves—including surplus—of municipal electric utilities.....  | 56,624,617         | 59,736,820         | 64,177,407         | 69,106,510         | 75,187,970         |
| <b>Totals, Commission and Municipal Reserves.....</b>                    | <b>122,770,104</b> | <b>129,170,080</b> | <b>138,392,201</b> | <b>148,474,209</b> | <b>165,473,743</b> |

<sup>1</sup> Included in Northern Ontario properties.

**Statistics of Urban Municipal Electrical Utilities of Ontario Supplied by the Commission.**—The Commission exercises supervisory functions over the electrical utilities owned and operated by the partner-municipalities, and has introduced a uniform accounting system which enables the Commission to present in its Annual Reports consolidated balance sheets and operating reports regarding these utilities. These statistics relate to about 90 p.c. of the retail customers supplied by the undertaking. Summary statistics regarding service to rural consumers are given in Table 14.

Statistics of the assets and liabilities of the electrical departments of urban municipalities served by the Hydro-Electric Power Commission are given in Table 12. These show, for 1936, total assets of \$152,039,551 as compared with liabilities of \$40,657,706. Of the difference, \$58,623,145 is allotted as reserves, leaving a surplus of \$52,758,700. The item "equities in H.E.P.C. systems", listed under both assets and reserves, relates to the sinking fund equities acquired by the individual municipalities in their collective generation and transmission undertaking administered by the Hydro-Electric Power Commission. All other items relate to the local distributing systems operated individually by the urban municipalities which are partners in the Hydro undertaking. In computing the percentage of net debt

to total assets the equity in Hydro systems is not taken into account. It will be noted that between 1932 and 1936 total assets have increased by \$19,663,487, while total liabilities have decreased by \$12,027,611.

**12.—Consolidated Statement of Assets, Liabilities, Reserves, and Surpluses of Electrical Departments of Urban Municipalities Served by the Ontario Hydro-Electric Power Commission, calendar years 1932-36.**

| Item.  | 1932.              | 1933.              | 1934.              | 1935.              | 1936.              |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| Numbers of municipalities included.....                  | 280                | 282                | 282                | 284                | 284                |
| <b>Assets—</b>   |                    |                    |                    |                    |                    |
| <b>PLANT.</b>  | \$                 | \$                 | \$                 | \$                 | \$                 |
| Lands and buildings.....                                 | 9,503,744          | 10,186,471         | 10,262,603         | 10,381,191         | 10,528,595         |
| Substation equipment.....                                | 22,288,782         | 22,306,801         | 22,327,619         | 22,072,115         | 22,162,208         |
| Distribution systems—overhead.....                       | 20,806,767         | 21,152,681         | 21,353,726         | 21,650,568         | 22,163,701         |
| Distribution systems—underground.....                    | 5,890,057          | 5,945,226          | 6,031,768          | 6,068,725          | 6,070,337          |
| Line transformers.....                                   | 9,392,062          | 9,478,005          | 9,635,279          | 9,678,578          | 9,845,940          |
| Meters.....  | 8,408,252          | 8,514,165          | 8,624,505          | 8,767,892          | 9,043,616          |
| Street lighting equipment—regular.....                   | 2,257,618          | 2,381,599          | 2,385,296          | 2,420,239          | 2,527,183          |
| Street lighting equipment—ornamental.....                | 1,545,355          | 1,485,444          | 1,464,307          | 1,485,308          | 1,504,597          |
| Miscellaneous construction expenses.....                 | 4,120,920          | 4,040,800          | 3,907,350          | 3,616,937          | 4,019,431          |
| Steam or hydraulic plants.....                           | 498,232            | 502,979            | 494,933            | 496,050            | 496,186            |
| Old plant.....   | 4,989,655          | 5,016,756          | 4,978,079          | 4,917,917          | 4,876,405          |
| Plants not distributed.....                              | 200,000            | 200,000            | 200,000            | 200,000            | 200,000            |
| <b>Totals, Plant.....</b>                                | <b>89,887,050</b>  | <b>91,184,587</b>  | <b>91,075,565</b>  | <b>91,756,565</b>  | <b>93,438,204</b>  |
| <b>OTHER.</b>  |                    |                    |                    |                    |                    |
| Bank and cash balances.....                              | 3,155,442          | 1,666,489          | 2,215,914          | 2,927,486          | 3,921,121          |
| Securities and investments.....                          | 2,050,325          | 2,163,785          | 2,382,447          | 2,593,634          | 2,924,613          |
| Accounts receivable.....                                 | 3,683,059          | 3,746,911          | 4,001,596          | 4,363,298          | 4,560,714          |
| Inventories.....   | 1,232,209          | 1,226,043          | 1,110,705          | 1,212,063          | 1,261,844          |
| Sinking funds on local debentures.....                   | 9,090,211          | 9,386,177          | 9,161,420          | 9,086,152          | 9,535,713          |
| Equities in H.E.P.C. systems.....                        | 23,066,130         | 26,045,679         | 29,274,341         | 32,609,980         | 36,193,874         |
| Other assets.....  | 163,638            | 253,582            | 289,158            | 301,318            | 203,168            |
| <b>Totals, Assets.....</b>                               | <b>132,376,064</b> | <b>135,703,253</b> | <b>140,111,146</b> | <b>144,850,496</b> | <b>152,039,551</b> |
| <b>Liabilities—</b>                                      |                    |                    |                    |                    |                    |
| Debenture balances.....                                  | 45,133,306         | 42,606,145         | 39,046,990         | 36,667,031         | 34,485,507         |
| Accounts payable.....                                    | 3,512,725          | 3,320,486          | 3,149,035          | 2,931,934          | 2,879,497          |
| Bank overdrafts.....                                     | 298,910            | 206,398            | 143,557            | 72,085             | 25,500             |
| Other liabilities.....                                   | 3,740,376          | 3,787,725          | 3,669,008          | 3,462,906          | 3,267,142          |
| <b>Totals, Liabilities.....</b>                          | <b>52,685,317</b>  | <b>49,920,754</b>  | <b>46,008,590</b>  | <b>43,134,006</b>  | <b>40,657,706</b>  |
| <b>Reserves—</b>   |                    |                    |                    |                    |                    |
| For equity in H.E.P.C. systems.....                      | 23,066,130         | 26,045,679         | 29,274,341         | 32,609,980         | 36,193,874         |
| For depreciation.....                                    | 14,902,177         | 16,075,950         | 17,426,809         | 18,410,882         | 19,666,170         |
| Other reserves.....                                      | 1,902,303          | 2,043,082          | 2,056,821          | 2,459,075          | 2,763,101          |
| <b>Totals, Reserves.....</b>                             | <b>39,870,610</b>  | <b>44,163,729</b>  | <b>48,757,971</b>  | <b>53,479,947</b>  | <b>58,623,145</b>  |
| <b>Surpluses—</b>  |                    |                    |                    |                    |                    |
| Debentures paid.....                                     | 15,244,778         | 17,651,368         | 20,606,130         | 23,481,674         | 26,084,295         |
| Local sinking funds.....                                 | 9,090,211          | 9,386,177          | 9,161,420          | 9,086,153          | 9,535,713          |
| Operating surpluses.....                                 | 15,476,143         | 14,575,234         | 14,975,085         | 15,668,416         | 17,138,692         |
| <b>Totals, Surpluses.....</b>                            | <b>39,820,132</b>  | <b>41,612,779</b>  | <b>44,744,595</b>  | <b>48,236,543</b>  | <b>52,758,700</b>  |
| <b>Totals, Liabilities, Reserves, and Surpluses.....</b> | <b>132,376,064</b> | <b>135,703,253</b> | <b>140,111,146</b> | <b>144,850,496</b> | <b>152,039,551</b> |
| Percentages of net debt to total assets....              | 43.4               | 40.4               | 35.0               | 32.0               | 28.3               |

**13.—Statement of Earnings and Expenses of Electrical Departments of Urban Municipalities Served by the Ontario Hydro-Electric Power Commission, calendar years 1932-36.**

| Item.  | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| Numbers of municipalities included.....                | 280               | 282               | 282               | 284               | 284               |
|  | \$                | \$                | \$                | \$                | \$                |
| <b>Earnings—</b>                                       |                   |                   |                   |                   |                   |
| Domestic service.....                                  | 11,447,308        | 11,429,101        | 11,844,033        | 12,145,220        | 12,682,140        |
| Commercial light service.....                          | 6,243,794         | 6,013,026         | 6,206,086         | 6,458,748         | 6,815,439         |
| Commercial power service.....                          | 9,356,694         | 9,080,522         | 9,692,784         | 10,211,069        | 10,694,192        |
| Municipal power.....                                   | 1,859,585         | 1,826,872         | 1,875,970         | 1,821,286         | 1,817,987         |
| Street lighting.....                                   | 1,783,973         | 1,779,563         | 1,777,597         | 1,788,700         | 1,790,421         |
| Rural service—merchandise <sup>1</sup> .....           | 11,069            | 12,813            | 18,748            | 21,070            | 23,159            |
| Miscellaneous.....                                     | 513,787           | 455,925           | 555,172           | 562,280           | 578,826           |
| <b>Totals, Earnings.....</b>                           | <b>31,216,210</b> | <b>30,627,932</b> | <b>31,970,390</b> | <b>33,009,939</b> | <b>34,408,164</b> |
| <b>Expenses—</b>                                       |                   |                   |                   |                   |                   |
| Power purchased.....                                   | 19,109,036        | 19,330,862        | 19,591,888        | 20,053,677        | 20,486,563        |
| Substation operation.....                              | 503,352           | 454,765           | 468,944           | 478,814           | 478,850           |
| Substation maintenance.....                            | 300,189           | 288,583           | 296,551           | 297,127           | 301,897           |
| Distribution systems, operation and maintenance.....   | 969,750           | 895,351           | 844,814           | 840,634           | 855,670           |
| Line transformer maintenance.....                      | 95,485            | 82,321            | 75,172            | 70,750            | 72,712            |
| Meter maintenance.....                                 | 300,105           | 283,116           | 291,403           | 313,234           | 328,411           |
| Consumers' premises expense.....                       | 368,209           | 361,499           | 352,409           | 340,702           | 308,645           |
| Street lighting, operation, and maintenance.....       | 360,710           | 353,082           | 338,785           | 340,120           | 356,032           |
| Promotion of business.....                             | 206,761           | 289,937           | 228,741           | 252,948           | 288,339           |
| Billing and collecting.....                            | 818,721           | 817,660           | 827,860           | 835,376           | 945,893           |
| General office, salaries, and expenses.....            | 960,559           | 908,515           | 908,040           | 945,880           | 967,269           |
| Undistributed expense.....                             | 436,993           | 349,101           | 362,322           | 360,677           | 445,393           |
| Truck operation and maintenance.....                   | 112,060           | 105,453           | 98,082            | 95,151            | 69,805            |
| Interest.....  | 2,532,941         | 2,426,286         | 2,204,994         | 2,040,130         | 1,893,304         |
| Sinking fund and principal payments on debentures..... | 2,244,368         | 2,319,319         | 2,358,100         | 2,423,088         | 2,448,223         |
| <b>Totals, Expenses.....</b>                           | <b>29,378,936</b> | <b>29,265,853</b> | <b>29,248,264</b> | <b>29,686,068</b> | <b>30,348,778</b> |
| Surpluses.....   | 1,837,274         | 1,361,989         | 2,722,126         | 3,323,871         | 4,159,386         |
| Depreciation charges.....                              | 1,920,896         | 1,960,000         | 2,036,637         | 2,076,322         | 2,230,022         |
| Surpluses less depreciation charges.....               | -83,622           | -627,011          | 685,489           | 1,247,549         | 1,929,364         |

<sup>1</sup> Profits from the sale of merchandise.

**Rural Electrical Service in Ontario.**—During the past few years substantial progress has been made in Ontario in the field of rural electrification, and the Commission's rural operations are now an important feature of its work. Towards this rural work the Ontario Government, pursuant to its policy of promoting the basic industry of agriculture, contributes, in the form of 'grants-in-aid', 50 p.c. of the initial capital cost of distribution lines and equipment. In 1930 the Ontario Legislature passed two additional Acts relating to rural service. The Rural Power District Loans Act, 1930, provides for advances up to \$1,000 to actual farm owners of lands and premises in rural power districts, for the installation of electrical wiring and the purchase of equipment. The Rural Power District Service Charge Act, 1930, provides for the fixing of low maximum service charges for all classes of rural service. In Table 14 will be found statistics relating to rural electrical distribution systems operated by the Hydro-Electric Power Commission. A steady rate of increase is apparent from these statistics.

#### 14.—Statistics Relating to Electrical Service to Rural Power Districts Operated by the Ontario Hydro-Electric Power Commission, years ended Oct. 31, 1932-36.

NOTE.—Re rural power district legislation, consult the following Ontario Government publications: *The Power Commission Act* (R.S.O., 1927, c. 57); *The Rural Hydro-Electric Distribution Act* (R.S.O., 1927, c. 59); *The Rural Power District Loans Act, 1930* (20 Geo. V, c. 14); and *The Rural District Service Charge Act, 1930* (20 Geo. V, c. 15).

| Item.                                    | 1932.      | 1933.      | 1934.      | 1935.      | 1936.      |
|--|------------|------------|------------|------------|------------|
| Rural power districts..... No.           | 172        | 171        | 171        | 171        | 174        |
| Townships served..... No.                | 358        | 365        | 367        | 368        | 380        |
| Consumers..... No.                       | 59,534     | 61,845     | 63,840     | 67,802     | 73,614     |
| Primary distribution lines..... miles    | 8,918      | 9,174      | 9,461      | 9,976      | 10,808     |
| Power supplied..... h.p.                 | 32,853     | 32,372     | 33,949     | 37,190     | 42,897     |
| Revenues from customers..... \$          | 2,752,353  | 2,796,023  | 2,832,672  | 2,902,809  | 3,000,750  |
| Total expenses..... \$                   | 2,776,192  | 2,904,612  | 2,908,967  | 2,875,498  | 2,891,007  |
| Net surpluses..... \$                    | -23,838    | -108,589   | -76,295    | 27,311     | 109,743    |
| Capital invested, totals..... \$         | 16,964,227 | 17,693,875 | 18,307,575 | 19,132,265 | 20,673,974 |
| Provincial grants-in-aid, totals..... \$ | 8,892,808  | 8,752,393  | 9,054,080  | 9,489,671  | 10,232,069 |

<sup>1</sup> Included in previous item, "Capital invested".

#### Subsection 2.—Hydro-Electric and Power Commissions in Other Provinces.

**Quebec.**—*Quebec Streams Commission.*—Created by 1 Geo. V, c. 5, and given additional powers by 3 Geo. V, c. 6 (see R.S.Q., 1925, c. 46), and by 20 Geo. V, c. 34, the Commission is authorized to ascertain the water resources of the province, to make recommendations regarding their control, and to construct certain storage dams and operate them so as to regulate the flow of streams. The Commission has not undertaken the direct production of electric power, but has assisted companies engaged in such work by a systematic collection of data on the flow of the principal rivers and on the meteorological conditions, by investigation of numerous water-power sites and determination of the longitudinal profile of a large number of rivers, but mostly by the regulation of the flow of the principal power streams, thereby increasing very materially the amount of power available. This regulation is obtained by constructing storage dams holding water in large reservoirs during flood periods and using it to increase the flow at low-water periods.

The Commission has built storage reservoirs on the St. Maurice river, where the low-water flow has been increased from 6,000 second-feet to 18,000 second-feet, on lake Kenogami, the St. Francis, the Métis, the Ste. Anne de Beaurpré, and the North rivers. The entire cost to the Commission of these storage works has been about \$9,000,000 and the annual revenue exceeds \$634,000.

Other reservoirs on the Gatineau, Lièvre, and Mattawin rivers which are the property of the Commission and are operated by that body have been built and paid for by the benefiting companies instead of being financed by the Commission.

**Provincial Electricity Board.**—Created by an Act passed at the 1937 session of the Legislature (1 Geo. VI, c. 25), the Provincial Electricity Board superseded, with wider powers, the former Quebec Electricity Commission which operated from Dec. 2, 1935, to Aug. 31, 1937. The new Board is given power to control undertakings for the production, sale, and distribution of electricity in the province, to fully investigate the property and accounts of such undertakings, to alter and cancel abusive contracts, and to fix rates for the sale of electricity based upon the value of physical assets and reasonable expenses of an undertaking. All electrical undertakings in the province are to operate under licence from the Board, such licences to

remain in force for two years. The duration of all contracts for the distribution of electricity is limited to five years. The Act does not apply to municipal corporations which have established an electricity service, except that such corporations may benefit by the provisions for obtaining revision of an abusive contract.

*National Electricity Syndicate.*—Created by an Act of the 1937 Legislature (1 Geo. VI, c. 24), the Syndicate is intended to develop electricity-generating plants and distributing systems in the province. The Syndicate may establish its undertakings by one or both of two methods: first, by funds advanced by the Provincial Government; secondly, by the issue of stock or debentures of which the Provincial Government is to purchase at least 60 p.c. to give it a controlling interest. The Act authorizes the Syndicate to use the first method to develop generating plants and distributing systems in the electoral districts of Abitibi, Timiskaming, Lake St. John and Roberval, and for this purpose authorizes an advance to the Syndicate of \$10,000,000 which may be subsequently increased by the Legislature. No further alienation or extension of leases previously granted on water-power sites of over 300 h.p. capacity may be granted without consent of the Legislature. The Act also permits the Government to contribute up to 55 p.c. of the cost of an electricity distributing system established by any rural municipality.

*Nova Scotia.*—The Nova Scotia Power Commission was created in 1919 with powers similar to those of the Ontario Commission. It is authorized to "generate, accumulate, transmit, distribute, supply, and utilize electric energy and power in any part of the province of Nova Scotia, and do everything incidental thereto or deemed by the Commission necessary or expedient therefor". Its main operations, however, are undertaken with the approval of the Lieutenant-Governor in Council.

The Commission has already constructed several important hydro-electric developments and is now operating the following systems: *St. Margaret*—sells power by wholesale and retail in Halifax and vicinity; *Mushamush*—sells power by wholesale and retail in Lunenburg Co.; *Sheet Harbour*—sells power by wholesale in Pictou Co., supplies demands of a groundwood pulp-mill at Sheet Harbour, retails in Sheet Harbour and in Musquodoboit and Stewiacke valleys and serves the town of Truro through the Pictou County Power Board; *Mersey System*—supplies demands of pulp and paper mill at Brooklyn, Queens Co.; *Markland System*—supplies town of Liverpool, Caledonia valley and places in vicinity, also power for a woodworking factory and a gold mine; *Tusket System*—sells power by wholesale in Yarmouth, also supplies demands of Cosmos Imperial Mills, Ltd., at Yarmouth; *Roseway System*—sells power wholesale in Shelburne and wholesale and retail in the town of Lockeport and vicinity; *Antigonish System*—supplies Antigonish town, and other communities in Antigonish Co.; *Canseau System*—serves various places on Cape Breton island, including St. Peters and Cheticamp districts which are supplied with diesel-generated energy. The Mabou district is supplied by the Commission with energy purchased in bulk from the Inverness collieries.

The Department of Rural Electrification of the Commission, created during the year 1937, is establishing various distribution districts throughout the province, and thus making service available to communities that were unable to enjoy electric light previous to the passing of the Rural Electrification Act, 1937.

The total installed capacity at Nov. 30, 1937, was 67,362 h.p., and there were about 308 miles of main transmission lines and 276 miles of secondary transmission and distribution lines. The total capital expenditure to Nov. 30, 1937, was \$14,487,803 and the reserves were \$2,253,715.

**New Brunswick.**—The New Brunswick Electric Power Commission, incorporated under provincial legislation, owns and operates two generating stations: an 11,000 h.p. hydro-electric plant at Musquash, twelve miles west of Saint John; and a 15,000 h.p. plant at Grand Lake in the Minto coal area. Transmission lines of 66,000 volts connect the two plants with each other and with the cities of Saint John and Moncton. A 33,000-volt line delivers power from the Grand Lake plant to Fredericton and Marysville. A 66,000-volt line delivers power from the Grand Lake plant to the towns of Newcastle and Chatham.

Power is sold *en bloc* to the cities of Saint John, Moncton, and Fredericton and to the town of Sussex, supplying 17,150 customers in these communities. Power is also distributed directly by the Commission to villages and rural districts, serving directly 10,600 customers. The high-voltage line mileage is 307 and 1,100 miles of distributing lines are in operation. The Commission has under construction rural distribution lines totalling 85 miles in length which will add 250 customers.

The Commission has a plant investment of \$8,022,000 and an annual revenue of \$1,044,000.

**Manitoba.**—The Manitoba Power Commission commenced its operations in 1919 under the authority of the Electrical Power Transmission Act. This Act empowered the Commission to make provision for generating electric energy, to enter into contracts for the purchase of power in bulk from generating agencies, and for its transmission and sale to municipalities, corporations, and individuals. Legislation was passed in 1929 by which the Government undertook to pay interest charges and sinking fund charges on an amount not exceeding 50 p.c. of the capital cost of the construction and erection of equipment required for the generation and transmission of electric energy. In 1931 passage of the Electrical Power Transmission Act reorganized the administration of the Commission by establishing a Board and giving to it additional authority.

The first transmission line was completed in 1920 to serve the city of Portage la Prairie. Power was sold to the city in bulk. With Portage la Prairie as a nucleus, the lines were rapidly extended over the entire southern and western portions of the province, and at the present time the Commission is serving 96 cities, towns, and villages. During this period the Commission took over several municipally-owned plants, notably the plants at Birtle, Brandon, Virden, and Minnedosa. Each of these services has now been tied into the main system and the plants are relegated to standby service. The Commission purchases energy from the municipally-owned plant at Dauphin and distributes it to outlying districts. Power is also purchased from the Winnipeg Electric Company at Selkirk and distributed to the summer resort areas along lake Winnipeg. The Commission has made rapid strides in the promotion of electrical services for farms. The farm rates have been lowered and the cost of building farm extensions has been considerably reduced. In 1937 the Commission made its first incursion into the eastern part of the province, when the towns of Whitemouth and Elma were served.

In 1936 arrangements were completed for the export of a block of power to the Inter-State Power Company at Niche, North Dakota.

The Commission owns and operates a central steam-heating system at Brandon, supplying heat to the business part of the city and to part of the residential section. It also owns and operates the Brandon gas plant.

The object of the Commission is to extend service to any district in which the available revenue is sufficient to justify the necessary capital expenditure. In this

connection, the years 1936 and 1937 brought an unusual number of inquiries for service and it is apparent that succeeding years will see the hydro network growing very rapidly.

**Saskatchewan.**—The Saskatchewan Power Commission was established in 1929 under the Power Commission Act (R.S.S., 1930, c. 30), authorizing the Commission to manufacture, sell, and supply electric energy, to acquire and develop water-power sites, to acquire or construct steam and oil plants, to construct transmission lines, to purchase power, and to enter into contracts with municipalities for the supply of energy. The Commission is also given certain control and regulatory powers *re* the operation of electrical public utilities, and is charged with the responsibility for the administration of the Electrical Inspection and Licensing Act, 1935 (1934-35, c. 64).

The initial operations of the Commission were concerned with acquiring by purchase municipally-owned plants which were improved, enlarged, or supplemented by installations made by the Commission and were operated as individual systems of supply. Examples of such acquisitions made in 1929 were the Saskatoon, Humboldt, and Rosthern plants, while the plant at Shellbrook, the Wynyard-Elfrs-Wadena and the Leader-Prelate-Sceptre systems, served from plants at Wynyard and Leader, were established by the Commission in the same year. In 1930 the municipal plants at North Battleford, Swift Current, Unity, and Lanigan and the privately-owned plant of the Maple Creek Light, Power & Milling Co. at Maple Creek were acquired, and in 1931 the generating plant at Willowbunch was added. The Watrous-Nokomis system, including ten towns and villages, was also purchased from Canadian Utilities, Ltd., and has been connected with the Bulgea system of the Montreal Engineering Co., Ltd.

Transmission lines run from Saskatoon, as the centre of the main system, easterly to Humboldt, northerly to Shellbrook and Duck Lake, westerly to Radisson, and southwesterly to Rosetown. Additional lines link Rosetown with Moose Jaw, and Tisdale (where the Commission has a generating plant) with Nipawin. The systems built in 1929 have been extended. All transmission lines supply towns and villages along their courses. By a line built in 1935, service is given to the town of Battleford from the North Battleford plant. There are now 1,364 miles of transmission lines owned and operated.

The Commission purchases several blocks of power or contracts for the interchange of power from private interests in addition to supplying energy generated at its own plants. The number of consumers served directly in 123 towns and villages is approximately 8,506 and those indirectly served (where the cities operate the distribution systems) number 16,796. The total plant investment as at Dec. 31, 1936, was approximately \$7,711,120.

**British Columbia.**—British Columbia as a province has not, up to the present time, established any commissions for the development and use of water power for the distribution of electric energy. Such power developments as have been undertaken to date have been by private interests or by municipalities. The Water Board, a quasi-judicial body, regulates the rates which are charged by public utility companies.

## CHAPTER XIV.—MANUFACTURES.\*

### Section 1.—The Evolution of Canadian Manufacturing Industries.

**Early Manufactures.**—The type of manufactures established in a community will, in the beginning, be largely determined, more especially where transportation charges are high, by the raw materials available in that community. For example, the first agricultural process to be carried on by Europeans in what is now the Dominion of Canada was probably the raising of a crop of grain at Port Royal, Nova Scotia, in 1605; the first corresponding manufacturing process was the grinding of the grain in the autumn of that year. Other early manufactures were necessarily connected with the satisfaction of the primary needs of human beings for food, clothing and shelter, and with the other primary need—protection. It is therefore significant that, at a census of occupations taken in 1681, a comparatively large number of tailors, shoemakers, masons, carpenters, gunsmiths, and edge-tool makers were enumerated. Again, although the colonial policy of France under the old *régime* aimed at preventing the manufacture, in Canada, of any article which could be imported from the Mother Country, the uncertainties of transportation due to the colonial wars of the period—France and England were at war for 34 of the 74 years between 1689 and 1763—led to a necessary relaxation of restrictions. From the introduction of sheep raising and the manufacture of home-spun woollens arose the important textile industries of to-day, which are able to produce the finest fabrics of cotton, wool or silk.

Under the British *régime*, shipbuilding was conducted on a large scale in Quebec and New Brunswick, the industry reaching its climax of prosperity about 1865 when 105 Quebec-built ships with a total tonnage of 59,333 were registered. Thereafter, iron and steel ships gradually supplanted the wooden vessels, but the forests of Canada have since provided the raw material for the pulp and paper and other important industries.

One of the chief factors in the progress of Canada is the possession of many natural resources favourable to industrial growth. It is upon the country's agricultural resources, forests, minerals, and water powers that Canada's industries are mainly based. The fish and fur resources also make an important contribution of raw materials to the manufacturing industries of the Dominion. Nevertheless, the comparatively small home market, a large part of it in scattered agricultural areas, has always been one of the difficulties of the situation. In spite of this, Canada is now not merely the second largest manufacturing country in the British Empire; her exports to the other Dominions consist largely of manufactured goods and her exports of manufactured and partly manufactured goods to the United States exceed the exports of raw materials. The rate at which this movement is to continue will depend almost entirely upon the further development of the many-sided physical assets of the country. The ore used in the manufacture of iron and steel in Canada, as well as the coal which has supplied the manufacturing industries with power, has, in the main, been imported from the United States, chiefly because the principal

\* Revised by A. Cohen, B.Com., Chief, General Manufactures Branch, Dominion Bureau of Statistics. This Branch publishes individual reports on the vegetable products, textile, and miscellaneous manufacturing industries, also reports on the manufacturing industries generally for Canada and the provinces. For a complete list of publications of this Branch, see Chapter XXIX, Section 1, under "Production".



manufacturing centres of this country in the St. Lawrence and Great Lakes region are fairly conveniently situated with regard to the coal and iron supplies of the United States and far away from the coal and iron supplies of the Maritime Provinces. In recent years coal has been increasingly replaced by electric power. The great bulk of the pig iron used in Canadian manufactures is made in domestic blast furnaces.

#### Subsection 1.—Growth of Manufacturing in Canada since 1870.

**Growth of Canadian Manufactures Prior to the War.**—Until the later '90's, the growth of Canadian manufacturing industries was not particularly rapid, though the great fall in the prices of commodities during the period from 1873 to 1897 was largely responsible for the comparatively slow growth of the values of manufactured commodities from \$221,600,000 in 1870 to \$469,800,000 in 1890. Afterwards there was a change and the prices of commodities commenced to rise, while the industries generally shared in the advantages of the great growing period from 1900 to 1912. The gross product of establishments with five hands or over increased from \$368,700,000 in 1890 to \$1,166,000,000 in 1910 and to \$1,381,600,000 in 1915. The fundamental advantages of the position of Canada, her abundant raw material, her inexhaustible water power, her growing home market in the expanding West, had contributed to this result.

**The Influence of the War.**—The influence of the War upon the manufactures of Canada was profound and far-reaching, tending to promote the diversification of products and the production at home of many commodities which had been imported previously. On account of the practical suspension of the importation of manufactured goods of many kinds from Europe, enterprising Canadian manufacturers were given opportunities of entering upon new lines of manufacture with practical control of the market. There was added to this the reflex effect of the great prosperity of agriculture, produced by the unprecedented prices of war time, with the general result that industry worked at high pressure. Incidentally, factory methods become more specialized and a high degree of administrative and mechanical efficiency was attained, and Canada, partly owing to the absorption of the energies of Europe in the War, assumed a new position as one of the leading manufacturing countries of the world. The inflation of the war period also led to unprecedented figures of values produced.

This great boom in Canadian manufactures reached its height in the summer of 1920. Gross values in 1929, however, reached a higher point than in the post-war boom of 1920, although the prices of manufactured goods had dropped about 41 p.c. in the intervening period.

**Effects of the Depression on the Manufacturing Industries of Canada.**—The downward trend in manufacturing operations which began in the fall of 1929 continued with increasing force to about the middle of 1933. As a result, the output of manufactured products in 1933, valued at \$2,086,847,847, was the lowest annual average reached since 1917. This was a decrease of 48.2 p.c. as compared with the peak year of 1929. In 1935 the value of production amounted to \$2,807,337,381, an increase of 10.8 p.c. over the previous year, but still 30.3 p.c. below the 1929 level. The number of persons employed decreased from 694,434 in 1929 to 493,903 in 1933, a drop of 28.9 p.c. For 1935, however, the number of employees was 582,874, an increase of 6.9 p.c. over the 1934 figures. In spite of this increase, the employees in 1935 still numbered 16.1 p.c. below the 1929 figure. The decline in salary and

wage payments exceeded even that of the number of employees, the drop between 1929 and 1933 being \$347,487,752 or 42.7 p.c. In 1935 the increase in salary and wage payments amounted to \$124,764,814 over 1933 and \$56,732,269 over 1934. Average earnings per employee, which in 1933 amounted to \$943, represented a decrease of 19.5 p.c. from the average earnings of \$1,171 in 1929. For 1935 average earnings were \$1,013. Table 8, p. 417, shows the percentage variation in employment, salary and wage payments and value of production since 1929.

The growth of manufacturing production since 1870 is shown in Table 1 following, while the increasing importance of Canadian manufacturing for the international market may be illustrated by the fact that Canadian exports of manufactured produce increased from less than \$3,000,000 per annum on the average of 1871-75 to \$614,000,000 in the post-war fiscal year ended Mar. 31, 1920. Exports of "fully or chiefly manufactured" products in the fiscal year ended Mar. 31, 1936, amounted in value to \$324,239,689, and exports of "partly manufactured" products to \$260,962,269 (see pp. 568-569 of the 1937 Year Book).

### 1.—Historical Summary of Statistics of Manufactures for the Dominion, 1870-1936.

NOTE.—Prior to 1929, totals for the chemical industries included the value placed on intermediate products used in further processes in the producing works. To this extent, totals are not comparable to those of 1929 and subsequent years. Further, statistics of the non-ferrous metal smelting industries were included in manufactures for the first time in 1923.

| Year.   | Estab-<br>lish-<br>ments. | Capital.      | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials. | Net<br>Value<br>of<br>Products. <sup>1</sup> | Gross<br>Value<br>of<br>Products. |
|---|---------------------------|---------------|-----------------|---------------------------|--------------------------|--|-----------------------------------|
|   | No.                       | \$            | No.             | \$                        | \$                       | \$   | \$                                |
| (All establishments irrespective of the number of employees.) |                           |               |                 |                           |                          |  |                                   |
| 1870.....   | 41,259                    | 77,961,020    | 187,942         | 40,851,009                | 124,907,846              | 96,709,927                                   | 231,617,773                       |
| 1880.....   | 49,722                    | 165,302,623   | 251,935         | 59,429,002                | 179,918,593              | 129,757,475                                  | 309,676,068                       |
| 1890.....   | 76,964                    | 353,213,000   | 369,595         | 100,415,350               | 250,759,292              | 219,088,591                                  | 469,847,886                       |
| (Establishments with five hands and over.)                    |                           |               |                 |                           |                          |  |                                   |
| 1890.....   | 14,065                    | 2             | 272,833         | 79,231,311                | 2                        | 2  | 368,696,723                       |
| 1900.....   | 14,630                    | 446,916,487   | 339,173         | 113,219,350               | 266,577,858              | 214,535,517                                  | 481,053,375                       |
| 1910.....   | 19,218                    | 1,247,583,609 | 515,203         | 241,008,416               | 601,509,018              | 564,466,621                                  | 1,165,975,639                     |
| 1915.....   | 15,953                    | 1,953,705,230 | 2               | 283,311,505               | 791,913,432              | 589,603,792                                  | 1,381,547,225                     |
| (All establishments irrespective of the number of employees.) |                           |               |                 |                           |                          |  |                                   |
| 1917.....   | 22,538                    | 2,696,154,030 | 621,694         | 509,382,027               | 1,541,087,416            | 1,332,180,767                                | 2,873,268,482                     |
| 1918.....   | 22,910                    | 2,926,815,424 | 618,395         | 582,457,488               | 1,829,019,369            | 1,469,723,777                                | 3,289,761,146                     |
| 1919.....   | 22,249                    | 3,095,025,799 | 611,008         | 618,463,139               | 1,786,629,810            | 1,569,870,745                                | 3,290,560,585                     |
| 1920.....   | 23,351                    | 3,271,910,633 | 600,586         | 732,129,535               | 2,935,271,619            | 1,686,978,408                                | 3,772,250,067                     |
| 1921.....   | 22,235                    | 3,190,026,338 | 456,076         | 618,785,137               | 1,366,803,685            | 1,509,143,244                                | 2,676,037,029                     |
| 1922.....   | 22,541                    | 3,244,302,410 | 474,139         | 619,431,319               | 1,285,774,723            | 1,485,434,407                                | 2,482,209,130                     |
| 1923.....   | 22,612                    | 3,280,322,959 | 557,267         | 624,545,051               | 1,470,149,439            | 1,511,025,375                                | 2,761,165,514                     |
| 1924.....   | 22,178                    | 3,538,813,469 | 508,503         | 559,384,015               | 1,435,409,851            | 1,586,689,241                                | 2,695,655,882                     |
| 1925.....   | 22,331                    | 3,893,390,981 | 544,225         | 596,015,171               | 1,587,665,408            | 1,236,501,159                                | 2,948,545,815                     |
| 1926.....   | 22,708                    | 3,981,569,590 | 581,539         | 653,850,933               | 1,728,624,192            | 1,406,574,164                                | 3,221,269,231                     |
| 1927.....   | 22,936                    | 4,337,631,558 | 618,933         | 693,932,228               | 1,758,789,334            | 1,544,296,557                                | 3,394,713,270                     |
| 1928.....   | 23,379                    | 4,788,296,019 | 688,023         | 755,199,372               | 1,919,438,703            | 1,725,338,540                                | 3,738,494,728                     |
| 1929.....   | 23,597                    | 5,085,014,784 | 694,434         | 813,019,812               | 2,031,020,975            | 1,894,910,456                                | 4,029,371,340                     |
| 1930.....   | 21,929                    | 5,285,316,760 | 614,439         | 736,995,760               | 1,696,963,902            | 1,665,631,720                                | 3,428,970,028                     |
| 1931.....   | 21,501                    | 4,961,932,000 | 557,426         | 624,545,051               | 1,625,539,011            | 1,390,489,237                                | 3,628,464,862                     |
| 1932.....   | 24,544                    | 4,741,855,610 | 495,398         | 505,883,373               | 1,956,968,883            | 1,997,354,201                                | 3,126,191,555                     |
| 1933.....   | 25,232                    | 4,689,373,704 | 493,903         | 465,563,090               | 1,939,188,574            | 1,405,439,552                                | 2,086,847,728                     |
| 1934.....   | 25,663                    | 4,703,917,730 | 545,162         | 523,594,638               | 1,236,977,053            | 1,222,043,809                                | 2,533,768,854                     |
| 1935.....   | 25,491                    | 4,696,991,853 | 582,874         | 590,326,904               | 1,420,885,153            | 1,392,179,009                                | 2,607,337,381                     |
| 1936 <sup>2</sup> .....                                       | 24,202                    | 3,271,263,531 | 591,359         | 612,071,431               | 1,624,213,996            | 1,239,592,672                                | 3,002,403,814                     |

<sup>1</sup> In accordance with a resolution passed by the Conference of British Commonwealth Statisticians, 1935, the net value of production is now computed by subtracting the cost of fuel and electricity as well as the cost of materials from the gross value of the products. Prior to this, only the cost of materials was deducted. The figures for 1924 and later years have been revised in accordance with this resolution. The revision could not be carried back further as statistics for cost of electricity are not available for years prior to 1924.

<sup>2</sup> Not reported. <sup>3</sup> Central electric stations, and dyeing, cleaning and laundry work ceased to be regarded as "manufacturing" industries for 1936 and adjustments for earlier years will be made in the near future. This affects the comparability of the figures for 1936.

## 2.—Summary Statistics of Manufactures, by Provinces, for Representative Years, 1917-36.

NOTE.—See headnote, Table 1, p. 405.

| Year and Province.          | Estab-lish-ments. | Capital.      | Em-ploy-ees. | Salaries and Wages. | Cost of Materials. | Net Value of Products. <sup>1</sup> | Gross Value of Products. |
|-----------------------------|-------------------|---------------|--------------|---------------------|--------------------|-------------------------------------|--------------------------|
|                             | No.               | \$            | No.          | \$                  | \$                 | \$                                  | \$                       |
| <b>1917.</b>                |                   |               |              |                     |                    |                                     |                          |
| Canada.....                 | 22,838            | 2,696,154,033 | 621,694      | 509,332,927         | 1,541,087,416      | 1,332,180,767                       | 2,873,268,183            |
| P.E. Island.....            | 418               | 2,225,482     | 1,588        | 688,149             | 3,088,718          | 1,816,986                           | 4,905,704                |
| Nova Scotia.....            | 1,387             | 128,052,239   | 25,814       | 19,177,657          | 102,456,085        | 58,751,437                          | 181,207,522              |
| New Brunswick.....          | 987               | 64,010,777    | 20,301       | 13,192,740          | 32,466,048         | 27,996,000                          | 60,462,048               |
| Quebec.....                 | 7,193             | 793,889,489   | 191,969      | 143,291,802         | 855,486,685        | 396,839,787                         | 782,026,472              |
| Ontario.....                | 9,471             | 1,302,675,630 | 306,270      | 264,442,393         | 795,095,511        | 685,063,845                         | 1,480,159,356            |
| Manitoba.....               | 816               | 95,530,452    | 20,665       | 17,381,806          | 69,884,850         | 45,062,533                          | 114,947,383              |
| Saskatchewan.....           | 633               | 30,096,623    | 6,846        | 5,906,150           | 22,093,445         | 15,829,428                          | 37,622,873               |
| Alberta.....                | 720               | 60,552,814    | 10,191       | 9,323,221           | 42,725,021         | 26,105,121                          | 68,830,142               |
| Br. Columbia.....           | 1,292             | 215,681,355   | 38,689       | 35,864,308          | 87,764,650         | 74,978,844                          | 162,743,494              |
| Yukon.....                  | 11                | 3,739,169     | 71           | 118,801             | 26,403             | 336,786                             | 363,189                  |
| <b>1920.</b>                |                   |               |              |                     |                    |                                     |                          |
| Canada.....                 | 23,351            | 3,371,946,653 | 609,586      | 732,120,588         | 2,085,271,619      | 1,686,978,468                       | 3,772,250,057            |
| P.E. Island.....            | 384               | 2,734,719     | 1,327        | 888,121             | 4,164,223          | 2,221,740                           | 6,388,969                |
| Nova Scotia.....            | 1,388             | 141,649,850   | 23,834       | 26,127,781          | 85,724,755         | 63,274,708                          | 148,999,493              |
| New Brunswick.....          | 928               | 105,671,688   | 19,241       | 19,605,048          | 60,812,641         | 46,910,631                          | 107,723,272              |
| Quebec.....                 | 7,677             | 1,028,236,105 | 186,806      | 205,829,153         | 552,558,520        | 517,693,125                         | 1,077,261,645            |
| Ontario.....                | 9,473             | 1,608,079,888 | 300,794      | 369,846,193         | 1,071,843,374      | 822,570,783                         | 1,894,414,157            |
| Manitoba.....               | 773               | 112,896,616   | 24,331       | 33,357,872          | 92,739,271         | 65,492,687                          | 158,221,908              |
| Saskatchewan.....           | 639               | 31,737,162    | 7,182        | 10,249,892          | 34,894,105         | 24,655,529                          | 59,549,634               |
| Alberta.....                | 722               | 61,063,132    | 11,337       | 15,903,600          | 56,139,646         | 32,466,428                          | 88,066,074               |
| Br. Columbia and Yukon..... | 1,367             | 210,991,887   | 35,132       | 50,413,414          | 125,405,084        | 111,692,821                         | 237,097,905              |
| <b>1922.</b>                |                   |               |              |                     |                    |                                     |                          |
| Canada.....                 | 22,541            | 3,244,302,410 | 474,430      | 510,431,313         | 1,283,774,723      | 1,198,434,407                       | 2,482,209,130            |
| P.E. Island.....            | 352               | 2,946,329     | 1,127        | 628,540             | 2,621,443          | 1,787,569                           | 4,409,012                |
| Nova Scotia.....            | 1,103             | 106,047,616   | 14,280       | 12,192,652          | 38,003,108         | 29,985,794                          | 67,988,962               |
| New Brunswick.....          | 897               | 82,230,805    | 14,351       | 12,201,014          | 38,069,376         | 26,821,281                          | 60,880,657               |
| Quebec.....                 | 7,410             | 970,019,442   | 147,962      | 144,368,667         | 337,752,977        | 370,276,067                         | 708,029,044              |
| Ontario.....                | 9,388             | 1,696,738,906 | 243,297      | 275,559,006         | 678,746,675        | 617,732,828                         | 1,299,499,503            |
| Manitoba.....               | 781               | 88,779,517    | 14,188       | 18,274,012          | 54,630,008         | 41,326,416                          | 95,957,004               |
| Saskatchewan.....           | 614               | 31,101,612    | 4,196        | 5,618,174           | 22,450,081         | 16,557,481                          | 38,307,532               |
| Alberta.....                | 672               | 55,514,624    | 7,461        | 9,493,543           | 30,306,395         | 22,813,091                          | 58,119,486               |
| Br. Columbia and Yukon..... | 1,264             | 210,323,379   | 27,572       | 32,095,704          | 81,203,970         | 71,313,880                          | 152,517,850              |
| <b>1926.</b>                |                   |               |              |                     |                    |                                     |                          |
| Canada.....                 | 22,703            | 2,981,569,590 | 581,539      | 653,850,933         | 1,728,624,192      | 1,466,574,164 <sup>1</sup>          | 3,221,269,231            |
| P.E. Island.....            | 299               | 2,850,010     | 2,261        | 690,403             | 2,637,960          | 1,309,170 <sup>1</sup>              | 4,069,051                |
| Nova Scotia.....            | 1,163             | 118,050,902   | 16,782       | 13,014,707          | 39,137,265         | 30,751,779 <sup>1</sup>             | 72,556,768               |
| New Brunswick.....          | 910               | 95,661,154    | 17,674       | 14,600,734          | 44,074,961         | 27,453,289 <sup>1</sup>             | 73,661,794               |
| Quebec.....                 | 7,464             | 1,216,975,958 | 180,669      | 189,336,145         | 442,927,613        | 429,957,781 <sup>1</sup>            | 899,644,124              |
| Ontario.....                | 9,457             | 1,985,165,921 | 280,353      | 335,164,230         | 908,044,673        | 711,978,793 <sup>1</sup>            | 1,661,379,326            |
| Manitoba.....               | 797               | 127,445,924   | 21,201       | 26,973,850          | 75,000,529         | 54,466,177 <sup>1</sup>             | 132,129,088              |
| Saskatchewan.....           | 674               | 33,943,060    | 4,904        | 6,397,545           | 29,128,025         | 16,120,107 <sup>1</sup>             | 47,093,432               |
| Alberta.....                | 749               | 72,468,286    | 10,233       | 12,808,554          | 49,826,532         | 31,404,783 <sup>1</sup>             | 83,059,494               |
| Br. Columbia and Yukon..... | 1,405             | 329,008,375   | 47,462       | 54,865,756          | 137,846,624        | 102,942,785 <sup>1</sup>            | 247,278,254              |
| <b>1929.</b>                |                   |               |              |                     |                    |                                     |                          |
| Canada.....                 | 23,597            | 5,952,041,754 | 694,434      | 813,019,812         | 2,032,020,975      | 1,894,910,456 <sup>1</sup>          | 4,029,371,310            |
| P.E. Island.....            | 276               | 3,489,934     | 2,133        | 751,448             | 2,364,883          | 1,516,710 <sup>1</sup>              | 4,338,277                |
| Nova Scotia.....            | 1,195             | 135,662,325   | 20,966       | 17,925,190          | 50,781,055         | 39,140,013 <sup>1</sup>             | 98,567,448               |
| New Brunswick.....          | 860               | 117,065,970   | 18,517       | 15,712,322          | 39,845,223         | 29,051,944 <sup>1</sup>             | 70,825,554               |
| Quebec.....                 | 7,156             | 1,673,011,042 | 213,467      | 233,803,672         | 537,838,611        | 583,498,000 <sup>1</sup>            | 1,155,201,014            |
| Ontario.....                | 9,910             | 2,418,340,450 | 339,859      | 421,789,723         | 1,057,407,249      | 975,407,258 <sup>1</sup>            | 2,080,391,430            |
| Manitoba.....               | 923               | 173,152,948   | 26,318       | 34,158,583          | 88,055,264         | 71,933,922 <sup>1</sup>             | 193,806,010              |
| Saskatchewan.....           | 761               | 58,877,124    | 8,047        | 10,438,759          | 51,143,205         | 26,749,229 <sup>1</sup>             | 80,435,537               |
| Alberta.....                | 817               | 107,448,628   | 13,748       | 16,460,038          | 62,700,608         | 41,989,415 <sup>1</sup>             | 106,824,476              |
| Br. Columbia and Yukon..... | 1,699             | 394,866,933   | 51,379       | 61,980,107          | 141,395,377        | 125,484,869 <sup>1</sup>            | 273,681,585              |
| <b>1933.</b>                |                   |               |              |                     |                    |                                     |                          |
| Canada.....                 | 25,232            | 4,089,373,704 | 493,963      | 465,562,690         | 969,188,574        | 1,048,259,450 <sup>1</sup>          | 2,086,847,847            |
| P.E. Island.....            | 263               | 2,395,085     | 1,065        | 507,980             | 1,592,301          | 1,384,072 <sup>1</sup>              | 3,077,817                |
| Nova Scotia.....            | 1,378             | 123,645,061   | 12,200       | 10,701,189          | 25,402,432         | 24,356,279 <sup>1</sup>             | 52,001,937               |
| New Brunswick.....          | 800               | 122,130,873   | 11,064       | 9,877,690           | 20,471,624         | 21,453,127 <sup>1</sup>             | 44,826,347               |
| Quebec.....                 | 8,070             | 1,648,872,387 | 163,571      | 141,358,231         | 292,806,955        | 336,407,773 <sup>1</sup>            | 855,000,534              |
| Ontario.....                | 10,158            | 2,857,072,413 | 335,810      | 294,391,900         | 465,106,584        | 510,578,550 <sup>1</sup>            | 1,005,233,502            |
| Manitoba.....               | 1,073             | 179,720,120   | 20,749       | 20,699,449          | 44,697,266         | 44,608,801 <sup>1</sup>             | 91,408,441               |
| Saskatchewan.....           | 818               | 64,950,579    | 5,014        | 5,871,180           | 19,164,919         | 15,251,760 <sup>1</sup>             | 36,199,608               |
| Alberta.....                | 975               | 98,345,221    | 10,944       | 10,896,132          | 29,505,155         | 23,838,049 <sup>1</sup>             | 54,642,706               |
| Br. Columbia and Yukon..... | 1,697             | 361,250,855   | 30,890       | 31,108,339          | 70,297,698         | 70,381,040 <sup>1</sup>             | 145,490,955              |

<sup>1</sup> See footnote 1 to Table 1, p. 405.

## 2.—Summary Statistics of Manufactures, by Provinces, for Representative Years, 1917-36—concluded.

| Year and Province.          | Estab-lish-ments. | Capital.      | Em-ployees. | Salaries and Wages. | Cost of Materials. | Net Value of Products. <sup>1</sup> | Gross Value of Products. |
|-----------------------------|-------------------|---------------|-------------|---------------------|--------------------|-------------------------------------|--------------------------|
| No.                         | \$                | No.           | \$          | \$                  | \$                 | \$                                  | \$                       |
| 1934.                       |                   |               |             |                     |                    |                                     |                          |
| Canada.....                 | 25,663            | 4,763,917,730 | 545,162     | 533,594,635         | 1,230,977,053      | 1,232,943,899 <sup>1</sup>          | 2,533,758,934            |
| P. E. Island.....           | 273               | 3,517,088     | 1,060       | 600,210             | 1,321,421          | 1,281,040 <sup>1</sup>              | 3,302,556                |
| Nova Scotia.....            | 1,356             | 119,064,747   | 15,041      | 12,401,325          | 28,497,123         | 28,406,017 <sup>1</sup>             | 60,844,551               |
| New Brunswick.....          | 847               | 123,476,314   | 13,522      | 11,367,625          | 24,637,918         | 20,357,257 <sup>1</sup>             | 54,057,847               |
| Quebec.....                 | 8,168             | 1,678,486,302 | 181,546     | 161,197,908         | 357,751,720        | 380,453,666 <sup>1</sup>            | 766,498,000              |
| Ontario.....                | 10,322            | 2,063,721,375 | 259,621     | 270,834,102         | 610,485,807        | 611,303,863 <sup>1</sup>            | 1,255,325,701            |
| Manitoba.....               | 1,077             | 183,937,703   | 21,723      | 22,020,990          | 54,719,469         | 48,484,665 <sup>1</sup>             | 105,388,000              |
| Saskatchewan.....           | 845               | 65,975,159    | 5,986       | 6,063,983           | 24,280,080         | 16,238,427 <sup>1</sup>             | 42,201,723               |
| Alberta.....                | 968               | 98,418,699    | 11,565      | 11,775,745          | 40,381,587         | 27,576,875 <sup>1</sup>             | 69,389,118               |
| Br. Columbia and Yukon..... | 1,777             | 367,320,343   | 35,065      | 37,302,741          | 88,292,928         | 82,841,159 <sup>1</sup>             | 170,721,398              |
| 1935.                       |                   |               |             |                     |                    |                                     |                          |
| Canada.....                 | 25,491            | 4,698,991,853 | 538,874     | 590,326,964         | 1,220,885,153      | 1,302,179,099 <sup>1</sup>          | 2,807,337,331            |
| P. E. Island.....           | 261               | 3,508,905     | 1,108       | 618,406             | 1,894,409          | 1,302,405 <sup>1</sup>              | 3,356,006                |
| Nova Scotia.....            | 1,350             | 118,999,064   | 16,060      | 14,042,674          | 31,647,800         | 30,905,130 <sup>1</sup>             | 67,109,172               |
| New Brunswick.....          | 872               | 115,635,568   | 13,937      | 11,080,095          | 25,551,371         | 27,043,366 <sup>1</sup>             | 56,344,190               |
| Quebec.....                 | 7,942             | 1,664,198,107 | 139,071     | 173,354,535         | 398,866,702        | 393,805,021 <sup>1</sup>            | 821,020,796              |
| Ontario.....                | 10,266            | 2,064,198,151 | 281,438     | 303,807,297         | 718,570,516        | 608,918,734 <sup>1</sup>            | 1,422,592,474            |
| Manitoba.....               | 1,099             | 198,822,314   | 23,239      | 24,701,066          | 67,929,760         | 47,349,314 <sup>1</sup>             | 117,734,292              |
| Saskatchewan.....           | 880               | 66,271,171    | 6,355       | 6,524,411           | 28,046,921         | 16,976,149 <sup>1</sup>             | 46,821,300               |
| Alberta.....                | 1,002             | 96,322,781    | 12,087      | 12,504,449          | 42,831,636         | 28,932,217 <sup>1</sup>             | 73,282,607               |
| Br. Columbia and Yukon..... | 1,819             | 371,030,792   | 38,979      | 43,094,011          | 105,845,738        | 86,196,023 <sup>1</sup>             | 198,106,542              |
| 1936. <sup>2</sup>          |                   |               |             |                     |                    |                                     |                          |
| Canada.....                 | 24,202            | 3,271,263,531 | 594,359     | 612,071,424         | 1,624,213,996      | 1,280,592,672 <sup>1</sup>          | 3,002,403,514            |
| P. E. Island.....           | 233               | 2,394,532     | 996         | 553,008             | 2,200,028          | 1,055,201 <sup>1</sup>              | 3,311,223                |
| Nova Scotia.....            | 1,158             | 87,888,353    | 15,944      | 13,784,556          | 36,077,990         | 27,788,510 <sup>1</sup>             | 67,784,970               |
| New Brunswick.....          | 784               | 81,468,098    | 13,710      | 11,855,051          | 29,292,851         | 23,751,487 <sup>1</sup>             | 56,225,201               |
| Quebec.....                 | 7,969             | 1,029,546,039 | 194,876     | 182,319,454         | 455,027,759        | 377,514,998 <sup>1</sup>            | 863,687,389              |
| Ontario.....                | 9,753             | 1,588,484,130 | 288,992     | 314,872,843         | 822,884,081        | 636,470,617 <sup>1</sup>            | 1,547,551,081            |
| Manitoba.....               | 1,011             | 118,515,841   | 22,507      | 24,490,299          | 74,374,078         | 45,015,577 <sup>1</sup>             | 122,050,562              |
| Saskatchewan.....           | 604               | 42,055,557    | 5,782       | 6,013,378           | 25,311,152         | 15,185,500 <sup>1</sup>             | 41,694,510               |
| Alberta.....                | 905               | 70,224,578    | 11,756      | 12,328,471          | 47,684,020         | 25,000,136 <sup>1</sup>             | 74,052,010               |
| Br. Columbia and Yukon..... | 1,695             | 250,686,403   | 39,790      | 45,864,374          | 121,362,118        | 87,780,346 <sup>1</sup>             | 216,136,078              |

<sup>1</sup> See footnote 1 to Table 1, p. 405. <sup>2</sup> Central electric stations, and dyeing, cleaning and laundry work ceased to be regarded as "manufacturing" industries for 1936 and adjustments for earlier years will be made in the near future. This affects the comparability of the figures for 1936.

## 3.—Summary Statistics of Manufactures, by Industrial Groups, for Representative Years, 1917-36.

NOTE.—See headnote, Table 1, p. 405.

| Year and Industrial Group.                       | Estab-lish-ments. | Capital.      | Em-ployees. | Salaries and Wages. | Cost of Materials. | Net Value of Products. <sup>1</sup> | Gross Value of Products. |
|--|-------------------|---------------|-------------|---------------------|--------------------|-------------------------------------|--------------------------|
| No.  | \$                | No.           | \$          | \$                  | \$                 | \$                                  | \$                       |
| 1917.  |                   |               |             |                     |                    |                                     |                          |
| Totals.....                                      | 22,838            | 2,696,151,030 | 621,694,509 | 332,027,151         | 1,511,687,416      | 1,332,159,767                       | 2,873,265,183            |
| Vegetable products.....                          | 3,816             | 274,722,765   | 61,288      | 44,780,329          | 365,483,923        | 181,072,143                         | 546,556,066              |
| Animal products.....                             | 5,480             | 207,165,245   | 46,994      | 35,753,133          | 326,302,039        | 124,108,990                         | 444,406,029              |
| Textile products.....                            | 1,300             | 196,823,197   | 82,639      | 51,139,060          | 132,479,763        | 115,739,090                         | 248,218,089              |
| Wood and paper.....                              | 7,265             | 537,731,225   | 153,751     | 115,137,384         | 149,927,432        | 248,986,564                         | 308,914,046              |
| Iron and its products.....                       | 1,404             | 634,642,989   | 142,416     | 140,334,255         | 357,688,333        | 334,616,810                         | 692,305,143              |
| Non-ferrous metals.....                          | 296               | 60,421,911    | 18,220      | 15,895,590          | 46,446,669         | 41,039,351                          | 87,454,820               |
| Non-metallic minerals.....                       | 1,410             | 150,328,144   | 22,284      | 19,360,952          | 38,724,530         | 60,802,754                          | 99,527,284               |
| Chemicals and allied products <sup>2</sup> ..... | 539               | 175,836,690   | 56,153      | 51,505,434          | 99,068,092         | 131,381,995                         | 230,450,087              |
| Miscellaneous industries.....                    | 606               | 93,477,696    | 29,102      | 27,644,825          | 30,967,785         | 49,901,216                          | 80,899,001               |
| Central electric stations.....                   | 660               | 356,004,168   | 8,847       | 7,777,715           | Nil                | 44,536,848                          | 44,536,848               |

<sup>1</sup> See footnote 1 to Table 1, p. 405. <sup>2</sup> These figures do not correspond with those published in the Annual Report on Chemicals and Allied Products; the latter are revised and are directly comparable with those given here for 1929-36. See also headnote to Table 1, p. 405.

### 3.—Summary Statistics of Manufactures, by Industrial Groups, for Representative Years, 1917-36—continued.

| Year and Industrial Group.                       | Estab-lish-ments. | Capital.             | Em-ployees.    | Salaries and Wages. | Cost of Materials.   | Net Value of Products. <sup>1</sup> | Gross Value of Products. |
|--|-------------------|----------------------|----------------|---------------------|----------------------|-------------------------------------|--------------------------|
| No.  | \$                | No.                  | \$             | \$                  | \$                   | \$                                  | \$                       |
| <b>1920.</b>                                     |                   |                      |                |                     |                      |                                     |                          |
| <b>Totals.....</b>                               | <b>23,351</b>     | <b>3,371,940,653</b> | <b>609,596</b> | <b>732,120,583</b>  | <b>2,655,371,649</b> | <b>1,686,978,468</b>                | <b>3,772,350,057</b>     |
| Vegetable products.....                          | 4,219             | 304,123,233          | 72,380         | 75,696,530          | 532,481,195          | 234,317,627                         | 704,801,722              |
| Animal products.....                             | 4,823             | 221,792,457          | 48,687         | 54,291,606          | 400,406,354          | 152,095,130                         | 553,491,484              |
| Textile products.....                            | 1,304             | 392,788,185          | 87,730         | 54,433,609          | 250,233,300          | 173,741,035                         | 429,974,355              |
| Wood and paper.....                              | 7,897             | 772,086,812          | 143,731        | 171,610,460         | 308,282,332          | 415,478,277                         | 724,066,508              |
| Iron and its products.....                       | 1,690             | 642,904,322          | 146,204        | 205,414,599         | 349,642,666          | 365,473,097                         | 715,115,763              |
| Non-ferrous metals.....                          | 324               | 109,382,033          | 23,162         | 27,895,343          | 48,434,120           | 52,847,178                          | 101,281,298              |
| Non-metallic minerals.....                       | 1,176             | 223,541,735          | 27,361         | 34,406,423          | 74,200,407           | 85,216,316                          | 159,416,723              |
| Chemicals and allied products <sup>2</sup> ..... | 464               | 122,123,730          | 17,653         | 22,193,421          | 62,644,608           | 65,183,212                          | 127,827,820              |
| Miscellaneous industries.....                    | 665               | 134,954,504          | 31,985         | 41,552,885          | 52,853,767           | 75,715,577                          | 128,569,344              |
| Central electric stations.....                   | 819               | 448,273,642          | 10,693         | 14,626,709          | Nil                  | 65,705,060                          | 65,705,000               |
| <b>1922.</b>                                     |                   |                      |                |                     |                      |                                     |                          |
| <b>Totals.....</b>                               | <b>22,511</b>     | <b>3,344,302,410</b> | <b>474,436</b> | <b>510,431,312</b>  | <b>1,283,774,723</b> | <b>1,108,431,407</b>                | <b>2,482,309,130</b>     |
| Vegetable products.....                          | 4,355             | 371,361,682          | 63,217         | 64,424,922          | 330,580,062          | 204,946,749                         | 537,535,801              |
| Animal products.....                             | 5,118             | 201,829,414          | 49,598         | 49,933,679          | 364,073,631          | 107,473,832                         | 371,552,013              |
| Textile products.....                            | 1,709             | 268,065,383          | 88,048         | 76,224,361          | 153,066,593          | 155,402,510                         | 308,560,103              |
| Wood and paper.....                              | 6,983             | 761,183,396          | 118,462        | 132,054,914         | 206,682,820          | 235,131,962                         | 489,514,782              |
| Iron and its products.....                       | 1,040             | 526,109,953          | 74,538         | 90,605,157          | 168,282,265          | 163,302,638                         | 331,584,903              |
| Non-ferrous metals.....                          | 325               | 102,208,275          | 18,222         | 21,451,629          | 30,861,805           | 39,998,798                          | 70,855,693               |
| Non-metallic minerals.....                       | 1,095             | 238,691,461          | 22,468         | 27,204,642          | 63,377,262           | 77,911,159                          | 141,288,421              |
| Chemicals and allied products <sup>2</sup> ..... | 469               | 118,025,433          | 14,082         | 16,770,503          | 47,039,926           | 48,904,259                          | 95,944,185               |
| Miscellaneous industries.....                    | 542               | 88,753,756           | 15,064         | 17,236,255          | 19,706,279           | 32,948,080                          | 52,744,363               |
| Central electric stations.....                   | 905               | 508,068,752          | 10,634         | 14,495,250          | Nil                  | 82,328,866                          | 82,328,866               |
| <b>1926.</b>                                     |                   |                      |                |                     |                      |                                     |                          |
| <b>Totals.....</b>                               | <b>22,708</b>     | <b>3,981,569,590</b> | <b>581,539</b> | <b>653,850,433</b>  | <b>1,728,624,192</b> | <b>1,406,574,164</b>                | <b>3,221,360,231</b>     |
| Vegetable products.....                          | 4,629             | 440,259,094          | 73,908         | 75,349,589          | 414,316,414          | 234,326,172                         | 658,320,710              |
| Animal products.....                             | 4,896             | 223,938,659          | 67,843         | 60,203,986          | 339,114,267          | 118,071,730                         | 462,034,925              |
| Textile products.....                            | 1,638             | 317,275,429          | 100,672        | 83,506,752          | 202,832,333          | 153,208,397                         | 306,334,644              |
| Wood and paper.....                              | 6,751             | 920,589,278          | 134,187        | 160,916,720         | 201,001,976          | 314,685,753                         | 600,064,661              |
| Iron and its products.....                       | 1,142             | 597,982,098          | 103,510        | 137,640,065         | 258,020,373          | 234,326,351                         | 505,188,849              |
| Non-ferrous metals.....                          | 403               | 202,503,426          | 30,095         | 39,201,147          | 90,613,004           | 84,093,201                          | 183,501,723              |
| Non-metallic minerals.....                       | 1,240             | 261,734,184          | 26,045         | 31,986,949          | 82,203,319           | 77,491,488                          | 174,156,923              |
| Chemicals and allied products <sup>2</sup> ..... | 550               | 133,407,891          | 14,345         | 18,309,377          | 60,124,582           | 58,718,891                          | 122,539,526              |
| Miscellaneous industries.....                    | 436               | 109,669,565          | 17,628         | 21,703,342          | 30,307,874           | 38,956,740                          | 70,143,531               |
| Central electric stations.....                   | 1,057             | 756,220,066          | 13,406         | 19,943,000          | Nil                  | 86,796,351                          | 88,933,733               |
| <b>1929.</b>                                     |                   |                      |                |                     |                      |                                     |                          |
| <b>Totals.....</b>                               | <b>23,597</b>     | <b>5,083,014,754</b> | <b>694,424</b> | <b>813,049,842</b>  | <b>2,632,020,375</b> | <b>1,894,910,456</b>                | <b>4,029,371,340</b>     |
| Vegetable products.....                          | 5,005             | 559,064,835          | 83,858         | 93,299,665          | 427,019,724          | 234,152,957                         | 771,457,665              |
| Animal products.....                             | 4,490             | 243,835,065          | 67,670         | 62,081,423          | 345,351,882          | 127,929,887                         | 477,701,855              |
| Textile products.....                            | 1,891             | 383,153,797          | 118,620        | 105,994,237         | 220,304,252          | 200,123,522                         | 436,247,687              |
| Wood and paper.....                              | 7,406             | 1,152,075,234        | 164,800        | 192,235,445         | 314,203,269          | 381,913,807                         | 728,819,740              |
| Iron and its products.....                       | 1,160             | 754,989,105          | 132,281        | 186,928,700         | 384,925,660          | 336,378,090                         | 735,012,980              |
| Non-ferrous metals.....                          | 408               | 298,721,106          | 39,867         | 54,501,806          | 124,900,632          | 150,415,215                         | 283,545,666              |
| Non-metallic minerals.....                       | 1,188             | 329,448,844          | 31,431         | 41,511,846          | 117,149,130          | 106,601,828                         | 242,023,518              |
| Chemicals and allied products <sup>2</sup> ..... | 554               | 155,886,912          | 16,694         | 22,639,449          | 55,184,337           | 78,785,911                          | 138,545,221              |
| Miscellaneous industries.....                    | 463               | 130,118,324          | 21,049         | 20,123,447          | 42,982,071           | 58,740,708                          | 103,073,662              |
| Central electric stations.....                   | 1,024             | 1,055,731,632        | 16,164         | 24,831,821          | Nil                  | 119,869,051                         | 122,883,446              |

<sup>1</sup> See footnote 1 to Table 1, p. 405.<sup>2</sup> These figures do not correspond with those published in the Annual Report on Chemicals and Allied Products; the latter are revised and are directly comparable with those given here for 1929-36. See also headnote to Table 1, p. 405.

## 3.—Summary Statistics of Manufactures, by Industrial Groups, for Representative Years, 1917-36—concluded.

| Year and Industrial Group.        | Estab-<br>lish-<br>ments. | Capital.             | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials. | Net<br>Value of<br>Products. <sup>1</sup> | Gross<br>Value of<br>Products. |
|-----------------------------------|---------------------------|----------------------|-----------------|---------------------------|--------------------------|---|--------------------------------|
|                                   | No.                       | \$                   | No.             | \$                        | \$                       | \$  | \$                             |
| <b>1933.</b>                      |                           |                      |                 |                           |                          |   |                                |
| <b>Totals.</b>                    | <b>25,232</b>             | <b>1,689,373,794</b> | <b>493,903</b>  | <b>465,562,090</b>        | <b>969,188,574</b>       | <b>1,045,259,450</b>                      | <b>2,086,847,847</b>           |
| Vegetable products.               | 5,542                     | 500,533,005          | 73,095          | 66,137,487                | 224,243,088              | 189,134,032                               | 420,314,872                    |
| Animal products.                  | 4,496                     | 201,993,642          | 53,111          | 46,453,188                | 179,429,948              | 87,629,444                                | 271,068,210                    |
| Textile products.                 | 2,151                     | 322,312,247          | 106,235         | 80,068,813                | 144,584,507              | 143,990,608                               | 294,715,248                    |
| Wood and paper.                   | 7,917                     | 893,309,680          | 105,471         | 102,500,377               | 134,979,700              | 184,723,320                               | 342,155,077                    |
| Iron and its pro-<br>ducts.       | 1,291                     | 580,760,379          | 70,947          | 69,482,730                | 97,705,853               | 105,667,313                               | 211,961,908                    |
| Non-ferrous metals.               | 478                       | 266,266,443          | 25,273          | 28,099,026                | 71,900,608               | 88,427,984                                | 164,765,604                    |
| Non-metallic min-<br>erals.       | 1,144                     | 307,996,274          | 19,296          | 21,680,263                | 71,713,986               | 60,503,993                                | 141,791,451                    |
| Chemicals and<br>allied products. | 696                       | 153,900,930          | 15,397          | 18,738,620                | 34,271,654               | 55,394,281                                | 92,820,761                     |
| Miscellaneous<br>industries.      | 476                       | 66,769,049           | 10,361          | 10,342,700                | 10,269,030               | 17,124,800                                | 28,187,635                     |
| Central electric<br>stations.     | 1,041                     | 1,380,532,055        | 14,717          | 21,431,877                | Nil                      | 115,663,653                               | 117,532,081                    |
| <b>1934.</b>                      |                           |                      |                 |                           |                          |   |                                |
| <b>Totals.</b>                    | <b>25,663</b>             | <b>1,703,917,739</b> | <b>545,162</b>  | <b>533,594,635</b>        | <b>1,230,977,653</b>     | <b>1,222,943,899</b>                      | <b>2,533,768,954</b>           |
| Vegetable products.               | 5,656                     | 506,714,365          | 77,464          | 71,389,376                | 260,491,348              | 210,899,307                               | 480,314,618                    |
| Animal products.                  | 4,504                     | 210,260,801          | 57,199          | 50,191,368                | 226,262,467              | 94,998,810                                | 325,703,686                    |
| Textile products.                 | 2,284                     | 328,362,816          | 115,695         | 90,796,001                | 174,632,997              | 160,723,491                               | 342,054,633                    |
| Wood and paper.                   | 8,075                     | 894,508,679          | 116,691         | 117,960,909               | 155,389,258              | 223,240,884                               | 404,435,045                    |
| Iron and its pro-<br>ducts.       | 1,255                     | 547,892,157          | 81,782          | 88,924,108                | 154,055,504              | 143,360,504                               | 308,303,352                    |
| Non-ferrous metals.               | 488                       | 263,488,479          | 30,177          | 35,097,986                | 119,713,328              | 112,155,602                               | 237,233,670                    |
| Non-metallic min-<br>erals.       | 1,164                     | 307,338,479          | 21,959          | 24,905,554                | 84,508,106               | 71,337,352                                | 166,782,852                    |
| Chemicals and<br>allied products. | 730                       | 156,788,418          | 17,130          | 20,919,740                | 41,998,776               | 62,216,030                                | 108,652,039                    |
| Miscellaneous<br>industries.      | 508                       | 67,716,376           | 12,091          | 12,179,382                | 14,025,309               | 21,521,517                                | 36,414,643                     |
| Central electric<br>stations.     | 1,043                     | 1,430,852,166        | 14,974          | 21,829,491                | Nil                      | 122,461,993                               | 124,463,613                    |
| <b>1935.</b>                      |                           |                      |                 |                           |                          |   |                                |
| <b>Totals.</b>                    | <b>25,491</b>             | <b>1,698,891,883</b> | <b>532,874</b>  | <b>599,326,904</b>        | <b>1,420,885,153</b>     | <b>1,302,179,099</b>                      | <b>2,867,337,331</b>           |
| Vegetable products.               | 5,492                     | 496,256,485          | 70,285          | 74,859,447                | 283,631,045              | 217,631,454                               | 509,822,142                    |
| Animal products.                  | 4,402                     | 211,672,608          | 60,124          | 54,035,134                | 217,375,247              | 99,633,595                                | 361,943,587                    |
| Textile products.                 | 3,275                     | 329,197,254          | 120,699         | 96,574,964                | 183,920,438              | 166,228,533                               | 357,106,277                    |
| Wood and paper.                   | 8,180                     | 873,756,949          | 128,724         | 128,166,524               | 175,040,681              | 239,387,227                               | 441,160,937                    |
| Iron and its pro-<br>ducts.       | 1,249                     | 555,144,467          | 95,426          | 110,402,366               | 203,981,458              | 173,634,965                               | 390,228,929                    |
| Non-ferrous metals.               | 505                       | 261,625,967          | 33,613          | 40,315,477                | 174,900,971              | 107,898,470                               | 288,523,250                    |
| Non-metallic min-<br>erals.       | 1,188                     | 300,455,725          | 23,242          | 27,425,224                | 88,909,870               | 75,846,415                                | 176,184,717                    |
| Chemicals and<br>allied products. | 734                       | 147,472,534          | 18,933          | 23,715,305                | 48,310,876               | 66,001,200                                | 118,574,228                    |
| Miscellaneous<br>industries.      | 509                       | 63,588,796           | 12,270          | 12,282,480                | 14,691,067               | 21,437,115                                | 36,978,953                     |
| Central electric<br>stations.     | 1,041                     | 1,459,821,168        | 15,458          | 22,519,993                | Nil                      | 135,060,035                               | 137,114,911                    |
| <b>1936.<sup>2</sup></b>          |                           |                      |                 |                           |                          |   |                                |
| <b>Totals.</b>                    | <b>24,262</b>             | <b>3,271,263,531</b> | <b>594,359</b>  | <b>613,071,334</b>        | <b>1,624,213,996</b>     | <b>1,389,592,672</b>                      | <b>3,062,463,514</b>           |
| Vegetable products.               | 5,824                     | 524,164,493          | 87,071          | 84,597,061                | 333,562,706              | 254,135,013                               | 597,461,635                    |
| Animal products.                  | 4,433                     | 222,299,844          | 63,099          | 57,829,523                | 233,265,546              | 109,823,848                               | 397,955,241                    |
| Textile products.                 | 1,879                     | 316,273,003          | 114,966         | 96,016,170                | 197,386,583              | 162,677,274                               | 366,285,008                    |
| Wood and paper.                   | 8,178                     | 874,592,781          | 132,374         | 141,301,540               | 205,978,921              | 261,020,034                               | 497,103,663                    |
| Iron and its pro-<br>ducts.       | 1,317                     | 600,424,322          | 107,203         | 126,537,657               | 227,886,781              | 211,572,641                               | 453,385,553                    |
| Non-ferrous metals.               | 512                       | 266,322,074          | 36,935          | 45,091,191                | 212,783,636              | 132,423,707                               | 351,164,860                    |
| Non-metallic min-<br>erals.       | 803                       | 282,596,535          | 21,974          | 26,402,410                | 96,534,218               | 68,707,776                                | 177,771,597                    |
| Chemicals and<br>allied products. | 745                       | 147,664,533          | 19,910          | 25,267,267                | 52,482,872               | 69,854,217                                | 126,874,791                    |
| Miscellaneous<br>industries.      | 514                       | 36,925,946           | 10,317          | 10,267,909                | 14,382,572               | 19,378,164                                | 34,401,463                     |
| Central electric<br>stations.     | 2                         | 2                    | 2               | 2                         | 2                        | 2   | 2                              |

<sup>1</sup> See footnote 1 to Table 1, p. 405.<sup>2</sup> Central electric stations, and dyeing, cleaning and laundry work ceased to be regarded as "manufacturing" industries for 1936 and adjustments for earlier years will be made in the near future. This affects the comparability of the totals for 1936.

**Summary Statistics of Manufactures.**—In Table 4 will be found an analysis of the most important statistics of manufactures for the period 1917 to 1936, brought together in order that the tendencies in Canadian manufacturing industries may be traced as clearly as possible through this latest period of their development. In analysing statistics of production and materials used, it should be borne in mind that, due to the inflation of values during the War and immediate post-war periods and the drop in prices of commodities during the depressions of 1921 and 1930, the figures for these years become largely incomparable. One very important figure, however, which shows the trend of development clearly and uninterruptedly, is concerned with the use of power. In the analysis on p. 411 the aim is to show the position of power as a factor in general manufacturing production. Therefore, the power installation of central electric stations has been excluded. The total horsepower employed increased from 1,664,578 in 1917 to 4,346,775 in 1935, an increase of 162 p.c. in eighteen years. In the same period horse-power per wage-earner increased from 3.04 to 9.29, indicating the rapidly increasing utilization of electric power in manufacturing production. The significant feature is the increase in both the absolute figures of power employed and the average per wage-earner during the depression years as compared with 1929, although the large numbers of persons finding employment during 1934 and 1935 have reduced averages for those years compared with 1933. Another interesting comparison is the downward trends of value added by manufacture per employee and of average salaries and wages paid since 1929. However, compared with 1917 the figures for average salaries and wages in 1935 represent an increase of 23.7 p.c., while the increase in the value added by manufacture per employee is only 4.3 p.c., and wholesale prices of commodities declined 36.9 p.c. in the same period.

In using the figures for 1936 it is important to note that central electric stations, and dyeing, cleaning and laundry work are no longer regarded as 'manufacturing' industries. This change affects all the data for 1936 in Table 4, but especially the figures for capital. The apparent reduction of approximately 30 p.c. in capital is more than accounted for by the omission of these industries.

**Value of Products.**—The gross value of manufactured products in 1935 was reported as \$2,807,337,381; the cost of materials, including fuel and electricity, was \$1,505,158,282, leaving \$1,302,179,099 as the value added by manufacture. As the finished products of one branch of manufacture are constantly used as materials in other branches in the ascending scale of modern industry, it follows that they are counted over and over again, swelling in this manner the total gross value of products. The total value of manufactured products, strictly defined, would include: (1) the value of all raw materials obtained from the extractive and primary production industries which have entered into the manufacturing output; and (2) the entire value added to these raw materials by manufacturing processes from the time they first entered any factory up to the close of the census year. This total value would be very much greater than the \$1,302,179,099 shown as having been added by manufacture, but not so great as the \$2,807,337,381 shown as the gross value of production. The value of products for 1936 is affected adversely in comparison with earlier years due to the fact that central electric stations are no longer regarded as a manufacturing industry.

4.—Summary Statistics of Manufactures for Representative Years, 1917-36.

| Item.                              | 1917.     | 1920.     | 1926. <sup>1</sup> | 1929. <sup>1</sup> | 1930. <sup>1</sup> | 1933.     | 1934.     | 1935.     | 1936. <sup>2</sup> |
|------------------------------------|-----------|-----------|--------------------|--------------------|--------------------|-----------|-----------|-----------|--------------------|
| Establishments.....No.             | 22,538    | 23,351    | 22,708             | 23,597             | 24,020             | 25,292    | 25,663    | 25,401    | 24,202             |
| Capital.....\$                     | 2,696,154 | 3,371,940 | 3,951,569          | 5,038,014          | 5,203,316          | 4,689,373 | 4,703,917 | 4,686,924 | 3,271,263          |
| Averages, per establishment...\$   | 118,468   | 144,402   | 175,383            | 213,744            | 216,714            | 184,784   | 183,720   | 181,333   | 135,151            |
| Averages, per employee.....\$      | 4,577     | 6,404     | 7,997              | 8,503              | 8,435              | 7,671     | 7,629     | 7,602     | 6,877              |
| Totals, wages.....\$               | 621,694   | 609,586   | 581,539            | 694,434            | 644,438            | 495,093   | 516,162   | 552,874   | 594,359            |
| Averages, per establishment...\$   | 27.2      | 26.1      | 25.6               | 29.4               | 26.8               | 19.6      | 21.2      | 22.9      | 24.6               |
| Totals, salaries and wages.....\$  | 509,332   | 732,120   | 683,550            | 813,049            | 736,082            | 465,562   | 533,694   | 590,326   | 612,071            |
| Averages, per establishment...\$   | 22,304    | 31,333    | 28,714             | 34,466             | 30,445             | 18,461    | 20,792    | 23,138    | 25,280             |
| Averages, per employee.....\$      | 319       | 1,201     | 1,124              | 1,071              | 1,033              | 643       | 720       | 759       | 819                |
| Employees on salaries.....No.      | 68,726    | 58,346    | 51,433             | 96,417             | 92,432             | 84,494    | 99,732    | 105,579   | 104,417            |
| Averages, per establishment...\$   | 89,257    | 148,207   | 132,705            | 155,747            | 134,239            | 151,860   | 160,986   | 173,020   | 173,198            |
| Averages, salaries.....\$          | 1,299     | 1,750     | 1,587              | 1,954              | 1,932              | 1,407     | 1,614     | 1,689     | 1,659              |
| Averages, per wages.....\$         | 552,968   | 526,571   | 499,745            | 507,827            | 551,406            | 309,400   | 445,432   | 477,295   | 489,942            |
| Wages.....\$                       | 420,094   | 583,853   | 501,144            | 624,302            | 551,553            | 313,701   | 372,607   | 417,306   | 438,873            |
| Averages, wages.....\$             | 1,541,087 | 1,109,760 | 1,093,638          | 1,203,739          | 1,092,902          | 609,188   | 727,759   | 806,099   | 896,377            |
| Cost of materials.....\$           | 2,085,289 | 2,592,301 | 2,736,193          | 2,032,030          | 1,668,983          | 909,188   | 1,230,977 | 1,420,855 | 1,624,213          |
| Values added in manufacture.....\$ | 3,479     | 3,431     | 9,972              | 2,956              | 2,657              | 1,962     | 2,258     | 2,438     | 2,319              |
| Averages, per establishment...\$   | 158,332   | 149,725   | 140,745            | 127,896            | 111,111            | 77,777    | 87,777    | 87,777    | 87,777             |
| Averages, per employee.....\$      | 3,772,260 | 3,221,360 | 3,221,360          | 3,221,360          | 3,221,360          | 3,221,360 | 3,221,360 | 3,221,360 | 3,221,360          |
| Gross values of products.....\$    | 130,811   | 161,938   | 141,830            | 171,735            | 145,735            | 93,735    | 107,735   | 117,735   | 129,735            |
| Averages, per establishment...\$   | 1,662,775 | 2,068,715 | 3,134,248          | 3,867,979          | 4,051,744          | 4,146,131 | 4,244,896 | 4,346,775 | 4,501,775          |
| Averages, per employee.....\$      | 75        | 92        | 145                | 171                | 176                | 172       | 172       | 178       | 178                |
| Averages, per wage-earner...\$     | 3.04      | 3.97      | 6.37               | 6.58               | 7.49               | 10.61     | 9.72      | 9.29      | 9.29               |

<sup>1</sup> A change in the method of computing the number of wage-earners in the years 1925 to 1930, inclusive, increased the number somewhat over that which the method otherwise used would have given. There was, therefore, a proportionate reduction in the averages for 1925-30 per employee and wage-earner, as compared with what these averages would have been under the other method. In 1931, however, the method in force prior to 1925 was adopted. The figures for 1931 and later years are, therefore, comparable with those for 1924 and earlier years for the figures for prior years in the near future.

<sup>2</sup> See footnote 1 to Table 1, p. 405.

<sup>3</sup> These figures for power in this table represent the installation in manufactures exclusive of central electric stations; statistics of central electric stations are also excluded from the number of establishments and of wage-earners in working out the averages.

<sup>4</sup> Not available at time of going to press.



### Subsection 2.—Volume and Consumption of Manufactured Products.

**Volume of Manufacturing Production in Recent Years.\***—An investigation of the greatest importance, especially in a period when values are rapidly changing, is that of the volume of manufacturing production as distinguished from its value. Since real income is ultimately measured in goods and services, the growth of the volume of manufactures becomes a matter of great significance. The important thing to know is whether consumers are getting more goods and services, not whether they are expending more dollars and cents.

The ever-increasing use of factory products is one of the most striking features of modern life. The process has continued until at the present time fresh fruits and vegetables are about the only articles which reach the consumer without, in some way, being first processed at a factory. Fresh milk is pasteurized and bottled in a dairy plant, fresh fish and meats are dressed principally in packing plants and the home preserving of fruits and vegetables is being superseded by more efficient processes in the canning factory. Thus even the foods we eat, as well as the clothing we wear, our household conveniences, and our instruments of production and transportation, are increasingly products of factories. The growing volume of factory production, therefore, measures approximately the total flow of the economic goods upon which the rising standards of modern life so vitally depend.

The statistics of manufactures afford a variety of measures of the growth of factory production. The number of wage-earners, capital invested, value of production and value added by manufacture all show to some extent the direction and volume of growth. The value of production and that added by manufacture, being reported in dollars, are influenced by price changes as well as the quantity of goods produced, and, as already explained, have become misleading under the violent price changes of the past fifteen years. The capital invested is also affected by changing money values, and the relation between capital invested and value of goods produced varies greatly as between one industry and another. Neither is the number of wage-earners employed likely to be a representative measure of changes in the volume of production. The progressively increasing use of machinery and the rise in the power installed per wage-earner (see Table 4) tend to increase the employee's output. Thus, while the reported wage-earners in 1935 had increased 6.8 p.c. from the number in 1923, the volume of production is estimated to have increased 30.2 p.c. in the same period.

The central electric stations were excluded from general manufactures in making the index, since this industry is unique in that the product is energy in contrast to physical commodities; it is also unique in the magnitude of capital investment and the smallness of its labour force in proportion to net production. The index is based on the quantities of manufactured products reported and includes 71.1 p.c. of the total value of the production in 1926, exclusive of central electric stations. It is weighted according to the values added by manufacture in 1926. A complete description of the manner in which the index is constructed will be found in the publication referred to in the footnote to this page.

The physical volume of manufacturing production, exclusive of central electric stations, increased 50.2 p.c. from 1923 to 1929. When it is recalled that the population of Canada is estimated to have increased only 11.3 p.c. during the same period, the growth of manufacturing production is indeed remarkable. Of this advance, the part resulting from an increase in the domestic demand due to growth

\* For a much more detailed and comprehensive treatment of this subject, see the study "The Quantity of Manufacturing Production in Canada 1923-29" by A. Cohen, B. Com., Chief, General Manufactures Branch, Dominion Bureau of Statistics.

of population would be about 11.3 p.c. Exports of partly and fully manufactured goods increased from \$591,830,000 in the fiscal year ended Mar. 31, 1924, to \$690,904,000 in the fiscal year 1930, the increase in exports representing about 3.6 p.c. of the 1923 production. The remainder of the increase in production by 1929, or a margin equal to roughly 35 p.c. of the volume of manufactures of 1923, was, therefore, apparently absorbed by increases in capital equipment and by the rise in the standard of living of the population of Canada.

**5.—Indexes of the Volume of Manufacturing Production, According to Component Material and Purpose Classifications, 1923, 1929, and 1932-35.**  
(1926=100.)

| Classification and Group.                      | 1923.       | 1929.        | 1932.       | 1933.       | 1934.       | 1935.        |
|--|-------------|--------------|-------------|-------------|-------------|--------------|
| <b>Component Material Classification—</b>      |             |              |             |             |             |              |
| Vegetable products.....                        | 78.3        | 121.6        | 92.5        | 90.9        | 103.3       | 108.6        |
| Animal products.....                           | 81.4        | 95.4         | 83.2        | 86.4        | 93.9        | 99.1         |
| Textiles and textile products.....             | 84.9        | 113.6        | 98.5        | 107.1       | 118.1       | 124.8        |
| Wood and paper products.....                   | 83.4        | 127.5        | 87.2        | 89.2        | 104.5       | 115.0        |
| Iron and its products.....                     | 82.2        | 129.7        | 53.4        | 50.5        | 68.1        | 84.5         |
| Non-ferrous metals.....                        | 72.9        | 138.7        | 100.4       | 98.3        | 120.8       | 133.5        |
| Non-metallic minerals.....                     | 88.9        | 145.0        | 84.4        | 77.8        | 91.9        | 99.1         |
| Chemicals and allied products.....             | 84.0        | 120.4        | 93.7        | 99.2        | 112.5       | 125.8        |
| Miscellaneous industries.....                  | 80.1        | 110.0        | 66.1        | 58.9        | 70.8        | 76.6         |
| <b>Totals, All Industries<sup>1</sup>.....</b> | <b>81.8</b> | <b>123.9</b> | <b>81.9</b> | <b>82.0</b> | <b>96.5</b> | <b>106.5</b> |
| <b>Purpose Classification—</b>                 |             |              |             |             |             |              |
| Food.....                                      | 84.7        | 102.8        | 92.7        | 91.0        | 101.0       | 104.1        |
| Clothing.....                                  | 82.9        | 114.8        | 93.2        | 87.9        | 105.1       | 110.5        |
| Drink and tobacco.....                         | 76.0        | 140.5        | 101.7       | 99.2        | 110.3       | 125.2        |
| Personal utilities.....                        | 85.4        | 101.9        | 70.6        | 71.0        | 79.8        | 87.9         |
| House furnishings.....                         | 78.9        | 137.7        | 89.9        | 87.3        | 100.5       | 109.2        |
| Books and stationery.....                      | 93.1        | 131.5        | 127.6       | 122.0       | 138.7       | 154.9        |
| Producers materials.....                       | 84.9        | 124.7        | 75.0        | 77.9        | 94.7        | 105.6        |
| Industrial equipment.....                      | 70.3        | 129.5        | 75.6        | 70.2        | 87.5        | 100.5        |
| Vehicles and vessels.....                      | 71.4        | 131.6        | 82.4        | 63.3        | 70.7        | 83.5         |
| Miscellaneous.....                             | 85.0        | 125.1        | 99.4        | 113.3       | 137.5       | 148.9        |

<sup>1</sup> Exclusive of central electric stations.

As may be seen from Table 5, all groups in the component material classification reported declines in the volume of production during the depression. In comparing the low point of the depression, *viz.*, 1933, with 1929 it is found that the iron and steel group suffered the greatest contraction in production with a decrease of 61.1 p.c. This was followed by the miscellaneous industries group, with a decrease of 46.5 p.c., non-metallic mineral products 46.3 p.c., wood and paper products 30.0 p.c., non-ferrous metal products 29.1 p.c., vegetable products 25.2 p.c., chemicals and allied products 17.6 p.c., animal products 9.4 p.c., and textiles and textile products 5.7 p.c.

In 1934 and 1935 there was a material improvement, the index of production for all industries rising from 82.0 in 1933 to 106.5 in 1935. In spite of this improvement only three groups—textiles, animal products, and chemicals—are above the 1929 level of production. The output of textiles in 1935 was about 10 p.c. greater than in 1929. This is an all-time record for this group of industries.

In analysing the changes in the volume of production, on a purpose classification basis, some interesting facts are revealed. In comparing 1933 with 1929 it is found that the food group reported a decrease of 10.6 p.c., while that of clothing decreased 14.7 p.c. The output of vehicles and vessels, which is largely made up of the automobile and rubber-tire industries, recorded a decrease of 59.5 p.c.—this is the greatest decrease of any group. Producers materials and industrial equipment declined 37.5 p.c. and 45.8 p.c., respectively, due to the general decline in industrial activity. House furnishings dropped 36.6 p.c., personal utilities 30.3 p.c., drink and tobacco 31.5 p.c., and books and stationery 7.2 p.c. The decrease

in the personal utilities group needs some explanation. The production of musical instruments, which is included in this group, has been decreasing steadily during the past few years, the output of pianos, phonographs and phonograph records becoming smaller and smaller. The main product of the musical instruments industry, namely, the radio, is now produced in the electrical apparatus industry. This industry, however, is credited to the industrial equipment group, as by far the largest part of its output consists of industrial equipment.

All groups shared in the improvement which occurred in 1934 and 1935. Only one of the major groups, *viz.*, "food", exceeded its 1929 production figure. The only other exceptions were two minor groups, "books and stationery" and "miscellaneous".

The index of the physical volume of production dropped from 122.9 in 1929 to 82.0 in 1933 and then rose to 106.5 in 1935, making a net decrease of 13.3 p.c. This decrease is significant when compared with a decrease of 31.3 p.c. in the net value of production and 20.1 p.c. in the number of wage-earners employed.

**6.—Indexes of the Volume of Manufacturing Production for the Groups of the Purpose Classification, 1923, 1929, and 1932-35.**  
(1926=100.)

| Group and Class.                       | 1923.       | 1929.        | 1932.        | 1933.        | 1934.        | 1935.        |
|--|-------------|--------------|--------------|--------------|--------------|--------------|
| <b>Food.....</b>                       | <b>84.7</b> | <b>102.8</b> | <b>92.7</b>  | <b>91.9</b>  | <b>101.0</b> | <b>104.1</b> |
| Breadstuffs.....                       | 90.8        | 110.6        | 97.4         | 94.5         | 103.0        | 103.8        |
| Fish.....                              | 74.1        | 77.9         | 57.2         | 59.2         | 70.0         | 66.7         |
| Fruit and vegetable preparations.....  | 59.3        | 127.5        | 109.4        | 110.2        | 137.3        | 137.0        |
| Meats.....                             | 90.1        | 97.3         | 90.9         | 84.4         | 106.5        | 107.0        |
| Milk products.....                     | 87.4        | 96.7         | 100.8        | 98.5         | 106.5        | 113.3        |
| Oils and fats.....                     | 111.5       | 87.8         | 101.9        | 89.9         | 101.9        | 119.9        |
| Sugar.....                             | 74.3        | 83.0         | 84.1         | 77.4         | 78.7         | 86.1         |
| Infusions.....                         | 97.0        | 112.9        | 114.8        | 124.2        | 136.3        | 142.6        |
| Miscellaneous.....                     | 82.9        | 120.2        | 111.6        | 118.7        | 132.2        | 150.4        |
| <b>Clothing.....</b>                   | <b>82.9</b> | <b>114.8</b> | <b>93.2</b>  | <b>97.9</b>  | <b>105.1</b> | <b>110.5</b> |
| Boots and shoes.....                   | 79.8        | 110.0        | 83.0         | 87.4         | 92.5         | 97.2         |
| Fur goods.....                         | 48.3        | 114.6        | 89.8         | 95.1         | 97.6         | 101.2        |
| Garments and personal furnishings..... | 90.6        | 113.3        | 87.8         | 96.5         | 107.9        | 115.7        |
| Gloves and mittens.....                | 93.9        | 133.3        | 97.7         | 121.1        | 145.6        | 145.9        |
| Hats and caps.....                     | 67.1        | 109.2        | 87.0         | 85.1         | 100.0        | 107.9        |
| Knitted goods.....                     | 93.9        | 111.4        | 103.2        | 107.5        | 113.4        | 116.4        |
| Waistcoats.....                        | 73.4        | 143.8        | 107.9        | 105.2        | 112.1        | 140.5        |
| Miscellaneous.....                     | 97.7        | 138.0        | 128.1        | 120.4        | 118.4        | 122.4        |
| <b>Drink and Tobacco.....</b>          | <b>76.0</b> | <b>140.5</b> | <b>101.7</b> | <b>96.2</b>  | <b>110.3</b> | <b>125.2</b> |
| Beverages, alcoholic.....              | 69.2        | 148.0        | 94.0         | 84.6         | 101.0        | 119.7        |
| Beverages, non-alcoholic.....          | 86.0        | 146.8        | 137.4        | 131.5        | 143.4        | 155.9        |
| Tobacco.....                           | 81.3        | 133.3        | 108.8        | 113.4        | 121.9        | 129.3        |
| <b>Personal Utilities.....</b>         | <b>85.4</b> | <b>101.9</b> | <b>70.6</b>  | <b>71.0</b>  | <b>79.8</b>  | <b>87.9</b>  |
| Jewellery and timepieces.....          | 92.4        | 104.2        | 78.3         | 79.7         | 89.1         | 103.1        |
| Recreational supplies.....             | 93.0        | 85.0         | 28.0         | 23.2         | 32.5         | 35.6         |
| Personal utilities.....                | 78.6        | 111.7        | 104.1        | 109.3        | 116.6        | 127.0        |
| <b>House Furnishings.....</b>          | <b>78.9</b> | <b>137.7</b> | <b>89.9</b>  | <b>87.3</b>  | <b>100.5</b> | <b>109.2</b> |
| <b>Books and Stationery.....</b>       | <b>93.1</b> | <b>131.5</b> | <b>127.6</b> | <b>122.0</b> | <b>138.7</b> | <b>154.9</b> |
| <b>Producers Materials.....</b>        | <b>84.9</b> | <b>124.7</b> | <b>75.0</b>  | <b>77.9</b>  | <b>94.7</b>  | <b>105.6</b> |
| Farm materials (fertilizers).....      | 78.3        | 130.8        | 331.1        | 505.8        | 609.1        | 675.3        |
| Manufacturers materials.....           | 82.9        | 124.4        | 82.9         | 91.0         | 111.2        | 123.7        |
| Building materials.....                | 88.0        | 123.1        | 54.1         | 47.3         | 57.7         | 65.4         |
| General materials.....                 | 95.4        | 133.4        | 79.2         | 70.8         | 88.0         | 96.0         |
| <b>Industrial Equipment.....</b>       | <b>76.3</b> | <b>129.5</b> | <b>75.6</b>  | <b>70.2</b>  | <b>87.5</b>  | <b>100.5</b> |
| Farming equipment.....                 | 66.8        | 88.9         | 25.4         | 29.6         | 41.2         | 59.0         |
| Manufacturing equipment.....           | 86.2        | 131.4        | 65.0         | 55.2         | 79.5         | 101.8        |
| Trading equipment.....                 | 83.3        | 116.4        | 120.2        | 120.5        | 133.6        | 137.3        |
| Service equipment.....                 | 96.3        | 107.0        | 103.7        | 103.1        | 113.3        | 127.6        |
| Light, heat and power equipment.....   | 66.2        | 149.0        | 100.3        | 87.7         | 106.7        | 122.8        |
| General equipment.....                 | 84.3        | 130.0        | 68.2         | 66.4         | 85.1         | 93.8         |
| <b>Vehicles and Vessels.....</b>       | <b>71.4</b> | <b>131.6</b> | <b>52.4</b>  | <b>53.3</b>  | <b>70.7</b>  | <b>83.5</b>  |
| <b>Miscellaneous.....</b>              | <b>85.0</b> | <b>125.1</b> | <b>99.4</b>  | <b>113.3</b> | <b>137.5</b> | <b>148.6</b> |
| <b>Totals, All Manufactures.....</b>   | <b>81.8</b> | <b>122.9</b> | <b>81.9</b>  | <b>82.0</b>  | <b>96.5</b>  | <b>106.5</b> |

<sup>1</sup> Exclusive of central electric stations.

The construction of this new index of the volume of manufacturing production has superseded, for 1923 and later years, the index published in 1931 and previous years. The former index, which made no pretence to the reliability of the new one, was made by dividing the gross value of manufactures by the index number of the prices of manufactured goods. The central electric stations were included in the former index, but are excluded from the new one. However, the former index covered the period 1917 to 1923 not covered in the new one and, since this earlier period was one of wide fluctuations in money values, the following index numbers are given for the whole period since 1917, using the earlier method, but excluding central electric stations, for the years 1917 to 1922, and the new index, transposed to the 1917 base, from 1923 to 1935.

## INDEXES OF THE VOLUME OF MANUFACTURING PRODUCTION, 1917-35.

(1917=100.)

|                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|
| 1917..... 100.0 | 1922..... 96.0  | 1927..... 136.5 | 1932..... 105.0 |
| 1918..... 102.0 | 1923..... 104.8 | 1928..... 148.8 | 1933..... 105.1 |
| 1919..... 98.1  | 1924..... 102.9 | 1929..... 157.5 | 1934..... 123.7 |
| 1920..... 95.0  | 1925..... 112.7 | 1930..... 142.8 | 1935..... 130.4 |
| 1921..... 86.1  | 1926..... 128.1 | 1931..... 124.1 |                 |

**Consumption of Manufactured Products.**—One of the beneficial results of placing the classification of external trade and of production upon a common basis is exhibited in Table 7, where the value of commodities made available for consumption in Canada is derived from the statistics of the two important fields. For example, the value of all manufactured commodities made available in a period approximately corresponding to 1935 was \$2,607,807,756, a figure obtained by adding to the value of manufactured products in 1935 the value of the imports of manufactured and partly manufactured goods during the fiscal year ended Mar. 31, 1936, and deducting the value of the corresponding exports for the same period. In this table more accurate statistics could be presented were it possible to exclude from the gross value of manufactured products the duplications involved when the products of one manufacturing establishment become the materials worked upon in another. Vegetable, iron, textile, animal, and wood and paper products were, in that order, the leading groups in the value of finished goods made available for consumption. The large amount of manufactured vegetable products made available for consumption was due to the large domestic production, as the exports and imports were about equal, while manufactures of textiles and iron and steel products, in addition to a large production, showed an excess of imports over exports of \$51,000,000 and \$56,000,000, respectively. Wood and paper, animal, and non-ferrous metal products were manufactured in Canada in greater quantities than required for home consumption, providing export balances in these groups.

In 1929, the order of the groups by the values available for consumption was iron, vegetable, textile, wood and paper, and animal products. In that year the value of iron products available for consumption represented 22.4 p.c. of the total for all products; in 1935 iron products represented only 17.1 p.c. of the total. Since 1929 the consumption of vegetable, animal, chemical, and textile products has been much better maintained than that of iron, non-metallic mineral, and wood products.

### 7.—Consumption of Manufactured Products, by Groups, 1935, with Totals for 1922-35.

NOTE.—Statistics of manufacturing production are for the calendar year. Imports and exports of manufactured and partly manufactured goods are for the fiscal years ended Mar. 31 of the following years.

| Group of Industries.               | Value of Products Manufactured. | Manufactured and Partly Manufactured Goods. |                            | Value of Manufactured Products Available for Consumption. <sup>1</sup> |
|------------------------------------|---------------------------------|---|----------------------------|--|
|                                    |                                 | Value of Not Imports.                       | Value of Domestic Exports. |  |
|                                    | \$                              | \$  | \$                         | \$   |
| Totals, 1922.....                  | 2,482,209,130                   | 574,551,323                                 | 515,173,415                | 2,541,587,038  |
| Totals, 1923.....                  | 2,781,165,514                   | 639,343,645                                 | 591,829,306                | 2,828,679,853  |
| Totals, 1924.....                  | 2,695,653,532                   | 576,031,243                                 | 601,598,479                | 2,679,496,346  |
| Totals, 1925.....                  | 2,948,545,315                   | 671,462,940                                 | 693,325,245                | 2,924,683,010  |
| Totals, 1926.....                  | 3,221,269,231                   | 767,022,008                                 | 673,709,266                | 3,314,581,973  |
| Totals, 1927.....                  | 3,394,713,270                   | 825,147,919                                 | 648,178,000                | 3,571,633,189  |
| Totals, 1928.....                  | 3,738,484,728                   | 954,468,018                                 | 702,314,797                | 3,990,687,949  |
| Totals, 1929.....                  | 4,029,371,310                   | 939,236,894                                 | 690,904,225                | 4,277,664,069  |
| Totals, 1930.....                  | 3,428,970,628                   | 675,919,565                                 | 491,561,750                | 3,610,328,443  |
| Totals, 1931.....                  | 2,698,461,892                   | 423,610,230                                 | 350,166,608                | 2,771,905,485  |
| Totals, 1932.....                  | 2,128,194,555                   | 281,928,559                                 | 268,423,169                | 2,138,790,244  |
| Totals, 1933.....                  | 2,086,847,847                   | 298,135,224                                 | 367,873,223                | 2,017,109,848  |
| Totals, 1934.....                  | 2,553,758,984                   | 357,885,394                                 | 425,113,451                | 2,469,053,897  |
| Vegetable products.....            | 509,822,142                     | 65,736,359                                  | 68,382,814                 | 507,175,687  |
| Animal products.....               | 351,643,587                     | 13,405,715                                  | 56,506,222                 | 308,638,080  |
| Textiles and textile products..... | 357,106,277                     | 60,040,183                                  | 8,827,930                  | 408,518,530  |
| Wood and paper products.....       | 441,160,387                     | 22,540,966                                  | 170,111,002                | 293,569,451  |
| Iron and its products.....         | 390,228,929                     | 108,958,126                                 | 52,365,206                 | 440,828,849  |
| Non-ferrous metal products.....    | 288,523,250                     | 25,000,702                                  | 192,080,355                | 121,497,027  |
| Non-metallic mineral products..... | 176,184,717                     | 30,687,568                                  | 7,096,581                  | 198,845,690  |
| Chemicals and allied products..... | 118,574,228                     | 29,505,079                                  | 16,018,391                 | 132,060,016  |
| Miscellaneous industries.....      | 36,978,953                      | 29,602,288                                  | 9,952,710                  | 56,628,531   |
| Central electric stations.....     | 137,114,911                     | 75,292                                      | 3,160,817                  | 134,029,386  |
| Totals, 1935.....                  | 2,807,337,381                   | 355,672,333                                 | 585,261,058                | 2,607,807,756  |

<sup>1</sup> For 1928 to 1935 foreign products imported and later re-exported are eliminated from the value of products available for consumption, but for 1927 and previous years this was impossible, since foreign exports for these years had never been analysed as raw materials or partly or fully manufactured goods. Therefore in this table the value of manufactured products made available for consumption, for the years 1922 to 1927, inclusive, is an overstatement by the amount of the foreign exports of manufactured goods in each year, probably varying from about \$11,000,000 in 1922 to \$18,000,000 in 1927.

### Section 2.—Production of Industrial Groups and Individual Industries.

The manufacture of products of vegetable origin comprises the most important group of industries, the output in 1935 being valued at \$509,822,142 or 18·2 p.c. of the total value of production. Wood and paper products with an output valued at \$441,160,387 or 15·7 p.c. of the total ranked second, followed by iron and its products with \$390,228,929, textiles \$357,106,277, animal products \$351,643,587, non-ferrous metal products \$288,523,250, non-metallic mineral products \$176,184,717, central electric stations \$137,114,911, chemical products \$118,574,228, and miscellaneous industries \$36,978,953.

In employment, the importance of the groups is different. Under this category, the wood and paper group with 123,724 or 21·2 p.c. of the total employees occupies the premier position. Textiles with 120,699 or 20·7 p.c. of the total comes second, followed by iron and its products with 95,426, vegetable products 79,285, animal products 60,124, non-ferrous metal products 33,613, non-metallic mineral products 23,342, chemical products 18,933, central electric stations 15,458, and miscellaneous industries 12,270.

**Analysis by Groups of Industries.**—In spite of the improvement which took place during 1934 and 1935, the number of employees in 1935 is still 16·1 p.c. below the number employed in 1929, with a still greater decrease of 27·4 p.c. in salaries

and wages paid. This reflects the lower level of wages prevailing in 1935 as compared with 1929. Due to the drop in the wholesale prices of manufactured products, the value of production dropped 30.3 p.c. between 1929 and 1935 while the physical volume decreased only 13.3 p.c. The iron and its products group was hit hardest by the depression. In gross value of products, the output of these industries was reduced by 71.3 p.c. in 1933 compared with 1929. In salaries and wages paid the reduction was 62.8 p.c. and in employees 46.4 p.c. The wood and paper group and those of non-ferrous metals and animal products suffered severely, but not by any means as much as in the first group named. The records of central electric stations, the chemical and textile industries were particularly good; the first named showed the least reduction of all groups in gross value of production, but the chemicals showed the smallest reductions in both employees and salaries and wages paid. The miscellaneous group of industries showed a reduction of 72.7 p.c. in gross value of products, 50.8 p.c. in the number of employees and 64.5 p.c. in the salaries and wages paid. This group was not as severely affected as these figures would indicate, the bridge-building industry having been transferred from this group to that of iron and its products in 1930. On the other hand, the iron and its products group suffered more severely than is implied by the figures.

From the low year of the depression, so far as the manufacturing industries are concerned, viz., 1933, while there has been marked improvement in all groups, iron and non-ferrous metal products have shown the greatest improvement in gross value of products and quite naturally central electric stations have shown the least. In number of employees and salaries and wages paid, iron and its products is also the leader. It is of interest to note that in the section of the table below, which compares 1935 data with those for 1929, as regards employees engaged, two industrial groups—chemicals and textiles—actually show increases. The miscellaneous group of industries and iron and its products have made the least headway towards the 1929 level, although the latter group has made a very marked advance from the low point of the depression.

#### 8.—Percentage Variation in Employment, Salaries and Wages, and Gross Value of Products in the Manufacturing Industries in the Seven-Year Period 1929-35.

NOTE.—The highest pre-depression year was 1929, while the lowest depression year was 1933.

| Group of Industries.                    | 1933<br>Compared with<br>1929. |                           |                                     | 1935<br>Compared with<br>1929. |                           |                                     | 1935<br>Compared with<br>1933. |                           |                                     |
|---|--------------------------------|---------------------------|-------------------------------------|--------------------------------|---------------------------|-------------------------------------|--------------------------------|---------------------------|-------------------------------------|
|   | Em-<br>ployees.                | Salaries<br>and<br>Wages. | Gross<br>Value of<br>Pro-<br>ducts. | Em-<br>ployees.                | Salaries<br>and<br>Wages. | Gross<br>Value of<br>Pro-<br>ducts. | Em-<br>ployees.                | Salaries<br>and<br>Wages. | Gross<br>Value of<br>Pro-<br>ducts. |
| Vegetable products.....                 | -17.7                          | -29.1                     | -43.2                               | -10.8                          | -10.8                     | -33.9                               | + 8.5                          | +13.2                     | +20.9                               |
| Animal products.....                    | -26.2                          | -25.9                     | -45.0                               | -11.2                          | -26.4                     | -13.0                               | +13.2                          | +16.3                     | +29.7                               |
| Textiles and textile pro-<br>ducts..... | -11.7                          | -21.8                     | -35.6                               | + 4.4                          | - 8.8                     | -16.2                               | +13.6                          | +19.7                     | +21.2                               |
| Wood and paper products.....            | -26.0                          | -24.9                     | -38.3                               | -24.9                          | -39.2                     | -39.2                               | +25.1                          | +25.6                     | +25.6                               |
| Iron and its products.....              | -46.4                          | -62.8                     | -71.3                               | -27.9                          | -40.0                     | -47.1                               | +34.5                          | +58.0                     | +84.1                               |
| Non-ferrous metal pro-<br>ducts.....    | -33.0                          | -39.9                     | -46.4                               | -15.7                          | -26.0                     | + 1.7                               | +33.0                          | +43.5                     | +75.1                               |
| Non-metallic mineral pro-<br>ducts..... | -38.6                          | -47.8                     | -41.4                               | -25.7                          | -33.9                     | -27.2                               | +21.0                          | +26.5                     | +24.3                               |
| Chemicals and chemical<br>products..... | - 7.8                          | -17.2                     | -33.0                               | +13.4                          | + 4.7                     | -14.4                               | +23.0                          | +26.6                     | +27.7                               |
| Miscellaneous products.....             | -50.8                          | -64.5                     | -72.7                               | -41.7                          | -57.8                     | -64.1                               | +13.4                          | +18.7                     | +31.2                               |
| Central electric stations...            | -17.6                          | -21.5                     | - 6.8                               | - 4.4                          | - 9.3                     | +11.6                               | + 5.0                          | + 5.1                     | +16.7                               |
| Averages for All<br>Industries.....     | -28.9                          | -42.7                     | -48.2                               | -16.1                          | -27.4                     | -30.3                               | +18.0                          | +26.8                     | +24.5                               |

<sup>1</sup> In 1930 bridge building, formerly included with miscellaneous products, was transferred to the iron and its products group.

### Subsection 1.—Manufactures Grouped by Chief Component Materials.

A classification based on the chief component materials in the various products of each manufacturing establishment was applied for the first time in the compilation of the returns for 1920. The number of groups was reduced from fifteen to nine to correspond with the external trade classification and the classes of industry were somewhat altered to conform with recent industrial developments. Subsequently, the central electric stations industry was taken out of the miscellaneous class and now forms a class by itself.

**Vegetable Products.**—Though first in value of gross production in 1935, this group ranked only fourth in the number of people employed and in salaries and wages paid. With the exception of rubber, coffee and spices, sugar factories, and rice mills, the industries of this group are dependent mainly upon domestic farm products for their raw materials. They produced, in 1935, 18.2 p.c. of the total manufacturing production and employed 13.6 p.c. of all persons engaged in manufacturing industries.

The flour-milling industry is the leading industry of the group from the point of view of gross value of products. This industry, which has existed to meet the domestic needs for more than 300 years, is one of the Dominion's oldest manufactures, but it is only within recent times that its progress has become pronounced. The War and the demand it created gave a great impetus to this trade. The 384 flour-mills, many of them of the most modern type and highest efficiency, have a capacity far in excess of Canada's demands. During 1928, productive capacity reached about 121,000 barrels per day. Since then, the industry has suffered adversity. Exports of wheat flour declined from 10,737,266 barrels in 1928 to 4,881,057 barrels in 1935, but in spite of the decrease Canada continues to be one of the leading exporters of wheat flour.

With the increase in urban population, as well as the improvement in transportation, which increasingly enables rural communities to purchase factory-made bread, the bread industry made rapid strides during the past decade. During this period there was an increase of 30 p.c. in the capital invested and 54 p.c. in the number of employees. The bread and other bakery products industry had an output valued at \$59,400,668, capital investment reached \$43,788,924, employees numbered 19,167, and salaries and wages paid amounted to \$16,369,912. This industry was thus the third largest employer of labour among manufacturing industries. In salaries and wages paid, however, it ranked only eighth.

The rubber industry is another industry of importance in the industrial life of the country. Canada now ranks among the leading countries of the world as a manufacturer of rubber goods. In 1935 she was the seventh largest importer of raw rubber in the world, ranking after the United States, the United Kingdom, Japan, Germany, France, and Russia. Existing plants in 1935 numbered 45 and represented a capital investment of \$63,435,798, including equipment and working capital. These plants furnished employment to 11,023 persons who received \$11,017,431 in salaries and wages and produced goods valued at \$55,949,570. They also used raw materials to the value of \$20,258,774, mainly imported from tropical countries. The rubber industry is also of considerable importance to the cotton yarn and cloth industry, which supplies tire fabrics. The industry, besides supplying the domestic market, contributes materially to the export trade of Canada. The products find their way to the remotest parts of the world, as a glance at the list of countries to which rubber tires are shipped will show. Spain, Peru, Dutch East Indies, British East Africa, and China are but a few of these far-flung countries.

Establishments engaged in the production of tobacco, cigars and cigarettes numbered 116 in 1935. The capital invested in the industry amounted to \$58,178,513, employees numbered 8,145, salary and wage payments \$7,221,048, and the products made were valued at \$39,103,875 exclusive of excise taxes. Consumers of the products of this industry contributed about \$31,000,000 to the Dominion treasury in excise taxes. Canada is self-sufficient as regards its requirements of manufactured tobacco products. Practically the whole of the Canadian production goes to supply domestic demand, imports and exports of manufactured tobacco products being extremely small. The tobacco industry also contributes materially to the agricultural economy of Canada. Of the materials used, amounting to \$19,701,385, \$15,187,876 was for raw leaf tobacco. All told, the tobacco industry consumed 38,929,237 lb. of raw leaf tobacco of which 31,348,922 lb. was of domestic growth.

The fruit and vegetable preparations industry, which includes canned fruits, canned vegetables, pickles, vinegar, jams, etc., comprises another large division of this group. In 1935, this industry reported an output valued at \$38,276,487, a capital investment of \$38,272,379 and an employment of 7,912 persons, who received \$5,003,481 in salaries and wages. The development of the canned foods trade has effected great changes in the relation of foods to seasons. Fruits and vegetables of many kinds are to be had at all times of the year with much of their original freshness and flavour. The producers in the country are provided with an enormously extended market and the consumers in both city and country with cheap and wholesome food in great variety. The industry has made rapid strides in the past few years. During the period of 1923-35 the volume of fruit and vegetable preparations produced increased 155 p.c. This growth is indeed remarkable, as it represents a corresponding increase in the domestic demand for these products, the foreign trade being relatively small as compared with the domestic production. Imports in 1935 were valued at \$2,652,961 and exports at \$5,138,094. According to these figures, the industry has a small exportable surplus over domestic requirements.

Other important industries of this group are: biscuits and confectionery, brewing, distilling, and sugar refining.

**Animal Products.**—Production in this group is determined, in large measure, by the demand at home and abroad for Canadian butter, cheese, canned fish, fresh or frozen meats, bacon and hams, condensed and evaporated milk, etc.

The leading industry of the group is that of slaughtering and meat packing, with a value of production in 1935 of \$133,379,312. Next comes butter and cheese, with a value of \$99,888,971. These two industries represented about two-thirds of the production of the entire group.

The butter and cheese industry, which manufactures a product of farm animals, has been for many years of leading importance in Canada. Originating in the agricultural districts of the Maritime Provinces, the Eastern Townships of Quebec and the southern counties of Ontario, it is now developing rapidly in the Prairie Provinces and in the more recent northern settlements of Quebec and Ontario. For an industry so large in the aggregate, it is unique in having shown very little tendency toward consolidation in large units, the gross production of \$99,888,971 coming from no fewer than 2,589 plants, mostly small and scattered at convenient points throughout the farming communities.



The leather industries have long been established on a considerable scale, mainly, of course, because the large number of cattle raised and slaughtered provide a ready supply of hides. There are large tanneries in the eastern provinces and no fewer than 217 boot and shoe factories were in operation in 1935, chiefly in Quebec and Ontario, representing a total capital of about \$24,000,000 with an annual output of over \$36,000,000 and employing 15,930 men and women. The canning and preserving of fish also calls for reference. Concentrated naturally upon the Pacific and Atlantic coasts, 630 establishments were engaged in 1935 in canning, curing and packing of various kinds of fish that were valued at \$23,000,000.

**Textile Products.**—The output of textiles in 1935 was valued at \$357,106,277. The establishments in this group, which numbered 2,275, represented a capital investment of \$329,197,254; they furnished employment to 120,699 persons who were paid \$96,574,954 in salaries and wages, and also spent \$183,920,438 for materials.

In net production, *i.e.*, in value added by manufacture, which is a truer criterion than gross production of the place of the group in the industrial life of the country, the textile group was fourth in 1935 among the ten major groups shown in the summary statistics of Table 3, p. 407, being exceeded only by the wood, vegetable, and iron and its products groups. Textiles accounted for about 13 p.e. of the net manufacturing production of Canada. As an indication of the contribution which the textile group made in 1935 to the employment in the Dominion, the group stood second in the number of employees and third in salaries and wages paid, with about 21 p.e. of the total employees in manufacturing and 16 p.e. of the total salaries and wages paid. Again, this wide group of textiles may be regarded as two distinct divisions: (1) the spinning, weaving and knitting trades, and (2) the finishing trades. If so regarded, the first division assumes the proportions of a very large industrial group with a gross production of \$185,486,029, while the second division, which usually is the larger, had a production of only \$171,620,248 in 1935.

From the standpoint of gross value of production, cotton yarn and cloth in 1935 was again the leading industry in the textile group. The output was valued at \$59,378,604 while the persons employed numbered 18,121 and the salaries and wages paid totalled \$13,206,265.

The hosiery and knitted goods industry is also worthy of special mention. From the standpoint of employment and salaries and wages paid, it was first in 1935, employing 18,511 persons and paying \$14,252,653 in salaries and wages. Despite the depressed condition of the textile industry generally, the volume and value of production of this branch of the industry held up remarkably well, the value of production being only 23.2 p.e. lower than the peak year of 1929 while the volume was actually 4.5 p.e. higher. Employment, however, declined by 537 or 2.8 p.e. since 1929.

The outstanding feature of the textile situation in Canada has been the great expansion of the silk industry during the past few years, at a time when practically all other industries were experiencing a diminishing demand for their products. While other industries have to struggle hard to regain the 1929 level of production, this industry has since then recorded an increase of 24 p.e. in capital investment, 131 p.e. in number of employees, 119 p.e. in salary and wage payments, 80 p.e. in cost of materials and 93 p.e. in gross value of production.

**Wood and Paper.**—The forests of Canada have always been an important factor in the building up and maintaining of manufacturing industries. Since early pioneering times the sawmill has formed one of the first steps from the pioneering

community to the industrial centre. There is to-day practically no form of industrial activity in which wood is not used, directly as a raw material or indirectly as, for example, in the form of paper. The primary operations in the woods provide work during part of the year for at least 200,000 individuals, largely during the season when employment in manufacturing industries is at its minimum. This has a valuable steadying effect on general labour conditions throughout the year.

The manufacture of lumber, which depends to a large extent on building and construction operations and the export markets, has shown wide fluctuations. The peak, reached in 1911 with a total cut of 4,918,000 M ft. b.m., has never been equalled. It was followed by a general decline to the 2,869,000 M reported for 1921. A second peak of 4,742,000 M was reached in 1929. Production then decreased annually to a minimum in 1932 amounting to 1,810,000 M. There were increases in 1933, 1934, and 1935.

The manufacturing industries that draw their principal raw material from the sawmills reached their maximum production in 1929 with a gross value of \$146,950,000 and then declined to \$52,289,642 in 1933 but increased to \$57,860,721 in 1934 and to \$64,802,326 in 1935.

The pulp and paper industry is a comparatively recent development in Canadian industry. In 1881 there were only 36 paper and 5 pulp mills in operation in Canada. By 1923 the industry had displaced flour milling as Canada's most important manufacturing industry and in spite of recent vicissitudes has held that position up to 1935, when it was displaced by the non-ferrous metal smelting and refining industry. In employment and salaries and wages paid, pulp and paper is still, however, the dominant industry. The peak of production was reached in 1929 when 4,021,000 tons of wood pulp and 3,197,000 tons of paper were produced. In that year there were 108 pulp and paper mills in operation, consuming 5,278,000 cords of pulpwood and using hydro-electric power valued at more than \$13,000,000. During 1926, Canada, for the first time, produced more newsprint than the United States and has maintained the leadership in spite of decreases in production. During 1935 this industry produced 3,868,341 tons of pulp, the highest production since 1929, and 3,280,896 tons of paper, an all-time record. Of this paper, 2,765,444 tons was newsprint, more than three times the production of the United States.

The manufacturing industries which draw their principal raw material from the pulp and paper mills reached their maximum production of \$187,882,000 in 1929. In 1934 production was \$139,108,400 and in 1935, \$147,801,647.

**Iron and Its Products.**—The manufacture of iron and steel and their products is one of Canada's basic industries. In 1935 over half a billion dollars was invested in the 1,249 establishments in this line of business, 95,000 persons were given employment and the payroll amounted to \$110,000,000. Gross production was valued at \$390,000,000, a figure which was just a little more than half of the value reported for 1929.

Although ore for the manufacture of iron has not been mined in Canada for some years, there exists a primary industry of considerable size. There are now four concerns which make pig iron, one being in Nova Scotia and three in Ontario. The former company uses Nova Scotia coal and iron ore from the great Wabana deposits, which it controls, on Bell island, Newfoundland. The other concerns import ore and coal from the United States. These companies have 10 blast furnaces available for use which, if operated at capacity, could produce 1,500,000 long tons of pig iron annually. They also operate open-hearth steel furnaces and

rolling mills to make steel ingots, blooms and billets, merchant and alloy steel bars, rails, structural shapes, plates, sheets, rail fastenings, etc. Including a number of other steel furnaces and rolling mills there were 30 steel-making plants in operation in 1935 and 13 rolling mills. Factory sales of pig iron, steel, ferro-alloys, and rolled products were valued at \$39,000,000.

Among the secondary or fabricating industries the manufacture of automobiles takes first place. It is one of Canada's largest industries. In 1935 there were 20 manufacturing or assembling plants in operation, employees numbered 13,095 and products advanced \$30,000,000 in value to \$106,624,445. The number of cars and trucks made was 172,877 of which about 40 p.c., or 69,348, were for export. The 1935 production was the highest since 1929 when 262,625 cars were made in Canada. The making of automobile parts occupied 82 establishments and 6,614 employees in 1935 and production was valued at \$32,684,252, an advance of \$8,000,000.

All other industries in the group showed gains, the value of output in the railway rolling-stock industry advancing to \$41,200,000 from \$34,300,000; the machinery industry to \$32,800,000 from \$26,000,000; the farm implements industry to \$13,700,000 from \$8,800,000; the castings and forgings industry to \$38,800,000 from \$35,100,000; bridge and structural steel industry to \$7,600,000 from \$4,700,000; sheet metal products industry to \$33,600,000 from \$30,900,000; the hardware and tools industry to \$16,000,000 from \$13,600,000; wire and wire products to \$16,200,000 from \$14,700,000; the increases in the other groups, including the boilers, tanks and engines industry, the bicycle industry, and the miscellaneous iron and steel industry, being less than one million dollars in each case.

**Non-Ferrous Metals.**—Production during 1935 from this group of manufactures based on non-ferrous metals was valued at \$288,523,250 compared with \$237,233,670 in 1934 and \$233,545,666 in 1929, previously the best year on record.

A total of 505 factories were in operation in this group in 1935 as against 487 in 1934, but the capital employed declined \$1,900,000 to \$261,625,967. The number of persons employed increased to 33,613 from 30,177 in 1934 and salaries and wages advanced to \$40,315,477 from \$35,097,986. The cost of materials and supplies used during 1935 was \$174,906,971 as against \$119,713,328 in 1934 and the cost of fuel and electricity advanced to \$5,717,809 from \$5,364,840.

For purposes of the annual Census of Manufactures the makers of non-ferrous metal products have been classified under 7 main industries in accordance with the nature of their main products. All but one of these industries reported a gain in output value in 1935 compared with 1934. In the non-ferrous smelting and refining industry the gain was \$36,000,000, or 24 p.c., to \$186,245,658; electrical apparatus increased \$11,000,000, or 22 p.c., to \$61,152,834; white metal alloys gained 18 p.c. to \$6,182,402; aluminium products gained 33 p.c. to \$4,992,640; and the miscellaneous industry increased 27 p.c. to \$1,170,035. The brass and copper products industry showed a slight decline in output value to \$19,187,022.

**Non-Metallic Minerals.**—This group of manufactures includes such leading industries as coke making, oil refining, and the manufacture of glass, artificial abrasives, bricks, cement, etc. Final figures for 1935 show that the output for this group amounted in value to \$176,184,717 which is 6 p.c. above the corresponding total for 1934 but 27 p.c. below 1929.

The petroleum refining industry is by far the largest of the group. Canada produces some crude oil, but the bulk of the oil treated in Canadian refineries is imported from the United States or South America. In 1935 there were 45 refineries

operating at advantageous points across the Dominion; these units used 1,196,411,-443 gallons of crude oil and produced refined commodities worth \$79,176,081. About 4,800 people were employed and capital invested was \$64,012,045.

Forty-four coke and gas plants, representing an investment of \$99,000,000, made products worth \$33,474,789. Aerated waters, glass, cement, lime, salt, brick, dressed stone, cement products, and asbestos goods were also made in this group.

**Chemicals and Allied Products.**—Production of chemicals and allied products in 1935 was valued at \$118,574,228 at factory prices. This total, which was higher than in any year since 1930, was about 9.7 p.c. above the 1934 value of \$108,052,039 and 27.7 p.c. above the corresponding figure of \$92,820,761 in 1933. The gain in employment over 1934 was 10.5 p.c. and salaries and wages increased 13.3 p.c.

The improvement in 1935 was quite general with 13 of the industries showing substantial advances and one reporting a small decline. The gains were as follows: coal tar distillation, 30 p.c. to \$2,606,338; acids, alkalies, and salts, 15 p.c. to \$19,012,615; compressed gases, 9 p.c. to \$3,077,765; fertilizers, 11 p.c. to \$6,075,616; medicinals, 9 p.c. to \$21,292,751; paints, 9 p.c. to \$20,341,407; soaps, 17 p.c. to \$16,002,048; toilet preparations, 0.6 p.c. to \$6,017,944; inks, 19 p.c. to \$2,886,853; wood distillation, 4 p.c. to \$805,756; adhesives, 9 p.c. to \$1,436,259; polishes, 11 p.c. to \$2,149,239, and the miscellaneous industry, 2 p.c. to \$8,332,123. The value of explosives, etc., at \$8,537,514 was 6 p.c. less than in 1934.

The number of operating establishments in 1935 was 734 compared with 736 in 1934; the number of employees rose to 18,933 from 17,130, and salaries and wages increased \$2,700,000 to \$23,715,305. Capital employed was slightly less in 1935 at \$147,472,534.

About 52 p.c. of the factories, or 387, were located in the province of Ontario; their production totalled \$69,304,933, or 58 p.c. of the Canada total and their employees numbered 9,912, or 52 p.c. of the total. Quebec's 219 establishments gave work to 6,806 persons and made products worth \$34,767,941.

Many chemical products are also made in industries which, for statistical purposes, are not included in the chemicals and allied products group. For instance, pulp and paper, distilled liquors, brewery products, and artificial abrasives are classified in other groups.

**Central Electric Stations.**—The generation of power by central electric stations, which is of such vital importance to the development of manufactures in Canada, has increased very rapidly since the Great War. The output in 1919, the first year for which statistics have been compiled, amounted to 5,500,000,000 kilowatt hours and by 1930 had grown to 18,000,000,000 kilowatt hours. In spite of a temporary set-back occasioned by the general contraction in industrial production, the output for 1935 reached a new high record of 23,300,000,000 kilowatt hours. The pulp and paper industry is the largest user of electric energy. During 1935, this industry purchased 9,400,000,000 kilowatt hours from central electric stations, or about 40 p.c. of the total output. Other large users of electric energy are: the primary iron and steel industry, non-ferrous metal smelting, and acids, alkalies, and salts establishments. Approximately 8 p.c. of the total output of central electric stations in 1935 was used for residence lighting and other domestic services, while 6 p.c. was exported to the United States.

The growth of central electric stations is also strikingly illustrated in the increase since 1919 of 250 p.c. in the capital investment, which in 1935 totalled \$1,459,821,168 or 31 p.c. of the total for all industries. This industry is also unique in that there are no expenditures for raw material.

## 9.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Power, Fuel,

|  | Province, Group or Kind of Industry. | Establish-<br>ments. | Capital<br>Employed. | Salaried Employees. |                   |                    |
|--|--------------------------------------|----------------------|----------------------|---------------------|-------------------|--------------------|
|  |                                      |                      |                      | Male.               | Female.           | Salaries.          |
|  |                                      | No.                  | \$                   | No.                 | No.               | \$                 |
| <b>Totals, by Provinces.</b>               |                                      | <b>25,491</b>        | <b>4,698,991,853</b> | <b>82,041</b>       | <b>23,538</b>     | <b>173,020,195</b> |
| 1 Prince Edward Island.....                | 261                                  | 3,508,905            | 221                  | 39                  | 212,764           |                    |
| 2 Nova Scotia.....                         | 1,350                                | 118,999,064          | 1,939                | 492                 | 3,266,082         |                    |
| 3 New Brunswick.....                       | 872                                  | 115,635,568          | 1,691                | 410                 | 3,114,008         |                    |
| 4 Quebec.....                              | 7,942                                | 1,664,198,107        | 24,246               | 6,410               | 50,472,339        |                    |
| 5 Ontario.....                             | 10,266                               | 2,064,194,151        | 40,649               | 13,340              | 91,500,724        |                    |
| 6 Manitoba.....                            | 1,099                                | 198,822,314          | 3,826                | 931                 | 7,357,184         |                    |
| 7 Saskatchewan.....                        | 880                                  | 66,271,171           | 1,756                | 313                 | 2,635,015         |                    |
| 8 Alberta.....                             | 1,002                                | 96,322,781           | 2,383                | 449                 | 4,028,651         |                    |
| 9 British Columbia and Yukon.....          | 1,819                                | 371,039,792          | 5,330                | 1,154               | 10,433,428        |                    |
| <b>Totals, by Groups.</b>                  |                                      | <b>25,491</b>        | <b>4,698,991,853</b> | <b>82,041</b>       | <b>23,538</b>     | <b>173,020,195</b> |
| 1 Vegetable products.....                  | 5,402                                | 496,256,485          | 12,778               | 2,311               | 25,375,328        |                    |
| 2 Animal products.....                     | 4,402                                | 211,672,508          | 8,378                | 2,044               | 14,590,298        |                    |
| 3 Textiles and textile products.....       | 2,275                                | 329,197,254          | 8,927                | 4,178               | 21,424,283        |                    |
| 4 Wood and paper products.....             | 8,180                                | 873,756,949          | 20,026               | 4,866               | 39,042,919        |                    |
| 5 Iron and its products.....               | 1,249                                | 555,144,467          | 10,964               | 2,854               | 24,855,590        |                    |
| 6 Non-ferrous metal products.....          | 505                                  | 261,625,967          | 5,137                | 1,057               | 12,490,118        |                    |
| 7 Non-metallic mineral products.....       | 1,188                                | 300,455,725          | 4,045                | 885                 | 8,176,057         |                    |
| 8 Chemicals and chemical products.....     | 734                                  | 147,472,534          | 4,989                | 1,879               | 12,336,856        |                    |
| 9 Miscellaneous industries.....            | 509                                  | 63,588,796           | 1,847                | 574                 | 4,019,872         |                    |
| 10 Central electric stations.....          | 1,041                                | 1,459,821,168        | 4,950                | 1,290               | 10,708,868        |                    |
| <b>1.—Vegetable Products.</b>              | <b>5,402</b>                         | <b>496,256,485</b>   | <b>12,778</b>        | <b>2,311</b>        | <b>25,375,328</b> |                    |
| 1 Biscuits, confectionery, cocoa, etc..... | 234                                  | 37,779,319           | 1,798                | 450                 | 3,889,150         |                    |
| 2 Bread and other bakery products.....     | 3,045                                | 43,788,024           | 2,200                | 564                 | 2,865,264         |                    |
| 3 Breweries.....                           | 73                                   | 57,928,298           | 917                  | 126                 | 2,266,507         |                    |
| 4 Coffee, tea, and spices.....             | 86                                   | 13,431,195           | 595                  | 173                 | 1,392,881         |                    |
| 5 Distilleries.....                        | 10                                   | 42,045,051           | 255                  | 80                  | 924,517           |                    |
| 6 Flour and feed mills.....                | 1,127                                | 56,475,315           | 1,569                | 181                 | 2,094,324         |                    |
| 7 Foods, breakfast.....                    | 23                                   | 5,119,820            | 79                   | 36                  | 202,640           |                    |
| 8 Foods, stock and poultry.....            | 99                                   | 4,166,324            | 247                  | 74                  | 441,832           |                    |
| 9 Foods, miscellaneous.....                | 106                                  | 9,551,719            | 484                  | 175                 | 1,049,730         |                    |
| 10 Fruit and vegetable preparations.....   | 298                                  | 38,272,379           | 748                  | 236                 | 1,423,060         |                    |
| 11 Ice cream cubes.....                    | 8                                    | 609,081              | 8                    | 4                   | 18,494            |                    |
| 12 Linsseed and soya bean oil.....         | 3                                    | 2,228,063            | 31                   | 6                   | 83,134            |                    |
| 13 Macaroni, vermicelli, etc.....          | 15                                   | 1,985,716            | 62                   | 17                  | 100,770           |                    |
| 14 Malt and malt products.....             | 12                                   | 6,844,604            | 66                   | 8                   | 183,846           |                    |
| 15 Rice mills.....                         | 6                                    | 940,365              | 10                   | 2                   | 45,945            |                    |
| 16 Rubber goods, including footwear.....   | 45                                   | 63,435,798           | 1,299                | 416                 | 2,947,122         |                    |
| 17 Starch and glucose.....                 | 6                                    | 7,573,998            | 94                   | 37                  | 292,897           |                    |
| 18 Sugar refineries.....                   | 8                                    | 33,017,874           | 333                  | 55                  | 1,078,256         |                    |
| 19 Tobacco, cigars and cigarettes.....     | 116                                  | 58,178,513           | 1,602                | 602                 | 3,470,509         |                    |
| 20 Tobacco processing and packing.....     | 21                                   | 5,517,516            | 127                  | 11                  | 270,289           |                    |
| 21 Wine.....                               | 50                                   | 7,336,583            | 158                  | 28                  | 313,062           |                    |
| <b>2.—Animal Products.</b>                 | <b>4,402</b>                         | <b>211,672,508</b>   | <b>8,378</b>         | <b>2,044</b>        | <b>14,590,298</b> |                    |
| 1 Animal oils and fats.....                | 4                                    | 112,677              | 4                    | 1                   | 7,999             |                    |
| 2 Belting, leather.....                    | 13                                   | 244,442              | 44                   | 16                  | 101,782           |                    |
| 3 Boot and shoe findings, leather.....     | 18                                   | 1,283,396            | 49                   | 8                   | 100,281           |                    |
| 4 Boots and shoes, leather.....            | 217                                  | 24,313,445           | 1,055                | 428                 | 2,481,228         |                    |
| 5 Butter and cheese.....                   | 2,589                                | 58,291,763           | 2,850                | 726                 | 3,495,689         |                    |
| 6 Condensed milk.....                      | 21                                   | 4,912,936            | 95                   | 32                  | 217,511           |                    |
| 7 Dairy products, other.....               | 36                                   | 2,714,884            | 80                   | 23                  | 162,072           |                    |
| 8 Fish curing and packing.....             | 630                                  | 17,144,806           | 475                  | 75                  | 703,075           |                    |
| 9 Fur dressing and dyeing.....             | 13                                   | 957,872              | 70                   | 11                  | 167,210           |                    |
| 10 Fur goods.....                          | 309                                  | 10,474,936           | 544                  | 156                 | 1,030,514         |                    |
| 11 Gloves and mittens, leather.....        | 46                                   | 2,471,700            | 137                  | 40                  | 246,139           |                    |
| 12 Hair goods, animal and human.....       | 5                                    | 94,222               | 6                    | 3                   | 5,786             |                    |
| 13 Leather tanneries.....                  | 85                                   | 22,982,210           | 296                  | 69                  | 861,593           |                    |
| 14 Miscellaneous leather goods.....        | 218                                  | 5,728,593            | 421                  | 124                 | 613,415           |                    |
| 15 Sausage and sausage casings.....        | 50                                   | 1,146,011            | 68                   | 15                  | 130,529           |                    |
| 16 Slaughtering and meat packing.....      | 139                                  | 58,207,715           | 2,154                | 317                 | 4,265,175         |                    |
| <b>3.—Textiles and Textile Products.</b>   | <b>2,275</b>                         | <b>329,197,254</b>   | <b>8,927</b>         | <b>4,178</b>        | <b>21,424,283</b> |                    |
| 1 Awnings, tents and sails.....            | 60                                   | 1,732,394            | 126                  | 34                  | 187,466           |                    |
| 2 Bags, cotton and jute.....               | 24                                   | 5,221,593            | 106                  | 36                  | 304,480           |                    |
| 3 Bating and wadding.....                  | 5                                    | 1,231,907            | 17                   | 6                   | 63,578            |                    |
| 4 Carpets, mats and rugs.....              | 24                                   | 6,768,069            | 153                  | 47                  | 355,528           |                    |
| 5 Clothing, factory, men's.....            | 170                                  | 16,271,865           | 1,250                | 355                 | 2,272,203         |                    |

## Materials, and Values of Products of Canadian Manufacturing Industries, 1935.

| Employees on Wages. |         |             | Power Installed.        | Cost of Fuel and Electricity. | Cost of Materials. | Value of Products. |               |
|---------------------|---------|-------------|-------------------------|-------------------------------|--------------------|--------------------|---------------|
| Male.               | Female. | Wages.      |                         |                               |                    | Net. <sup>1</sup>  | Gross.        |
| No.                 | No.     | \$          | h.p.                    | \$                            | \$                 | \$                 | \$            |
| 366,778             | 110,517 | 417,306,709 | 8,783,055 <sup>2</sup>  | 84,273,129                    | 1,420,885,153      | 1,302,179,099      | 2,807,337,381 |
| 502                 | 256     | 405,642     | 9,034 <sup>2</sup>      | 99,192                        | 1,894,409          | 1,362,405          | 3,350,006     |
| 11,346              | 2,283   | 10,776,592  | 269,260 <sup>2</sup>    | 4,466,242                     | 31,647,800         | 30,995,130         | 67,109,172    |
| 9,840               | 1,996   | 8,560,087   | 235,933 <sup>2</sup>    | 3,149,453                     | 25,551,371         | 27,043,366         | 56,344,190    |
| 112,034             | 46,981  | 122,882,246 | 3,893,944 <sup>2</sup>  | 28,648,403                    | 398,566,702        | 393,805,691        | 821,020,790   |
| 176,789             | 50,600  | 212,306,483 | 2,681,267 <sup>2</sup>  | 36,072,924                    | 718,570,816        | 668,918,734        | 1,423,562,474 |
| 15,000              | 3,302   | 17,343,882  | 493,397 <sup>2</sup>    | 2,455,218                     | 67,929,760         | 47,349,314         | 117,734,292   |
| 3,912               | 374     | 3,889,396   | 154,288 <sup>2</sup>    | 1,798,232                     | 28,046,921         | 16,976,149         | 46,821,302    |
| 8,100               | 1,155   | 8,476,708   | 180,607 <sup>2</sup>    | 1,518,754                     | 42,851,636         | 28,932,217         | 73,282,607    |
| 29,075              | 3,420   | 32,660,589  | 865,875 <sup>2</sup>    | 6,004,711                     | 105,945,738        | 86,196,093         | 198,106,642   |
| 366,778             | 110,517 | 417,306,709 | 11,657,748 <sup>3</sup> | 84,273,129                    | 1,420,885,153      | 1,302,179,099      | 2,807,337,381 |
| 43,974              | 19,222  | 49,484,119  | 331,361 <sup>3</sup>    | 9,088,743                     | 283,681,945        | 217,051,454        | 509,822,142   |
| 39,121              | 10,581  | 39,444,836  | 122,560 <sup>3</sup>    | 4,634,745                     | 247,375,247        | 99,633,595         | 351,643,587   |
| 48,410              | 59,184  | 75,150,671  | 240,549 <sup>3</sup>    | 6,987,306                     | 183,920,438        | 166,228,533        | 357,106,277   |
| 2,955               | 9,319   | 80,153,005  | 2,160,083 <sup>3</sup>  | 26,732,479                    | 175,040,681        | 239,387,227        | 441,160,387   |
| 78,023              | 2,985   | 85,546,779  | 660,491 <sup>3</sup>    | 12,612,506                    | 203,981,458        | 173,634,965        | 390,228,929   |
| 22,781              | 4,038   | 27,825,359  | 416,127 <sup>3</sup>    | 5,717,809                     | 174,000,971        | 107,598,470        | 288,523,250   |
| 17,808              | 544     | 19,249,167  | 222,555 <sup>3</sup>    | 11,368,432                    | 88,969,870         | 75,846,415         | 176,154,717   |
| 9,311               | 2,754   | 11,378,449  | 130,464 <sup>3</sup>    | 4,256,062                     | 48,310,876         | 66,001,290         | 118,574,228   |
| 7,669               | 1,890   | 8,262,608   | 61,785 <sup>3</sup>     | 850,171                       | 14,691,067         | 21,437,115         | 36,978,953    |
| 9,218               | Nil     | 11,811,125  | 7,310,973 <sup>3</sup>  | 2,054,876                     | Nil                | 135,065,035        | 137,114,911   |
| 43,974              | 19,222  | 49,484,119  | 331,361                 | 9,088,743                     | 283,681,945        | 217,051,454        | 509,822,142   |
| 3,666               | 4,502   | 5,426,404   | 21,121                  | 700,216                       | 19,231,189         | 21,266,428         | 41,197,333    |
| 14,362              | 1,961   | 13,508,048  | 15,684                  | 1,915,706                     | 28,343,545         | 29,141,417         | 50,400,668    |
| 3,831               | 36      | 3,880,155   | 23,453                  | 708,085                       | 15,024,025         | 24,960,377         | 40,099,040    |
| 788                 | 562     | 1,144,136   | 3,366                   | 102,776                       | 17,543,308         | 6,568,747          | 24,214,761    |
| 800                 | 415     | 988,754     | 8,981                   | 312,413                       | 3,014,348          | 12,757,506         | 16,114,361    |
| 3,501               | 143     | 3,071,183   | 119,297                 | 1,356,769                     | 78,071,667         | 18,139,432         | 67,507,808    |
| 348                 | 179     | 643,997     | 4,459                   | 181,959                       | 3,304,705          | 6,168,355          | 9,655,049     |
| 444                 | 16      | 396,213     | 6,982                   | 88,539                        | 4,734,559          | 1,808,573          | 6,631,971     |
| 645                 | 439     | 883,112     | 5,724                   | 179,681                       | 7,566,381          | 6,903,581          | 14,639,623    |
| 3,253               | 3,675   | 3,640,421   | 10,899                  | 576,801                       | 22,252,826         | 15,446,860         | 38,276,487    |
| 167                 | 13      | 34,817      | 63                      | 15,028                        | 98,296             | 168,288            | 281,612       |
| 157                 | -       | 152,212     | 2,044                   | 53,153                        | 2,365,776          | 649,848            | 3,068,770     |
| 146                 | 105     | 145,846     | 1,732                   | 43,791                        | 885,246            | 559,013            | 1,488,950     |
| 222                 | 1       | 312,558     | 5,500                   | 262,212                       | 4,080,821          | 2,622,528          | 6,965,054     |
| 60                  | -       | 63,617      | 612                     | 4,147                         | 1,137,836          | 355,965            | 1,497,948     |
| 6,084               | 2,624   | 8,070,309   | 64,962                  | 1,189,014                     | 20,258,774         | 34,501,782         | 55,949,570    |
| 461                 | 17      | 462,394     | 4,520                   | 185,109                       | 2,635,566          | 2,262,019          | 5,082,694     |
| 1,054               | 92      | 2,008,435   | 21,368                  | 964,177                       | 25,137,568         | 10,490,252         | 36,597,997    |
| 2,103               | 3,828   | 3,741,539   | 2,935                   | 157,784                       | 19,701,385         | 19,244,706         | 39,103,875    |
| 712                 | 589     | 671,913     | 403                     | 43,104                        | 6,807,056          | 8,385,003          | 12,518,763    |
| 410                 | 25      | 333,015     | 1,236                   | 48,089                        | 1,496,968          | 1,607,181          | 3,152,238     |
| 39,121              | 10,581  | 39,444,836  | 122,560                 | 4,634,745                     | 247,375,247        | 99,633,595         | 351,643,587   |
| 20                  | Nil     | 19,790      | 85                      | 5,894                         | 66,469             | 67,259             | 129,619       |
| 89                  | Nil     | 75,891      | 343                     | 8,846                         | 370,941            | 306,527            | 637,314       |
| 365                 | 67      | 289,606     | 2,877                   | 47,500                        | 601,770            | 672,703            | 1,322,033     |
| 8,940               | 5,471   | 9,261,643   | 6,484                   | 281,429                       | 19,431,799         | 16,276,684         | 35,989,912    |
| 10,801              | 349     | 10,409,446  | 40,789                  | 1,642,140                     | 69,953,193         | 28,293,638         | 99,888,971    |
| 552                 | 28      | 586,727     | 3,672                   | 321,702                       | 5,281,904          | 2,538,828          | 8,142,184     |
| 236                 | 53      | 270,983     | 1,934                   | 45,965                        | 807,665            | 1,267,780          | 2,121,213     |
| 3,185               | 1,091   | 2,171,478   | 11,590                  | 344,871                       | 14,772,732         | 8,340,663          | 23,468,356    |
| 608                 | 119     | 564,126     | 893                     | 30,032                        | 319,559            | 1,025,125          | 1,374,747     |
| 1,227               | 989     | 2,036,063   | 495                     | 65,044                        | 7,844,084          | 4,099,542          | 12,518,670    |
| 652                 | 905     | 940,081     | 320                     | 22,833                        | 1,905,581          | 1,788,688          | 3,685,102     |
| 13                  | 3       | 11,320      | 80                      | 1,592                         | 42,733             | 31,555             | 75,880        |
| 3,486               | 116     | 3,058,213   | 15,507                  | 499,626                       | 12,991,558         | 7,006,369          | 20,497,553    |
| 1,303               | 574     | 1,341,798   | 1,568                   | 57,791                        | 3,554,285          | 2,832,650          | 4,644,626     |
| 259                 | 22      | 224,409     | 469                     | 31,149                        | 1,239,341          | 645,605            | 1,616,095     |
| 7,319               | 884     | 8,183,172   | 35,454                  | 1,227,180                     | 108,191,810        | 23,990,322         | 133,379,312   |
| 48,410              | 59,184  | 75,150,671  | 240,549                 | 6,957,306                     | 183,920,438        | 166,228,533        | 357,106,277   |
| 190                 | 150     | 270,760     | 248                     | 15,676                        | 868,429            | 723,206            | 1,605,311     |
| 303                 | 479     | 567,647     | 1,199                   | 40,272                        | 6,557,653          | 1,806,183          | 8,404,107     |
| 106                 | 16      | 113,231     | 637                     | 17,104                        | 489,855            | 382,705            | 859,664       |
| 568                 | 308     | 681,168     | 2,125                   | 105,453                       | 1,430,894          | 1,353,652          | 3,389,990     |
| 3,901               | 3,760   | 6,718,167   | 1,615                   | 132,499                       | 20,676,934         | 15,769,464         | 36,578,897    |

<sup>1</sup> See footnote 1 to Table 1, p. 405.<sup>2</sup> Exclusive of purchased power.<sup>3</sup> Including purchased power.

## 9.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Power, Fuel,

|   | Group or Kind of Industry.                     | Establish-<br>ments. | Capital<br>Employed. | Salaried Employees. |         |            |
|---|--|----------------------|----------------------|---------------------|---------|------------|
|   |  |                      |                      | Male.               | Female. | Salaries.  |
|   |  | No.                  | \$                   | No.                 | No.     | \$         |
| <b>3.—Textiles or Textile Products—concl.</b> |  |                      |                      |                     |         |            |
| 6   | Clothing, factory, women's.....                | 591                  | 22,668,528           | 1,672               | 889     | 3,892,895  |
| 7   | Clothing, contractors, men's and women's.      | 113                  | 671,967              | 223                 | 45      | 293,475    |
| 8   | Cordage, rope and twine.....                   | 11                   | 10,991,086           | 77                  | 24      | 247,566    |
| 9   | Corsets.....                                   | 22                   | 3,318,490            | 159                 | 210     | 524,756    |
| 10  | Cotton and wool waxes.....                     | 17                   | 840,796              | 34                  | 17      | 92,324     |
| 11  | Cotton textiles, n.e.s.....                    | 44                   | 2,283,660            | 107                 | 44      | 238,534    |
| 12  | Cotton thread.....                             | 5                    | 2,804,903            | 76                  | 26      | 173,482    |
| 13  | Cotton yarn and cloth.....                     | 35                   | 70,741,613           | 423                 | 144     | 1,163,740  |
| 14  | Dyeing and finishing of textiles.....          | 23                   | 5,257,029            | 115                 | 37      | 321,088    |
| 15  | Dyeing, cleaning and laundry work.....         | 416                  | 22,767,553           | 878                 | 531     | 1,856,247  |
| 16  | Flax, dressed.....                             | 9                    | 129,593              | 3                   | Nil     | 2,600      |
| 17  | Furnishing goods, men's.....                   | 176                  | 15,569,465           | 642                 | 316     | 1,586,914  |
| 18  | Gloves and mittens, fabric.....                | 8                    | 564,990              | 13                  | 7       | 36,624     |
| 19  | Hats and caps.....                             | 109                  | 6,451,000            | 443                 | 193     | 960,186    |
| 20  | Hosiery and knitted goods.....                 | 163                  | 50,048,900           | 921                 | 578     | 2,710,446  |
| 21  | Miscellaneous textiles, n.e.s.....             | 10                   | 11,342,949           | 276                 | 61      | 758,998    |
| 22  | Oiled and waterproof clothing.....             | 15                   | 759,872              | 24                  | 11      | 65,387     |
| 23  | Silk and artificial silk.....                  | 33                   | 35,063,023           | 593                 | 311     | 1,653,953  |
| 24  | Woollen cloth.....                             | 65                   | 19,020,049           | 361                 | 125     | 982,524    |
| 25  | Woollen goods, n.e.s.....                      | 25                   | 7,114,557            | 88                  | 28      | 315,469    |
| 26  | Woollen yarn.....                              | 34                   | 8,734,643            | 137                 | 69      | 328,089    |
| 27  | All other industries.....                      | 2                    | 226,155              | 10                  | 3       | 35,722     |
| <b>4.—Wood and Paper Products.....</b>        |  |                      |                      |                     |         |            |
|   |  | 3,186                | 873,756,949          | 20,026              | 4,866   | 39,042,919 |
| 1   | Bookkeepers' and poultrymen's supplies.....    | 7                    | 184,596              | 15                  | 2       | 17,973     |
| 2   | Blue printing.....                             | 20                   | 229,845              | 24                  | 5       | 40,053     |
| 3   | Boat building.....                             | 125                  | 1,993,735            | 171                 | 12      | 156,207    |
| 4   | Boxes and bags, paper.....                     | 146                  | 21,153,422           | 705                 | 258     | 1,978,139  |
| 5   | Boxes, wooden.....                             | 129                  | 6,991,712            | 294                 | 42      | 489,339    |
| 6   | Carriages, wagons, and sleighs.....            | 187                  | 1,622,902            | 200                 | 6       | 138,598    |
| 7   | Charcoal.....                                  | 71                   | 161,157              | 74                  | Nil     | 10,952     |
| 8   | Coffins and caskets.....                       | 44                   | 3,973,184            | 125                 | 28      | 240,332    |
| 9   | Cooperage.....                                 | 80                   | 1,920,016            | 95                  | 6       | 128,225    |
| 10  | Engraving, stereotyping and electrotyping..... | 91                   | 9,619,782            | 525                 | 149     | 1,238,104  |
| 11  | Excelsior.....                                 | 11                   | 307,586              | 19                  | 5       | 15,558     |
| 12  | Flooring, hardwood.....                        | 22                   | 3,330,270            | 101                 | 19      | 190,532    |
| 13  | Furniture.....                                 | 404                  | 26,060,837           | 1,076               | 244     | 1,789,353  |
| 14  | Lasts, trees, and shoe findings.....           | 13                   | 1,144,722            | 44                  | 10      | 166,501    |
| 15  | Lithographing.....                             | 42                   | 10,568,785           | 386                 | 174     | 1,305,189  |
| 16  | Miscellaneous paper products.....              | 102                  | 13,213,342           | 413                 | 207     | 1,167,354  |
| 17  | Miscellaneous wooden products.....             | 93                   | 4,608,846            | 150                 | 42      | 288,323    |
| 18  | Planing mills, sash and door factories.....    | 659                  | 28,917,294           | 1,144               | 177     | 1,547,163  |
| 19  | Printing and bookbinding.....                  | 1,182                | 40,331,944           | 2,595               | 699     | 5,102,026  |
| 20  | Printing and publishing.....                   | 793                  | 53,721,846           | 5,798               | 1,914   | 11,363,513 |
| 21  | Pulp and paper.....                            | 95                   | 545,572,938          | 2,791               | 499     | 7,827,961  |
| 22  | Refrigerators.....                             | 9                    | 499,733              | 31                  | 8       | 50,325     |
| 23  | Roofing paper, wallboard, etc.....             | 14                   | 4,884,394            | 226                 | 53      | 461,635    |
| 24  | Sawmills.....                                  | 3,698                | 75,973,627           | 2,622               | 190     | 2,250,109  |
| 25  | Sporting goods.....                            | 37                   | 1,538,278            | 87                  | 37      | 154,241    |
| 26  | Trade composition.....                         | 32                   | 1,017,257            | 16                  | 10      | 149,503    |
| 27  | Woodenware.....                                | 22                   | 1,239,809            | 50                  | 10      | 114,201    |
| 28  | Wood turning.....                              | 38                   | 1,730,708            | 82                  | 13      | 122,004    |
| 29  | All other industries.....                      | 20                   | 11,369,329           | 118                 | 37      | 479,598    |
| <b>5.—Iron and Its Products.....</b>          |  |                      |                      |                     |         |            |
|   |  | 1,249                | 555,144,467          | 10,964              | 2,854   | 24,855,596 |
| 1   | Agricultural implements.....                   | 34                   | 55,528,865           | 647                 | 183     | 1,323,053  |
| 2   | Automobiles.....                               | 20                   | 40,765,548           | 1,459               | 471     | 4,040,338  |
| 3   | Automobile supplies.....                       | 82                   | 23,260,333           | 548                 | 237     | 1,400,411  |
| 4   | Bicycles and skates.....                       | 4                    | 2,000,548            | 25                  | 10      | 39,350     |
| 5   | Boilers, tanks and engines.....                | 56                   | 15,417,364           | 443                 | 89      | 897,149    |
| 6   | Bridge and structural steel work.....          | 18                   | 18,935,273           | 564                 | 66      | 1,223,234  |
| 7   | Castings and forgings.....                     | 303                  | 63,585,479           | 1,476               | 412     | 3,363,053  |
| 8   | Hardware and tools.....                        | 153                  | 25,292,215           | 520                 | 249     | 1,365,170  |
| 9   | Iron and steel products, n.e.s.....            | 98                   | 5,731,505            | 299                 | 53      | 518,465    |
| 10  | Machinery.....                                 | 211                  | 59,899,705           | 1,656               | 497     | 3,658,097  |
| 11  | Primary iron and steel.....                    | 53                   | 86,465,490           | 706                 | 125     | 1,441,393  |
| 12  | Railway rolling-stock.....                     | 37                   | 86,547,010           | 1,228               | 283     | 2,529,387  |
| 13  | Sheet metal products.....                      | 129                  | 47,369,004           | 998                 | 283     | 2,101,001  |
| 14  | Wire and wire goods.....                       | 71                   | 24,346,325           | 395                 | 121     | 949,495    |

## Materials, and Values of Products of Canadian Manufacturing Industries, 1935—con.

| Employees on Wages. |         |            | Power<br>Installed. | Cost of<br>Fuel and<br>Electricity. | Cost of<br>Materials. | Value of Products. |             |
|---------------------|---------|------------|---------------------|-------------------------------------|-----------------------|--------------------|-------------|
| Male.               | Female. | Wages.     |                     |                                     |                       | Net. <sup>1</sup>  | Gross.      |
| No.                 | No.     | \$         | h.p.                | \$                                  | \$                    | \$                 | \$          |
| 4,311               | 11,022  | 10,700,966 | 4,099               | 214,492                             | 31,642,215            | 21,989,567         | 53,796,274  |
| 835                 | 1,364   | 1,259,334  | 418                 | 34,933                              | 1,327,480             | 1,750,102          | 1,918,575   |
| 618                 | 282     | 774,698    | 7,610               | 107,640                             | 2,638,585             | 2,390,856          | 5,127,087   |
| 147                 | 1,001   | 709,712    | 595                 | 18,942                              | 1,970,414             | 2,308,006          | 4,357,352   |
| 156                 | 91      | 158,478    | 1,813               | 33,496                              | 1,170,112             | 637,004            | 1,841,202   |
| 301                 | 536     | 526,438    | 1,005               | 30,541                              | 1,707,133             | 1,394,968          | 3,132,642   |
| 181                 | 413     | 459,082    | 1,895               | 64,008                              | 1,558,525             | 2,052,644          | 3,675,177   |
| 11,294              | 6,260   | 12,042,516 | 110,656             | 1,376,331                           | 33,689,873            | 23,812,460         | 59,378,064  |
| 899                 | 146     | 687,512    | 4,055               | 241,801                             | 1,560,868             | 2,202,005          | 4,094,734   |
| 3,770               | 5,573   | 6,482,887  | 15,287              | 938,365                             | 1,738,936             | 13,635,960         | 16,311,261  |
| 62                  | Nil     | 14,349     | 410                 | 2,203                               | 41,744                | 81,002             | 124,949     |
| 1,141               | 6,858   | 4,201,341  | 4,932               | 140,626                             | 13,916,201            | 9,065,917          | 23,152,780  |
| 42                  | 194     | 118,228    | 857                 | 7,457                               | 309,024               | 222,970            | 539,451     |
| 1,744               | 1,831   | 2,699,086  | 1,609               | 122,418                             | 5,649,019             | 5,858,047          | 11,524,478  |
| 6,088               | 10,974  | 11,542,307 | 19,622              | 753,400                             | 22,948,050            | 22,688,047         | 46,390,103  |
| 858                 | 177     | 914,308    | 8,220               | 203,000                             | 3,610,601             | 4,059,372          | 7,907,272   |
| 111                 | 151     | 193,063    | 171                 | 10,507                              | 664,227               | 416,353            | 1,090,087   |
| 5,551               | 3,633   | 6,717,084  | 21,118              | 931,738                             | 10,046,739            | 16,166,863         | 29,045,340  |
| 3,482               | 2,336   | 4,126,079  | 15,700              | 508,399                             | 10,342,336            | 8,402,570          | 19,343,305  |
| 785                 | 248     | 839,935    | 8,750               | 114,834                             | 2,605,343             | 2,805,504          | 5,525,741   |
| 1,174               | 1,246   | 1,581,079  | 6,868               | 198,357                             | 4,986,518             | 3,462,869          | 8,647,141   |
| 39                  | 39      | 50,801     | 122                 | 4,573                               | 182,640               | 216,861            | 404,074     |
| 89,513              | 9,319   | 59,153,665 | 2,160,083           | 26,732,479                          | 175,040,681           | 239,387,227        | 441,160,357 |
| 28                  | Nil     | 17,902     | 258                 | 49,069                              | 87,355                | 138,660            | 188,660     |
| 56                  | 5       | 37,923     | 124                 | 5,400                               | 49,857                | 123,211            | 178,468     |
| 407                 | 3       | 280,370    | 1,730               | 19,307                              | 373,406               | 631,737            | 1,024,450   |
| 2,461               | 2,138   | 3,452,921  | 7,241               | 235,430                             | 12,952,362            | 10,278,576         | 26,466,368  |
| 2,833               | 2,233   | 4,122,418  | 13,886              | 108,961                             | 2,613,538             | 2,076,720          | 5,699,219   |
| 266                 | 1       | 200,479    | 1,816               | 33,511                              | 276,901               | 835,893            | 846,305     |
| 20                  | Nil     | 10,940     | 94                  | 394                                 | 23,948                | 26,319             | 50,661      |
| 598                 | 110     | 526,466    | 1,615               | 40,947                              | 836,153               | 1,393,891          | 2,270,961   |
| 456                 | 1       | 328,022    | 2,161               | 24,063                              | 1,063,761             | 758,539            | 1,846,353   |
| 1,366               | 303     | 2,438,700  | 2,932               | 111,062                             | 1,191,562             | 5,417,273          | 6,719,867   |
| 63                  | 12      | 40,500     | 674                 | 7,671                               | 99,433                | 94,800             | 171,901     |
| 613                 | 4       | 412,392    | 5,365               | 37,905                              | 5,914                 | 94,154             | 2,366,973   |
| 7,213               | 294     | 5,164,744  | 20,718              | 455,687                             | 7,892,538             | 10,859,625         | 19,208,050  |
| 386                 | 182     | 347,972    | 801                 | 20,897                              | 394,727               | 824,206            | 1,239,830   |
| 1,358               | 528     | 2,060,785  | 3,152               | 89,581                              | 3,776,412             | 4,969,451          | 8,835,444   |
| 1,084               | 625     | 1,491,430  | 5,279               | 184,155                             | 6,447,527             | 5,798,499          | 12,425,181  |
| 907                 | 96      | 680,761    | 4,744               | 77,209                              | 1,433,650             | 1,716,811          | 3,227,670   |
| 5,358               | 20      | 3,728,534  | 46,613              | 396,818                             | 8,918,028             | 7,645,626          | 16,960,472  |
| 6,610               | 2,290   | 8,545,133  | 13,311              | 437,270                             | 11,653,559            | 21,097,502         | 33,188,331  |
| 7,955               | 1,222   | 11,067,999 | 24,702              | 731,011                             | 11,197,377            | 43,904,837         | 55,832,925  |
| 23,913              | 633     | 28,065,352 | 1,695,650           | 22,682,883                          | 57,995,037            | 81,973,392         | 162,651,282 |
| 102                 | 3       | 76,877     | 735                 | 6,417                               | 164,336               | 197,016            | 367,792     |
| 381                 | 2       | 342,675    | 3,925               | 139,518                             | 1,852,589             | 2,120,497          | 4,142,604   |
| 22,755              | 100     | 15,461,548 | 287,870             | 651,958                             | 35,927,884            | 29,826,200         | 65,905,132  |
| 409                 | 180     | 406,044    | 1,566               | 744                                 | 1,162                 | 1,024,155          | 1,598,925   |
| 864                 | 8       | 197,565    | 93                  | 13,154                              | 38,156                | 504,741            | 556,051     |
| 650                 | 88      | 361,679    | 1,862               | 15,817                              | 445,261               | 680,859            | 1,141,937   |
| 677                 | 38      | 424,125    | 2,935               | 30,173                              | 600,403               | 852,476            | 1,483,052   |
| 956                 | 85      | 891,489    | 7,848               | 144,387                             | 4,651,131             | 2,742,256          | 7,537,774   |
| 78,623              | 2,985   | 85,546,770 | 660,401             | 12,612,506                          | 203,981,458           | 173,634,965        | 390,228,929 |
| 4,110               | 40      | 4,002,567  | 23,785              | 478,043                             | 6,448,163             | 6,795,250          | 13,692,476  |
| 10,866              | 299     | 14,751,261 | 37,970              | 730,300                             | 76,645,098            | 30,252,247         | 106,624,445 |
| 5,231               | 598     | 6,111,023  | 35,250              | 689,030                             | 18,528,296            | 13,467,926         | 32,084,252  |
| 287                 | 24      | 308,082    | 1,207               | 32,010                              | 616,815               | 624,622            | 1,273,447   |
| 1,871               | 7       | 1,874,705  | 18,941              | 231,328                             | 2,774,327             | 4,359,868          | 7,365,523   |
| 1,426               | Nil     | 1,915,722  | 27,521              | 181,024                             | 3,901,609             | 3,514,966          | 7,567,599   |
| 11,720              | 152     | 10,775,919 | 60,454              | 1,591,805                           | 14,042,832            | 23,145,126         | 35,779,813  |
| 3,893               | 681     | 3,978,071  | 14,236              | 469,221                             | 4,869,850             | 10,637,289         | 18,970,360  |
| 981                 | 30      | 852,843    | 5,839               | 88,235                              | 1,604,729             | 1,977,895          | 3,670,859   |
| 8,684               | 122     | 6,873,154  | 44,326              | 611,375                             | 12,194,263            | 20,050,537         | 32,856,175  |
| 8,662               | 30      | 10,837,997 | 245,170             | 4,845,859                           | 18,539,072            | 15,816,530         | 38,790,961  |
| 15,002              | 23      | 16,256,284 | 114,321             | 1,636,866                           | 20,769,208            | 18,806,965         | 41,213,039  |
| 4,591               | 708     | 4,701,697  | 14,916              | 522,424                             | 18,971,140            | 14,070,732         | 33,504,302  |
| 2,699               | 262     | 2,803,495  | 16,525              | 622,380                             | 5,075,080             | 10,638,212         | 16,256,678  |

<sup>1</sup> See footnote 1 to Table 1, p. 405.



## 9.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Power, Fuel,

|   | Group or Kind of Industry. | Establishments. | Capital Employed.    | Salaried Employees. |               |                    |
|---|----------------------------|-----------------|----------------------|---------------------|---------------|--------------------|
|   |                            |                 |                      | Male.               | Female.       | Salaries.          |
|   |                            | No.             | \$                   | No.                 | No.           | \$                 |
| <b>6.—Non-Ferrous Metal Products.....</b>           |                            | <b>505</b>      | <b>261,625,967</b>   | <b>5,137</b>        | <b>1,657</b>  | <b>12,490,118</b>  |
| 1 Aluminium products.....                           | 19                         | 3,791,756       | 181                  | 37                  |               | 306,199            |
| 2 Brass and copper products.....                    | 124                        | 21,983,841      | 712                  | 172                 |               | 1,648,322          |
| 3 Electrical apparatus and supplies.....            | 182                        | 75,499,255      | 2,027                | 1,082               |               | 7,144,241          |
| 4 Jewellery and silverware.....                     | 112                        | 7,053,330       | 359                  | 171                 |               | 139,633            |
| 5 Miscellaneous non-ferrous metal products...       | 21                         | 1,179,766       | 68                   | 25                  |               | 159,110            |
| 6 Non-ferrous metal smelting and refining.....      | 15                         | 145,688,299     | 817                  | 118                 |               | 2,055,694          |
| 7 White metal alloys.....                           | 32                         | 5,521,720       | 123                  | 52                  |               | 336,919            |
| <b>7.—Non-Metallic Mineral Products.....</b>        |                            | <b>1,188</b>    | <b>300,455,725</b>   | <b>4,045</b>        | <b>885</b>    | <b>8,176,057</b>   |
| 1 Abrasive products.....                            | 15                         | 5,281,916       | 155                  | 48                  |               | 421,020            |
| 2 Aerated and mineral waters.....                   | 401                        | 12,495,396      | 735                  | 146                 |               | 1,197,658          |
| 3 Asbestos products.....                            | 13                         | 1,703,301       | 42                   | 14                  |               | 108,703            |
| 4 Cement.....                                       | 9                          | 52,454,004      | 74                   | 4                   |               | 150,587            |
| 5 Cement products.....                              | 94                         | 3,024,286       | 122                  | 9                   |               | 156,120            |
| 6 Clay products, from domestic clay.....            | 139                        | 20,502,006      | 198                  | 28                  |               | 374,954            |
| 7 Clay products, from imported clay.....            | 20                         | 4,449,314       | 105                  | 28                  |               | 200,769            |
| 8 Coke and gas products.....                        | 44                         | 98,989,160      | 987                  | 321                 |               | 2,043,032          |
| 9 Glass products.....                               | 68                         | 14,168,575      | 244                  | 62                  |               | 633,090            |
| 10 Lime.....  | 54                         | 5,707,391       | 52                   | 9                   |               | 84,741             |
| 11 Miscellaneous non-metallic mineral products..... | 35                         | 7,456,803       | 105                  | 20                  |               | 221,918            |
| 12 Petroleum products.....                          | 58                         | 64,707,454      | 830                  | 99                  |               | 1,057,994          |
| 13 Salt.....  | 10                         | 3,776,332       | 71                   | 30                  |               | 193,135            |
| 14 Sand-lime brick.....                             | 6                          | 608,899         | 13                   | 1                   |               | 16,038             |
| 15 Stone, monumental and ornamental.....            | 222                        | 5,180,887       | 292                  | 36                  |               | 424,728            |
| <b>8.—Chemicals and Chemical Products.....</b>      |                            | <b>734</b>      | <b>147,472,534</b>   | <b>4,989</b>        | <b>1,879</b>  | <b>12,338,856</b>  |
| 1 Acids, alkalies and salts.....                    | 18                         | 33,381,688      | 584                  | 110                 |               | 1,227,893          |
| 2 Adhesives.....                                    | 17                         | 2,066,794       | 51                   | 18                  |               | 128,963            |
| 3 Coal tar distillation.....                        | 10                         | 4,725,668       | 28                   | 6                   |               | 88,836             |
| 4 Explosives, ammunition and fireworks.....         | 8                          | 6,290,008       | 373                  | 127                 |               | 887,953            |
| 5 Fertilizers.....                                  | 19                         | 15,646,828      | 229                  | 50                  |               | 428,463            |
| 6 Gases, compressed.....                            | 28                         | 4,316,244       | 210                  | 61                  |               | 474,884            |
| 7 Inks, printing and writing.....                   | 31                         | 2,723,672       | 153                  | 45                  |               | 454,904            |
| 8 Medicinal and pharmaceutical preparations.....    | 166                        | 20,091,688      | 979                  | 530                 |               | 2,760,890          |
| 9 Miscellaneous chemical products.....              | 118                        | 12,101,735      | 419                  | 171                 |               | 1,015,524          |
| 10 Paints, pigments and varnishes.....              | 80                         | 22,709,466      | 1,045                | 322                 |               | 2,546,999          |
| 11 Polishes and dressings.....                      | 46                         | 1,839,486       | 130                  | 59                  |               | 288,693            |
| 12 Soaps and washing compounds.....                 | 104                        | 14,118,130      | 576                  | 166                 |               | 1,309,325          |
| 13 Toilet preparations.....                         | 83                         | 5,396,952       | 201                  | 205                 |               | 650,840            |
| 14 Wood distillation.....                           | 6                          | 2,064,215       | 11                   | Nil                 |               | 19,010             |
| <b>9.—Miscellaneous Industries.....</b>             |                            | <b>509</b>      | <b>63,588,796</b>    | <b>1,847</b>        | <b>574</b>    | <b>4,019,872</b>   |
| 1 Aircraft.....                                     | 7                          | 1,574,495       | 55                   | 7                   |               | 102,661            |
| 2 Artificial flowers and feathers.....              | 16                         | 256,611         | 22                   | 19                  |               | 41,264             |
| 3 Automobile accessories, fabric.....               | 11                         | 493,788         | 16                   | 12                  |               | 42,351             |
| 4 Brooms, brushes and mops.....                     | 78                         | 4,061,164       | 223                  | 87                  |               | 420,273            |
| 5 Buttons.....                                      | 17                         | 1,429,340       | 60                   | 17                  |               | 157,789            |
| 6 Candles.....                                      | 12                         | 756,829         | 36                   | 12                  |               | 74,007             |
| 7 Fountain pens and pencils.....                    | 10                         | 1,610,830       | 81                   | 28                  |               | 177,542            |
| 8 Ice, artificial.....                              | 48                         | 4,827,420       | 76                   | 15                  |               | 146,352            |
| 9 Jewel cases and silverware cabinets.....          | 4                          | 195,708         | 13                   | 13                  |               | 30,690             |
| 10 Mattresses and springs.....                      | 61                         | 5,800,057       | 236                  | 70                  |               | 547,737            |
| 11 Motion pictures.....                             | 5                          | 783,225         | 101                  | 31                  |               | 214,273            |
| 12 Musical instruments.....                         | 15                         | 2,451,673       | 54                   | 13                  |               | 88,198             |
| 13 Novelties, advertising and other.....            | 11                         | 185,299         | 17                   | 5                   |               | 32,259             |
| 14 Pipes, tobacco.....                              | 3                          | 29,354          | 4                    | Nil                 |               | 3,737              |
| 15 Regalia and society emblems.....                 | 10                         | 144,295         | 12                   | 1                   |               | 19,647             |
| 16 Scientific and professional equipment.....       | 27                         | 4,008,282       | 161                  | 94                  |               | 477,373            |
| 17 Shipbuilding and repairs.....                    | 30                         | 28,157,880      | 309                  | 36                  |               | 678,023            |
| 18 Signs, electric.....                             | 38                         | 2,654,052       | 125                  | 27                  |               | 250,702            |
| 19 Stamps and stencils, rubber and metal.....       | 36                         | 753,671         | 33                   | 19                  |               | 139,062            |
| 20 Statuary, art goods and church supplies.....     | 33                         | 805,553         | 77                   | 29                  |               | 121,060            |
| 21 Store display accessories.....                   | 3                          | 119,000         | 6                    | 4                   |               | 12,058             |
| 22 Toys and toy equipment.....                      | 9                          | 242,506         | 17                   | 9                   |               | 46,301             |
| 23 Typewriter supplies.....                         | 8                          | 803,100         | 39                   | 19                  |               | 160,496            |
| 24 Umbrellas.....                                   | 7                          | 189,106         | 13                   | 3                   |               | 28,143             |
| 25 All other industries.....                        | 1                          | 124,518         | 2                    | 1                   |               | 7,055              |
| <b>10.—Central Electric Stations.....</b>           |                            | <b>1,041</b>    | <b>1,459,821,168</b> | <b>4,950</b>        | <b>1,290</b>  | <b>10,708,868</b>  |
| <b>Totals.....</b>                                  |                            | <b>25,491</b>   | <b>4,698,991,853</b> | <b>82,041</b>       | <b>23,538</b> | <b>173,020,195</b> |

## Materials, and Values of Products of Canadian Manufacturing Industries, 1935—con.

| Employees on Wages. |         |             | Power<br>Installed. | Cost of<br>Fuel and<br>Electricity. | Cost of<br>Materials. | Value of Products. |               |
|---------------------|---------|-------------|---------------------|-------------------------------------|-----------------------|--------------------|---------------|
| Male.               | Female. | Wages.      |                     |                                     |                       | Net. <sup>1</sup>  | Gross.        |
| No.                 | No.     | \$          | h.p.                | \$                                  | \$                    | \$                 | \$            |
| 22,781              | 4,038   | 27,895,350  | 416,927             | 5,717,809                           | 174,906,971           | 107,898,470        | 288,523,250   |
| 782                 | 78      | 783,288     | 5,635               | 128,653                             | 3,258,310             | 1,805,677          | 4,092,840     |
| 3,115               | 247     | 3,101,590   | 25,174              | 544,147                             | 10,584,600            | 8,058,275          | 19,187,022    |
| 8,565               | 2,975   | 10,450,518  | 96,260              | 1,070,801                           | 25,409,896            | 34,672,227         | 61,182,834    |
| 1,707               | 533     | 2,092,717   | 3,025               | 99,594                              | 4,519,732             | 4,073,333          | 9,502,650     |
| 167                 | 49      | 100,859     | 388                 | 14,730                              | 337,338               | 817,967            | 1,170,085     |
| 8,009               | Nil     | 10,631,662  | 282,847             | 3,776,381                           | 126,804,075           | 55,665,202         | 180,245,658   |
| 466                 | 156     | 574,725     | 3,598               | 83,503                              | 3,903,110             | 2,105,789          | 6,182,402     |
| 17,868              | 544     | 19,249,167  | 222,555             | 11,368,432                          | 88,969,870            | 75,846,415         | 176,184,717   |
| 773                 | Nil     | 893,252     | 7,253               | 782,553                             | 2,684,406             | 5,176,971          | 8,643,930     |
| 1,899               | 90      | 1,708,913   | 3,693               | 100,990                             | 3,897,616             | 9,799,179          | 13,851,785    |
| 249                 | 22      | 215,151     | 2,404               | 66,793                              | 518,994               | 544,495            | 1,130,282     |
| 846                 | Nil     | 876,829     | 60,334              | 1,227,410                           | 394,264               | 3,585,369          | 5,580,043     |
| 386                 | 2       | 205,595     | 2,837               | 37,086                              | 459,290               | 657,756            | 1,154,138     |
| 1,502               | Nil     | 1,012,970   | 24,697              | 618,995                             | 60,583                | 2,332,085          | 3,012,563     |
| 636                 | 126     | 657,443     | 2,231               | 187,180                             | 530,735               | 1,457,062          | 2,174,077     |
| 2,798               | 1       | 3,589,289   | 32,812              | 2,432,111                           | 15,233,519            | 20,809,159         | 58,474,789    |
| 2,515               | 264     | 2,667,984   | 12,753              | 837,025                             | 3,618,175             | 5,478,145          | 9,933,348     |
| 695                 | Nil     | 471,308     | 7,183               | 686,186                             | 124,251               | 2,115,354          | 2,925,791     |
| 488                 | 26      | 408,510     | 13,130              | 184,930                             | 1,485,435             | 2,507,135          | 4,287,500     |
| 3,917               | 10      | 5,195,230   | 39,176              | 3,847,490                           | 58,869,814            | 17,233,062         | 79,590,525    |
| 372                 | Nil     | 404,650     | 3,418               | 175,240                             | 38,700                | 1,667,038          | 1,880,978     |
| 57                  | Nil     | 42,662      | 918                 | 17,048                              | 43,083                | 94,819             | 154,950       |
| 735                 | 3       | 749,501     | 0,716               | 107,836                             | 1,010,999             | 1,060,283          | 3,079,118     |
| 9,311               | 2,754   | 11,378,440  | 130,464             | 4,256,062                           | 48,316,876            | 66,001,290         | 118,574,228   |
| 1,925               | 8       | 2,263,004   | 70,656              | 2,158,692                           | 4,096,713             | 12,247,210         | 19,012,016    |
| 311                 | 9       | 204,590     | 1,506               | 114,604                             | 550,700               | 170,935            | 1,436,259     |
| 160                 | 9       | 187,393     | 379                 | 131,391                             | 1,523,137             | 957,810            | 2,096,338     |
| 922                 | 195     | 1,090,625   | 5,981               | 183,330                             | 3,207,264             | 5,146,920          | 5,537,514     |
| 707                 | 1       | 818,875     | 19,296              | 244,131                             | 4,362,594             | 1,368,891          | 6,075,616     |
| 234                 | 5       | 267,097     | 5,490               | 137,134                             | 433,045               | 2,607,589          | 3,077,765     |
| 267                 | 30      | 322,377     | 1,749               | 35,461                              | 1,081,695             | 1,769,697          | 2,886,853     |
| 981                 | 1,174   | 1,789,362   | 3,635               | 157,102                             | 7,009,191             | 14,126,458         | 21,292,761    |
| 814                 | 428     | 899,238     | 7,086               | 176,198                             | 3,449,447             | 4,706,478          | 8,382,123     |
| 1,530               | 103     | 1,695,117   | 7,255               | 289,845                             | 0,610,743             | 10,440,810         | 20,341,407    |
| 124                 | 77      | 142,051     | 198                 | 15,875                              | 959,157               | 1,174,207          | 2,149,239     |
| 973                 | 216     | 1,121,593   | 6,108               | 367,775                             | 8,980,703             | 6,653,570          | 16,002,048    |
| 197                 | 447     | 426,166     | 644                 | 30,639                              | 2,121,621             | 3,865,684          | 6,017,944     |
| 157                 | Nil     | 116,001     | 448                 | 113,885                             | 420,866               | 271,605            | 806,756       |
| 7,959               | 1,890   | 8,262,698   | 61,785              | 850,171                             | 14,691,667            | 21,437,115         | 36,978,953    |
| 222                 | 10      | 225,131     | 638                 | 11,066                              | 362,854               | 506,170            | 880,699       |
| 44                  | 172     | 80,124      | 8                   | 1,407                               | 61,045                | 197,432            | 290,784       |
| 88                  | 37      | 99,909      | 156                 | 6,706                               | 388,152               | 211,270            | 606,128       |
| 885                 | 219     | 717,682     | 1,866               | 46,338                              | 1,548,433             | 1,866,703          | 3,461,474     |
| 360                 | 253     | 384,226     | 708                 | 25,609                              | 477,788               | 867,249            | 1,707,706     |
| 58                  | 27      | 53,477      | 72                  | 8,965                               | 218,556               | 218,193            | 445,714       |
| 224                 | 227     | 357,391     | 564                 | 17,618                              | 967,820               | 886,362            | 1,871,800     |
| 432                 | 14      | 381,716     | 10,903              | 181,469                             | 72,545                | 1,327,554          | 1,581,568     |
| 47                  | 51      | 69,285      | 69                  | 3,906                               | 123,425               | 158,103            | 285,434       |
| 1,203               | 220     | 1,176,982   | 4,375               | 89,434                              | 3,501,112             | 7,793,021          | 6,383,567     |
| 11                  | 3       | 11,815      | 48                  | 5,607                               | 608,108               | 473,649            | 1,087,364     |
| 281                 | 11      | 198,177     | 1,181               | 35,852                              | 174,797               | 327,019            | 556,068       |
| 77                  | 48      | 61,212      | 42                  | 2,268                               | 104,708               | 155,241            | 262,217       |
| 17                  | 1       | 10,439      | 15                  | 681                                 | 10,429                | 15,613             | 26,723        |
| 13                  | 19      | 19,141      | 29                  | 857                                 | 28,922                | 62,341             | 92,120        |
| 428                 | 238     | 682,002     | 3,023               | 78,229                              | 2,363,265             | 3,158,021          | 5,599,515     |
| 2,620               | 2       | 2,624,364   | 36,483              | 259,342                             | 2,021,381             | 5,010,719          | 7,291,442     |
| 375                 | 9       | 401,759     | 154                 | 40,058                              | 383,011               | 1,238,818          | 1,661,887     |
| 170                 | 4       | 168,191     | 206                 | 8,731                               | 104,190               | 405,801            | 518,722       |
| 176                 | 164     | 238,624     | 737                 | 10,207                              | 456,805               | 516,425            | 983,437       |
| 31                  | 2       | 25,256      | 134                 | 2,870                               | 15,441                | 50,734             | 69,054        |
| 124                 | 81      | 123,223     | 53                  | 4,003                               | 188,921               | 395,531            | 588,455       |
| 68                  | 25      | 96,471      | 263                 | 7,886                               | 272,935               | 405,794            | 686,615       |
| 24                  | 4       | 46,213      | 20                  | 873                                 | 171,120               | 127,070            | 209,063       |
| 8                   | 6       | 9,728       | 38                  | 1,520                               | 35,004                | 62,273             | 98,797        |
| 9,218               | Nil     | 11,811,125  | 7,310,973           | 2,054,876                           | Nil                   | 135,060,935        | 137,114,911   |
| 366,778             | 110,517 | 417,306,700 | 11,657,748          | 84,273,128                          | 1,420,885,153         | 1,302,179,099      | 2,807,337,381 |

<sup>1</sup> See footnote 1 to Table I, p. 405.

### Subsection 2.—Manufactures Classified by the Purpose of the Products.

**Production of Manufactured Goods According to the Purpose Classification.**—In addition to the classification according to the chief component material of the products used for the industrial census in detailed presentation, a separate and distinct classification, based on the chief purpose of the products, was applied for the first time to the census returns of 1922 and is presented in Table 10 for the years 1922, 1924, 1926, 1929, 1933 to 1935 in summary form, and for 1935 in more detail.

Significant changes have occurred since 1922 in the importance of the various groups shown in the purpose classification. Indicative of the increasing industrialization of the Dominion is the increase in the "industrial equipment" group from 17.0 p.c. of the total value of production in 1922 to 18.7 p.c. of the total in 1935, and the increase in "producers materials" from 26.8 p.c. to 30.1 p.c. during the same period. Another significant change is the decline in the "food" group which dropped from a production of 27.1 p.c. to 21.9 p.c. of the total. Whereas in 1922, food products comprised the leading group, in 1935 the production of producers materials ranked first in importance. It should also be noted, however, that the cost of materials in this group is abnormally high. The following other groups have improved their positions since 1922: vehicles and vessels advanced from an output of 6.5 p.c. to 7.7 p.c. of the total value of production; drink and tobacco from 4.0 p.c. to 4.3 p.c.; and books and stationery from 4.0 p.c. to 4.2 p.c. The following groups, in addition to food, declined in importance: the clothing group dropped from 9.5 p.c. to 8.9 p.c.; house furnishings from 2.5 p.c. to 1.9 p.c.; and personal utilities from 2.3 p.c. to 1.5 p.c.

In analysing the relative standing of the two groups which are perhaps of the greatest interest, it is noted that the gross production of the "food" industries in 1935 was 21.9 p.c. of the output of Canadian manufactures, as compared with an output of only 8.9 p.c. for the "clothing" industries. Aside from the fact that a much larger proportion of its products is exported, the greater value of production in the "food" group was due, in part, to the higher cost of raw materials, the value added by manufacture being 14.4 p.c. of the total for all industries in the case of the "food" group and 8.7 p.c. for the "clothing" group. The "clothing" industries also gave employment to 11,963 more persons than the "food" industries, but paid out \$2,500,234 less in salaries and wages.

From the detailed analysis of the food group for 1935 given at the end of Table 10, it will be seen that over 35 p.c. of the 1935 gross production of the group was made up of breadstuffs, and this subdivision accounts for over 40 p.c. of total salaries and wages. Meats and milk products accounted for 22 p.c. and 18 p.c., respectively, of gross production. In all these three major subdivisions the average of wages and salaries was comparatively high, being in the neighbourhood of \$1,000 for the year.

In the clothing industry, on the other hand, only in the fur goods subdivision was the \$1,000 average approximated, but this division accounted for less than 6 p.c. of the gross production of the clothing group.

10.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Purpose of the Principal Product, by Main Groups for Representative Years 1922-35, and in Detail for 1935.

| Year and Purpose Heading. | Estab-<br>lish-<br>ments. | Capital.             | Em-<br>ployees. | Salaries<br>and Wages. | Cost of<br>Materials. | Gross<br>Value of<br>Products. <sup>1</sup> |
|---------------------------|---------------------------|----------------------|-----------------|------------------------|-----------------------|---|
|                           | No.                       | \$                   | No.             | \$                     | \$                    | \$  |
| <b>1922.</b>              |                           |                      |                 |                        |                       |   |
| <b>Totals</b> .....       | <b>22,541</b>             | <b>3,244,202,410</b> | <b>474,430</b>  | <b>510,421,312</b>     | <b>1,283,774,723</b>  | <b>2,482,209,130</b>                        |
| Food.....                 | 8,256                     | 343,867,673          | 66,351          | 67,738,707             | 490,731,438           | 673,704,031                                 |
| Drink and tobacco.....    | 496                       | 104,047,481          | 13,402          | 13,777,986             | 33,027,203            | 90,528,510                                  |
| Clothing.....             | 1,279                     | 175,076,687          | 70,931          | 65,595,519             | 115,749,053           | 236,553,193                                 |
| Personal utilities.....   | 936                       | 56,060,262           | 16,904          | 17,080,049             | 21,879,031            | 57,258,476                                  |
| House furnishings.....    | 600                       | 75,168,053           | 18,032          | 19,861,883             | 24,056,960            | 62,961,050                                  |
| Books and stationery..... | 1,557                     | 82,240,691           | 23,103          | 36,920,804             | 27,190,071            | 99,118,999                                  |
| Vehicles and vessels..... | 1,184                     | 101,237,804          | 30,067          | 37,237,412             | 87,840,814            | 100,624,079                                 |
| Producers materials.....  | 5,538                     | 1,086,692,015        | 143,354         | 147,581,011            | 516,400,409           | 966,241,271                                 |
| Industrial equipment..... | 2,055                     | 1,124,931,330        | 85,933          | 103,576,535            | 160,005,399           | 421,211,824                                 |
| Miscellaneous.....        | 30                        | 4,900,434            | 869             | 1,061,383              | 2,964,354             | 4,916,418                                   |
| <b>1924.</b>              |                           |                      |                 |                        |                       |   |
| <b>Totals</b> .....       | <b>22,178</b>             | <b>3,538,813,460</b> | <b>508,503</b>  | <b>559,884,945</b>     | <b>1,438,409,681</b>  | <b>2,695,653,582</b>                        |
| Food.....                 | 8,036                     | 364,420,646          | 74,721          | 73,119,482             | 515,708,299           | 702,713,901                                 |
| Drink and tobacco.....    | 518                       | 124,000,298          | 14,702          | 15,748,590             | 39,159,283            | 111,877,777                                 |
| Clothing.....             | 1,956                     | 197,041,969          | 81,729          | 75,380,919             | 130,130,048           | 200,944,008                                 |
| Personal utilities.....   | 941                       | 48,367,610           | 9,547           | 11,067,580             | 20,354,177            | 41,815,384                                  |
| House furnishings.....    | 587                       | 64,787,015           | 15,820          | 17,142,226             | 22,448,984            | 58,014,837                                  |
| Books and stationery..... | 1,600                     | 100,017,954          | 29,486          | 40,213,100             | 32,360,395            | 107,272,029                                 |
| Vehicles and vessels..... | 980                       | 205,551,891          | 34,140          | 44,977,007             | 117,515,075           | 195,403,284                                 |
| Producers materials.....  | 5,716                     | 1,251,962,266        | 163,523         | 178,646,967            | 584,533,201           | 707,759,255                                 |
| Industrial equipment..... | 2,204                     | 1,149,628,422        | 80,400          | 100,883,940            | 160,470,513           | 425,230,330                                 |
| Miscellaneous.....        | 150                       | 33,035,383           | 4,420           | 4,714,828              | 15,779,166            | 27,089,778                                  |
| <b>1926.</b>              |                           |                      |                 |                        |                       |   |
| <b>Totals</b> .....       | <b>22,708</b>             | <b>3,931,569,590</b> | <b>531,539</b>  | <b>653,589,933</b>     | <b>1,728,624,192</b>  | <b>3,321,260,231</b>                        |
| Food.....                 | 8,259                     | 394,159,943          | 87,343          | 78,143,619             | 551,403,701           | 733,223,094                                 |
| Drink and tobacco.....    | 574                       | 137,130,189          | 15,341          | 16,817,622             | 41,515,122            | 130,895,267                                 |
| Clothing.....             | 1,878                     | 211,149,085          | 91,215          | 85,361,012             | 158,095,630           | 300,551,672                                 |
| Personal utilities.....   | 984                       | 50,497,988           | 10,633          | 12,470,247             | 24,230,592            | 49,724,101                                  |
| House furnishings.....    | 543                       | 60,277,954           | 15,684          | 16,858,549             | 24,673,089            | 56,553,652                                  |
| Books and stationery..... | 1,716                     | 108,632,165          | 31,500          | 43,781,915             | 34,576,475            | 116,119,228                                 |
| Vehicles and vessels..... | 917                       | 271,235,675          | 30,731          | 70,315,570             | 173,650,584           | 260,094,410                                 |
| Producers materials.....  | 5,807                     | 1,404,509,475        | 182,590         | 206,672,939            | 645,319,933           | 935,766,740                                 |
| Industrial equipment..... | 2,457                     | 1,313,175,892        | 91,956          | 118,162,492            | 213,697,826           | 516,880,827                                 |
| Miscellaneous.....        | 173                       | 30,838,823           | 4,537           | 5,266,966              | 16,107,849            | 29,190,480                                  |
| <b>1929.</b>              |                           |                      |                 |                        |                       |   |
| <b>Totals</b> .....       | <b>23,537</b>             | <b>5,083,614,754</b> | <b>694,434</b>  | <b>813,049,842</b>     | <b>2,053,920,975</b>  | <b>4,029,371,340</b>                        |
| Food.....                 | 8,361                     | 463,984,558          | 94,707          | 87,960,038             | 607,306,238           | 837,986,384                                 |
| Drink and tobacco.....    | 590                       | 201,305,735          | 18,970          | 21,070,870             | 65,440,053            | 208,998,998                                 |
| Clothing.....             | 2,054                     | 250,215,735          | 106,641         | 100,863,405            | 176,130,224           | 363,011,970                                 |
| Personal utilities.....   | 980                       | 56,155,234           | 11,148          | 13,595,321             | 29,389,246            | 61,191,750                                  |
| House furnishings.....    | 600                       | 76,185,921           | 20,857          | 23,248,775             | 34,293,465            | 77,811,331                                  |
| Books and stationery..... | 1,917                     | 144,222,275          | 38,141          | 56,003,183             | 45,384,362            | 155,947,960                                 |
| Vehicles and vessels..... | 781                       | 310,942,038          | 61,835          | 91,239,185             | 243,293,530           | 407,947,643                                 |
| Producers materials.....  | 6,210                     | 1,772,809,696        | 222,104         | 267,233,327            | 523,139,599           | 1,161,390,753                               |
| Industrial equipment..... | 2,600                     | 1,774,844,446        | 116,086         | 156,051,963            | 304,581,449           | 737,711,202                                 |
| Miscellaneous.....        | 105                       | 32,739,065           | 3,939           | 4,584,261              | 13,007,959            | 27,403,344                                  |
| <b>1933.</b>              |                           |                      |                 |                        |                       |   |
| <b>Totals</b> .....       | <b>25,232</b>             | <b>4,689,373,704</b> | <b>493,903</b>  | <b>465,562,090</b>     | <b>969,138,574</b>    | <b>2,086,847,847</b>                        |
| Food.....                 | 8,750                     | 408,995,499          | 75,434          | 68,052,798             | 313,760,942           | 492,729,174                                 |
| Drink and tobacco.....    | 670                       | 135,612,678          | 18,280          | 17,626,141             | 40,454,300            | 98,409,638                                  |
| Clothing.....             | 2,333                     | 166,963,903          | 85,891          | 63,883,623             | 104,608,696           | 209,867,715                                 |
| Personal utilities.....   | 601                       | 39,681,900           | 8,938           | 8,616,372              | 15,323,843            | 35,589,961                                  |
| House furnishings.....    | 654                       | 86,047,002           | 23,827          | 12,887,200             | 20,064,584            | 58,084,649                                  |
| Books and stationery..... | 2,170                     | 132,507,101          | 34,309          | 42,850,661             | 26,513,830            | 108,477,707                                 |
| Vehicles and vessels..... | 479                       | 232,153,543          | 37,618          | 35,725,625             | 56,917,292            | 120,992,781                                 |
| Producers materials.....  | 6,564                     | 1,459,560,284        | 139,734         | 126,208,238            | 252,353,314           | 573,961,467                                 |
| Industrial equipment..... | 2,860                     | 1,974,679,340        | 74,778          | 85,587,303             | 133,382,392           | 394,907,113                                 |
| Miscellaneous.....        | 142                       | 23,163,454           | 3,334           | 3,544,129              | 7,510,826             | 18,497,642                                  |
| <b>1934.</b>              |                           |                      |                 |                        |                       |   |
| <b>Totals</b> .....       | <b>25,663</b>             | <b>4,703,917,730</b> | <b>545,162</b>  | <b>533,594,635</b>     | <b>1,230,977,053</b>  | <b>2,533,768,954</b>                        |
| Food.....                 | 8,871                     | 415,600,641          | 81,180          | 74,000,460             | 338,025,332           | 527,755,257                                 |
| Drink and tobacco.....    | 680                       | 131,802,821          | 18,348          | 18,316,163             | 42,394,220            | 100,791,466                                 |
| Clothing.....             | 2,413                     | 170,761,461          | 91,589          | 69,907,983             | 121,511,064           | 236,028,354                                 |
| Personal utilities.....   | 616                       | 39,466,768           | 10,029          | 9,965,177              | 18,721,601            | 40,313,288                                  |
| House furnishings.....    | 670                       | 86,913,969           | 16,981          | 14,630,504             | 20,728,352            | 46,826,546                                  |
| Books and stationery..... | 2,247                     | 133,383,455          | 35,445          | 44,495,558             | 31,627,029            | 111,421,559                                 |
| Vehicles and vessels..... | 467                       | 221,882,115          | 41,155          | 44,644,716             | 99,699,373            | 175,812,392                                 |
| Producers materials.....  | 6,646                     | 1,443,937,009        | 163,909         | 156,167,785            | 338,004,464           | 744,812,640                                 |
| Industrial equipment..... | 2,866                     | 2,006,485,870        | 83,657          | 97,396,113             | 171,387,338           | 470,746,065                                 |
| Miscellaneous.....        | 157                       | 23,622,992           | 3,768           | 3,980,166              | 9,507,772             | 22,402,587                                  |

<sup>1</sup> See footnote 1 to Table 1, p. 405. Net values are not available for the purpose classification.

10.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Purpose of the Principal Product, by Main Groups for Representative Years 1922-1935, and in Detail for 1935—concluded.

| Year and Purpose Heading.                  | Estab-<br>lish-<br>ments. | Capital.<br><br>\$   | Em-<br>ployees.<br><br>No. | Salaries<br>and Wages.<br><br>\$ | Cost of<br>Materials.<br><br>\$ | Gross<br>Value of<br>Products. <sup>1</sup><br><br>\$ |
|--|---------------------------|----------------------|----------------------------|----------------------------------|---------------------------------|---|
| 1935.                                      | No.                       | \$                   | No.                        | \$                               | \$                              | \$  |
| <b>Totals</b> .....                        | <b>25,491</b>             | <b>4,698,991,853</b> | <b>582,874</b>             | <b>590,326,904<sup>2</sup></b>   | <b>1,120,885,153</b>            | <b>2,807,337,351</b>                                  |
| Food.....                                  | 8,561                     | 465,894,748          | 83,920                     | 78,173,759 <sup>2</sup>          | 415,364,620                     | 614,425,247   |
| Breadstuffs.....                           | 677                       | 183,501,357          | 19,165                     | 19,785,411                       | 49,941,998                      | 121,157,062   |
| Clothing.....                              | 2,444                     | 177,567,199          | 95,893                     | 75,673,525                       | 129,135,498                     | 249,820,483   |
| Personal utilities.....                    | 612                       | 39,588,755           | 10,284                     | 10,333,919                       | 21,585,937                      | 43,453,234  |
| House furnishings.....                     | 679                       | 66,402,670           | 18,018                     | 15,911,383                       | 24,494,871                      | 52,944,629  |
| Books and stationery.....                  | 2,262                     | 128,707,801          | 36,626                     | 46,896,177                       | 34,354,450                      | 117,736,267   |
| Vehicles and vessels.....                  | 461                       | 226,007,916          | 45,717                     | 32,362,973                       | 120,325,337                     | 215,103,397   |
| Producers materials.....                   | 6,737                     | 1,410,995,540        | 177,160                    | 175,890,774                      | 427,603,908                     | 845,108,272   |
| Industrial equipment.....                  | 2,897                     | 2,037,312,404        | 91,835                     | 109,494,019                      | 187,338,713                     | 524,836,751   |
| Miscellaneous.....                         | 158                       | 23,913,463           | 4,246                      | 4,804,961                        | 10,619,821                      | 23,052,039  |
| <b>1935—DETAIL.</b>                        |                           |                      |                            |                                  |                                 |   |
| <b>Food</b> .....                          | <b>8,561</b>              | <b>465,894,748</b>   | <b>83,920</b>              | <b>78,173,759<sup>2</sup></b>    | <b>415,364,620</b>              | <b>614,425,247</b>                                    |
| Breadstuffs.....                           | 4,470                     | 153,543,234          | 36,476                     | 32,514,902                       | 135,132,805                     | 218,054,986   |
| Fish.....                                  | 630                       | 17,144,806           | 4,706                      | 2,874,553                        | 14,772,722                      | 23,458,356  |
| Fruits and vegetables.....                 | 298                       | 38,272,879           | 7,912                      | 5,063,431                        | 22,252,826                      | 38,470,487  |
| Meats.....                                 | 198                       | 69,364,626           | 11,038                     | 12,803,375                       | 109,431,151                     | 135,295,407   |
| Milk products.....                         | 2,040                     | 65,919,583           | 15,855                     | 15,142,428 <sup>2</sup>          | 76,042,505                      | 110,152,368   |
| Oils and fats.....                         | 4                         | 112,077              | 25                         | 27,789                           | 66,469                          | 139,619   |
| Sugar industries.....                      | 8                         | 33,017,874           | 2,134                      | 3,086,601                        | 25,137,568                      | 36,997,997  |
| Infusions.....                             | 80                        | 13,431,195           | 2,118                      | 2,837,077                        | 17,643,308                      | 24,214,761  |
| Miscellaneous.....                         | 221                       | 25,068,374           | 3,006                      | 4,123,463                        | 14,965,206                      | 28,235,266  |
| <b>Drink and Tobacco</b> .....             | <b>677</b>                | <b>183,501,357</b>   | <b>19,165</b>              | <b>19,785,411</b>                | <b>49,941,998</b>               | <b>121,157,062</b>                                    |
| Beverages, alcoholic.....                  | 89                        | 99,973,349           | 6,040                      | 8,068,913                        | 18,038,979                      | 56,813,401  |
| Beverages, non-alcoholic.....              | 451                       | 10,831,979           | 3,481                      | 3,534,248                        | 6,204,584                       | 17,004,023  |
| Tobacco.....                               | 137                       | 68,696,029           | 9,634                      | 8,163,250                        | 20,508,441                      | 47,839,638  |
| <b>Clothing</b> .....                      | <b>2,444</b>              | <b>177,567,199</b>   | <b>95,893</b>              | <b>75,673,525</b>                | <b>129,135,498</b>              | <b>249,820,483</b>                                    |
| Boots and shoes.....                       | 217                       | 24,313,445           | 19,930                     | 11,742,871                       | 19,431,790                      | 35,980,912  |
| Fur goods.....                             | 322                       | 11,432,808           | 3,724                      | 3,797,913                        | 8,163,073                       | 18,893,417  |
| Garments and personal<br>furnishings.....  | 1,072                     | 58,500,315           | 40,221                     | 32,159,763                       | 68,333,244                      | 119,803,888   |
| Gloves and mittens.....                    | 54                        | 3,036,690            | 1,900                      | 1,341,072                        | 2,214,605                       | 4,220,553   |
| Hats and caps.....                         | 185                       | 6,707,611            | 4,468                      | 3,781,669                        | 5,640,938                       | 11,815,202  |
| Knitted goods.....                         | 103                       | 50,048,900           | 15,511                     | 14,252,653                       | 22,948,056                      | 49,890,103  |
| Waterproofs.....                           | 16                        | 759,872              | 297                        | 255,450                          | 664,227                         | 1,090,887   |
| Miscellaneous textiles, &c.....            | 416                       | 22,767,558           | 10,752                     | 8,339,134                        | 1,738,930                       | 16,311,261  |
| <b>Personal Utilities</b> .....            | <b>612</b>                | <b>39,588,755</b>    | <b>10,284</b>              | <b>10,333,919</b>                | <b>21,585,937</b>               | <b>43,453,234</b>                                     |
| Jewellery and timepieces.....              | 116                       | 8,140,038            | 2,894                      | 3,132,325                        | 4,643,157                       | 9,878,093   |
| Recreational supplies.....                 | 61                        | 4,222,457            | 1,273                      | 1,016,184                        | 1,107,880                       | 2,820,817   |
| Personal utilities.....                    | 435                       | 27,217,260           | 6,117                      | 6,185,410                        | 15,834,900                      | 30,754,324  |
| <b>House Furnishings</b> .....             | <b>679</b>                | <b>66,402,670</b>    | <b>18,018</b>              | <b>15,911,383</b>                | <b>24,494,871</b>               | <b>52,944,629</b>                                     |
| <b>Books and Stationery</b> .....          | <b>2,262</b>              | <b>128,707,801</b>   | <b>36,626</b>              | <b>46,896,177</b>                | <b>34,354,450</b>               | <b>117,736,267</b>                                    |
| <b>Vehicles and Vessels</b> .....          | <b>461</b>                | <b>226,007,916</b>   | <b>45,717</b>              | <b>32,362,973</b>                | <b>120,325,337</b>              | <b>215,103,397</b>                                    |
| <b>Producers Materials</b> .....           | <b>6,737</b>              | <b>1,410,995,540</b> | <b>177,160</b>             | <b>175,890,774</b>               | <b>427,603,908</b>              | <b>845,108,272</b>                                    |
| Farm materials.....                        | 19                        | 15,646,828           | 906                        | 1,239,337                        | 4,362,594                       | 6,075,616   |
| Manufacturers materials.....               | 1,117                     | 1,102,343,945        | 117,821                    | 126,204,359                      | 330,050,688                     | 651,550,082   |
| Building materials.....                    | 5,004                     | 221,869,857          | 43,440                     | 35,011,831                       | 66,330,121                      | 134,048,112   |
| General materials.....                     | 597                       | 70,234,910           | 14,903                     | 13,436,247                       | 26,935,306                      | 52,538,862  |
| <b>Industrial Equipment</b> .....          | <b>2,897</b>              | <b>2,037,312,404</b> | <b>91,835</b>              | <b>109,494,019</b>               | <b>187,338,713</b>              | <b>524,836,751</b>                                    |
| Farming equipment.....                     | 41                        | 55,713,401           | 5,034                      | 5,361,495                        | 8,497,262                       | 13,831,136  |
| Manufacturing equipment.....               | 224                       | 61,044,427           | 9,547                      | 11,045,724                       | 12,588,990                      | 34,090,005  |
| Trading equipment.....                     | 144                       | 9,542,522            | 1,663                      | 1,876,404                        | 952,830                         | 4,780,063   |
| Service equipment.....                     | 275                       | 30,562,972           | 6,008                      | 7,012,207                        | 11,275,522                      | 31,234,028  |
| Light, heat, and power equip-<br>ment..... | 1,465                     | 1,715,390,000        | 42,623                     | 55,867,256                       | 102,082,355                     | 324,796,557   |
| General equipment.....                     | 748                       | 165,059,002          | 20,930                     | 28,330,933                       | 53,343,784                      | 116,098,962   |
| <b>Miscellaneous</b> .....                 | <b>158</b>                | <b>23,913,463</b>    | <b>4,246</b>               | <b>4,804,961</b>                 | <b>10,619,821</b>               | <b>23,052,039</b>                                     |

<sup>1</sup> See footnote 1 to Table 1, p. 405. Net values are not available for the purpose classification.

<sup>2</sup> Exclusive of employees in the butter and cheese industry in Quebec.

### Subsection 3.—Manufactures Classified by Origin of the Materials.

**Classification of Manufacturing Production According to the Origin of the Materials Worked Upon.**—The principal statistics of the manufactures of Canada, classified upon the basis of "origin", are presented in Table 11 for the years 1924, 1926, 1929, 1933 to 1935. By this means Canadian manufacturing production may be analysed from a new angle, one by means of which interesting comparisons can be made with the external trade classification according to origin.

The distinction made between farm materials of Canadian and foreign origin is based on whether the materials are indigenous to Canada rather than their actual source. Thus, the industries included in the foreign origin classes are those depending upon materials which cannot be grown in Canada, such as tea, coffee, spices, cane sugar, rice, rubber, cotton, etc., but it should be understood that industries included in the Canadian origin classes may be using large quantities of imported corn, fruit, tobacco, hides, wool, etc.

While the period reviewed in the following table covers only the short space of the 12 years from 1924 to 1935, interesting changes have taken place in the relative importance of the industries based on materials from the different origins. Since the purpose of such a comparison is to discover the relative importance of the manufacturing work done upon materials from the different origins, the figures of net value of products or the value added to the raw materials by the manufacturing processes will give a more accurate measure of the importance of the industrial groups than the figures of gross value of products.

The value added in the manufacture of materials of mineral origin represented 32.5 p.c. of the total value added by manufacture in all industries in 1935. This group advanced from second place in 1924 when the percentage of the total was 27.9. The second largest group from the point of view of value added is that of farm origin which accounted for 27.9 p.c. of the total value in 1935. This group was in first place in 1924 with 30.7 p.c. of the total. The value added by the industries of the forest group, which are third in importance, declined from 23.8 p.c. of the total in 1924 to 18.7 p.c. in 1935. On the other hand, central electric stations bettered their position, the percentages of the totals being 7.6 in 1924 and 9.9 in 1935. The above percentages of values added are based on the old method of computation, whereby the materials only are deducted from the gross value of products. The increase during the period under review in the relative importance of the industries of the mineral group was probably due to a number of influences. The expansion of the motor vehicle industry, the rapid growth in the use of electrical equipment, growing dependence of the construction industry upon large quantities of steel, cement, and various other manufactured mineral products, and the development of metallurgical plants in Canada were some factors in the growing importance of the mineral group of industries. Another factor in this trend has been the growing appreciation and development of the wealth of the mineral resources of Canada. Not only have the various mining activities made the raw materials for mineral industries more readily available, but those activities have also required large quantities of machinery, electrical apparatus, and other finished products of mineral origin.

In the year 1935, the industries of the farm group exceeded those of any other group in the gross value of products with 35.1 p.c. of the total, as compared with 34.3 p.c. for the mineral and 15.4 p.c. for the forest origin group. These three principal groups stood in the same order of importance with regard to the number of persons employed. In salaries and wages paid, the mineral origin group ranked first, followed by the farm origin and forest origin groups. In the matter of capital

invested, central electric stations led with 31.1 p.c. of the total, followed by the mineral group with 26.8 p.c., the forest group with 18.4 p.c. and the farm group with 17.8 p.c.

**11.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Origin of the Material Used, by Main Groups for Representative Years 1924-35.**

| Year and Origin.                 | Estab-<br>lish-<br>ments. | Capital.      | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials. | Gross<br>Value<br>of<br>Products. <sup>1</sup> |
|----------------------------------|---------------------------|---------------|-----------------|---------------------------|--------------------------|--|
|                                  | No.                       | \$            | No.             | \$                        | \$                       | \$   |
| <b>1924.</b>                     |                           |               |                 |                           |                          |  |
| <b>Grand Totals</b> .....        | 22,178                    | 3,539,813,460 | 508,503         | 539,884,045               | 1,438,409,681            | 2,695,053,582                                  |
| <b>Farm Origin—</b>              |                           |               |                 |                           |                          |  |
| (a) From field crops.....        | 4,506                     | 525,717,571   | 89,436          | 67,789,237                | 433,443,376              | 601,513,259                                    |
| Canadian origin.....             | 4,311                     | 299,158,049   | 51,462          | 33,793,131                | 270,753,367              | 404,469,331                                    |
| Foreign origin.....              | 284                       | 226,559,522   | 37,974          | 33,996,106                | 162,690,009              | 251,043,428                                    |
| (b) From animal husbandry.....   | 4,086                     | 253,858,982   | 64,671          | 66,696,501                | 285,502,644              | 413,007,421                                    |
| Canadian origin.....             | 4,068                     | 247,073,900   | 63,052          | 65,424,526                | 282,604,516              | 407,766,406                                    |
| Foreign origin.....              | 18                        | 6,785,082     | 1,619           | 1,271,975                 | 2,898,128                | 5,241,015                                      |
| <b>Totals, Farm Origin</b> ..... | 8,681                     | 779,576,553   | 154,107         | 154,485,738               | 718,946,020              | 1,104,520,680                                  |
| Canadian origin.....             | 8,379                     | 546,231,949   | 114,514         | 119,217,657               | 553,357,853              | 848,230,237                                    |
| Foreign origin.....              | 302                       | 233,344,604   | 39,593          | 35,268,081                | 165,598,197              | 256,289,443                                    |
| Wild life origin.....            | 226                       | 10,837,249    | 2,944           | 3,194,213                 | 7,506,169                | 13,386,266                                     |
| Marine origin.....               | 836                       | 20,304,785    | 11,157          | 3,344,348                 | 16,089,332               | 26,637,062                                     |
| Forest origin.....               | 6,873                     | 876,149,932   | 126,907         | 147,719,245               | 245,183,429              | 544,282,597                                    |
| Mineral origin.....              | 2,806                     | 1,010,517,944 | 136,837         | 171,008,497               | 349,800,585              | 700,002,697                                    |
| Mixed origin.....                | 1,805                     | 212,861,904   | 63,723          | 62,125,420                | 100,584,146              | 211,054,212                                    |
| Central electric stations.....   | 951                       | 628,505,093   | 12,828          | 17,946,584                | Nil                      | 95,169,708                                     |
| <b>1926.</b>                     |                           |               |                 |                           |                          |  |
| <b>Grand Totals</b> .....        | 22,708                    | 3,981,569,590 | 581,539         | 653,850,933               | 1,728,624,192            | 3,221,269,231                                  |
| <b>Farm Origin—</b>              |                           |               |                 |                           |                          |  |
| (a) From field crops.....        | 4,697                     | 565,932,312   | 99,200          | 95,403,666                | 456,522,508              | 773,023,228                                    |
| Canadian origin.....             | 4,434                     | 323,033,863   | 56,017          | 54,719,806                | 269,452,808              | 489,709,022                                    |
| Foreign origin.....              | 263                       | 242,898,449   | 43,183          | 40,683,860                | 187,069,640              | 286,314,206                                    |
| (b) From animal husbandry.....   | 4,149                     | 258,779,323   | 68,362          | 71,675,146                | 337,243,258              | 475,760,979                                    |
| Canadian origin.....             | 4,137                     | 248,759,804   | 65,939          | 69,600,146                | 333,770,293              | 467,253,826                                    |
| Foreign origin.....              | 12                        | 10,019,519    | 2,423           | 1,985,000                 | 3,472,965                | 8,507,153                                      |
| <b>Totals, Farm Origin</b> ..... | 8,846                     | 824,711,635   | 167,562         | 167,078,812               | 823,765,766              | 1,248,784,207                                  |
| Canadian origin.....             | 8,571                     | 571,793,667   | 121,956         | 124,409,952               | 633,223,161              | 953,962,848                                    |
| Foreign origin.....              | 275                       | 252,917,968   | 45,606          | 42,668,860                | 190,542,005              | 294,821,359                                    |
| Wild life origin.....            | 232                       | 13,321,668    | 3,662           | 4,328,731                 | 12,459,350               | 21,775,688                                     |
| Marine origin.....               | 831                       | 28,868,071    | 17,408          | 5,022,837                 | 22,034,129               | 36,190,764                                     |
| Forest origin.....               | 6,710                     | 926,726,166   | 133,428         | 159,909,652               | 260,039,864              | 597,561,657                                    |
| Mineral origin.....              | 3,284                     | 1,200,704,022 | 173,515         | 226,802,705               | 489,598,292              | 982,103,019                                    |
| Mixed origin.....                | 1,748                     | 231,017,962   | 72,558          | 70,105,190                | 120,420,791              | 245,630,163                                    |
| Central electric stations.....   | 1,057                     | 756,220,066   | 13,406          | 19,943,000                | Nil                      | 88,933,733                                     |
| <b>1929.</b>                     |                           |               |                 |                           |                          |  |
| <b>Grand Totals</b> .....        | 23,597                    | 5,083,014,754 | 694,434         | 813,049,842               | 2,032,030,975            | 4,029,371,340                                  |
| <b>Farm Origin—</b>              |                           |               |                 |                           |                          |  |
| (a) From field crops.....        | 5,191                     | 697,206,163   | 114,236         | 115,201,292               | 496,842,530              | 880,075,246                                    |
| Canadian origin.....             | 4,893                     | 436,282,846   | 67,234          | 67,235,530                | 326,292,528              | 598,311,861                                    |
| Foreign origin.....              | 298                       | 260,923,317   | 47,002          | 47,965,762                | 170,550,057              | 290,763,385                                    |
| (b) From animal husbandry.....   | 3,873                     | 300,457,360   | 71,518          | 76,931,259                | 361,854,627              | 522,170,403                                    |
| Canadian origin.....             | 3,850                     | 272,178,703   | 67,446          | 73,105,463                | 356,763,503              | 607,674,323                                    |
| Foreign origin.....              | 23                        | 28,278,657    | 4,372           | 3,825,796                 | 6,091,124                | 14,476,080                                     |
| <b>Totals, Farm Origin</b> ..... | 9,064                     | 997,663,523   | 186,054         | 192,132,551               | 858,697,207              | 1,411,245,649                                  |
| Canadian origin.....             | 8,743                     | 708,461,549   | 134,680         | 140,340,993               | 682,056,026              | 1,106,006,184                                  |
| Foreign origin.....              | 321                       | 289,201,974   | 51,374          | 51,791,558                | 176,641,181              | 305,239,465                                    |
| Wild life origin.....            | 234                       | 14,338,686    | 3,767           | 4,783,323                 | 12,847,817               | 20,861,030                                     |
| Marine origin.....               | 730                       | 28,644,442    | 16,867          | 5,411,855                 | 21,496,850               | 34,966,260                                     |
| Forest origin.....               | 7,533                     | 1,145,558,242 | 168,838         | 191,044,307               | 313,088,964              | 722,269,066                                    |
| Mineral origin.....              | 3,219                     | 1,550,662,908 | 218,870         | 304,027,809               | 678,683,203              | 1,392,499,898                                  |
| Mixed origin.....                | 1,973                     | 287,415,421   | 89,340          | 90,818,182                | 147,206,928              | 324,646,012                                    |
| Central electric stations.....   | 1,024                     | 1,055,731,532 | 16,164          | 24,831,821                | Nil                      | 122,883,446                                    |

<sup>1</sup> See footnote 1 to Table 1, p. 405. Net values are not available for the origin classification.

11.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Origin of the Material Used, by Main Groups for Representative Years 1921-35—concluded.

| Year and Origin.                | Estab-<br>lish-<br>ments. | Capital.             | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials. | Gross<br>Value<br>of<br>Products. <sup>1</sup> |
|---------------------------------|---------------------------|----------------------|-----------------|---------------------------|--------------------------|--|
|                                 | No.                       | \$                   | No.             | \$                        | \$                       | \$   |
| <b>1933.</b>                    |                           |                      |                 |                           |                          |  |
| <b>Grand Totals.....</b>        | <b>25,232</b>             | <b>4,689,373,704</b> | <b>493,903</b>  | <b>465,562,000</b>        | <b>909,188,574</b>       | <b>2,086,847,847</b>                           |
| <b>Farm Origin—</b>             |                           |                      |                 |                           |                          |  |
| (a) From field crops.....       | 5,740                     | 609,044,529          | 93,433          | 81,655,182                | 263,007,043              | 494,048,930                                    |
| Canadian origin.....            | 5,424                     | 303,913,114          | 59,378          | 51,750,819                | 173,684,115              | 322,289,909                                    |
| Foreign origin.....             | 322                       | 215,131,415          | 34,055          | 29,904,363                | 89,322,928               | 171,759,021                                    |
| (b) From animal husbandry.....  | 3,978                     | 265,730,390          | 72,970          | 62,195,099                | 199,671,203              | 320,662,509                                    |
| Canadian origin.....            | 3,949                     | 235,537,329          | 65,169          | 56,056,567                | 191,876,661              | 297,907,640                                    |
| Foreign origin.....             | 29                        | 30,192,870           | 7,801           | 6,138,532                 | 7,795,542                | 22,754,969                                     |
| <b>Totals, Farm Origin.....</b> | <b>9,724</b>              | <b>874,774,928</b>   | <b>166,403</b>  | <b>143,850,281</b>        | <b>462,678,246</b>       | <b>814,711,439</b>                             |
| Canadian origin.....            | 9,373                     | 629,450,643          | 124,547         | 107,807,386               | 365,559,776              | 620,197,449                                    |
| Foreign origin.....             | 351                       | 245,324,285          | 41,856          | 36,042,895                | 97,118,470               | 194,513,990                                    |
| Wild life origin.....           | 335                       | 10,507,157           | 3,498           | 3,481,885                 | 7,159,079                | 13,000,627                                     |
| Marine origin.....              | 620                       | 15,532,775           | 4,064           | 2,287,365                 | 10,930,239               | 17,380,323                                     |
| Forest origin.....              | 7,796                     | 832,445,002          | 102,807         | 99,046,012                | 139,550,374              | 335,880,257                                    |
| Mineral origin.....             | 3,839                     | 1,306,641,651        | 130,565         | 138,101,092               | 271,434,337              | 601,428,008                                    |
| Mixed origin.....               | 2,177                     | 212,939,536          | 71,849          | 57,363,558                | 83,406,249               | 156,908,817                                    |
| Central electric stations.....  | 1,041                     | 1,386,532,055        | 14,717          | 21,431,877                | Nil                      | 117,632,081                                    |
| <b>1934.</b>                    |                           |                      |                 |                           |                          |  |
| <b>Grand Totals.....</b>        | <b>25,663</b>             | <b>4,703,917,730</b> | <b>545,162</b>  | <b>533,504,635</b>        | <b>1,230,977,053</b>     | <b>2,533,758,954</b>                           |
| <b>Farm Origin—</b>             |                           |                      |                 |                           |                          |  |
| (a) From field crops.....       | 5,866                     | 607,420,061          | 99,966          | 89,162,003                | 308,435,652              | 566,150,163                                    |
| Canadian origin.....            | 5,528                     | 353,120,615          | 62,345          | 55,177,304                | 200,631,739              | 365,799,890                                    |
| Foreign origin.....             | 338                       | 214,299,446          | 37,621          | 33,984,699                | 107,803,913              | 200,350,273                                    |
| (b) From animal husbandry.....  | 3,955                     | 273,632,009          | 79,524          | 68,772,951                | 249,605,928              | 382,505,562                                    |
| Canadian origin.....            | 3,926                     | 239,440,017          | 70,604          | 61,236,979                | 240,051,906              | 356,626,503                                    |
| Foreign origin.....             | 29                        | 34,192,892           | 9,220           | 7,535,972                 | 9,553,932                | 25,879,059                                     |
| <b>Totals, Farm Origin.....</b> | <b>9,821</b>              | <b>881,052,970</b>   | <b>179,790</b>  | <b>157,934,954</b>        | <b>558,041,580</b>       | <b>948,655,725</b>                             |
| Canadian origin.....            | 9,454                     | 632,560,632          | 132,949         | 116,414,283               | 440,683,735              | 722,420,393                                    |
| Foreign origin.....             | 367                       | 248,492,338          | 46,841          | 41,520,671                | 117,357,845              | 226,235,332                                    |
| Wild life origin.....           | 334                       | 12,031,578           | 3,651           | 3,645,440                 | 8,258,147                | 14,156,511                                     |
| Marine origin.....              | 665                       | 17,372,799           | 4,663           | 2,870,119                 | 15,567,180               | 24,056,927                                     |
| Forest origin.....              | 7,946                     | 873,518,030          | 113,842         | 113,571,898               | 163,644,299              | 397,088,771                                    |
| Mineral origin.....             | 3,556                     | 1,271,242,338        | 150,694         | 169,962,858               | 395,976,386              | 809,659,506                                    |
| Mixed origin.....               | 2,208                     | 217,847,849          | 77,548          | 63,779,875                | 99,480,481               | 215,707,901                                    |
| Central electric stations.....  | 1,043                     | 1,430,852,166        | 14,974          | 21,829,491                | Nil                      | 124,463,613                                    |
| <b>1935.</b>                    |                           |                      |                 |                           |                          |  |
| <b>Grand Totals.....</b>        | <b>25,491</b>             | <b>4,698,991,853</b> | <b>532,874</b>  | <b>590,326,904</b>        | <b>1,420,885,153</b>     | <b>2,807,337,381</b>                           |
| <b>Farm Origin—</b>             |                           |                      |                 |                           |                          |  |
| (a) From field crops.....       | 5,620                     | 502,460,185          | 102,120         | 92,346,954                | 332,576,494              | 594,405,019                                    |
| Canadian origin.....            | 5,268                     | 385,787,001          | 64,088          | 58,212,158                | 219,828,843              | 392,090,889                                    |
| Foreign origin.....             | 352                       | 206,673,184          | 38,032          | 34,134,796                | 112,747,651              | 202,314,130                                    |
| (b) From animal husbandry.....  | 3,881                     | 242,276,644          | 74,556          | 67,115,718                | 254,608,357              | 389,096,072                                    |
| Canadian origin.....            | 3,881                     | 242,276,644          | 74,556          | 67,115,718                | 254,608,357              | 389,096,072                                    |
| Foreign origin.....             |                           |                      |                 |                           |                          |  |
| <b>Totals, Farm Origin.....</b> | <b>9,501</b>              | <b>834,736,829</b>   | <b>176,676</b>  | <b>159,462,672</b>        | <b>587,184,851</b>       | <b>984,101,091</b>                             |
| Canadian origin.....            | 9,149                     | 628,063,645          | 138,644         | 125,327,876               | 484,437,200              | 781,736,961                                    |
| Foreign origin.....             | 352                       | 206,673,184          | 38,032          | 34,134,796                | 112,747,651              | 202,314,130                                    |
| Wild life origin.....           | 322                       | 11,432,808           | 3,724           | 3,797,013                 | 8,163,673                | 13,893,417                                     |
| Marine origin.....              | 630                       | 17,144,806           | 4,766           | 2,874,553                 | 14,772,732               | 23,458,356                                     |
| Forest origin.....              | 8,058                     | 862,608,889          | 120,578         | 123,969,435               | 173,104,957              | 432,743,826                                    |
| Mineral origin.....             | 3,603                     | 1,260,176,377        | 171,651         | 202,180,239               | 511,639,555              | 961,973,179                                    |
| Mixed origin.....               | 2,330                     | 253,070,976          | 90,621          | 75,333,039                | 110,619,395              | 254,062,601                                    |
| Central electric stations.....  | 1,041                     | 1,459,821,168        | 15,458          | 22,519,983                | Nil                      | 137,114,911                                    |

<sup>1</sup> See footnote 1 to Table I, p. 405. Net values are not available for the origin classification. <sup>2</sup> This origin classification included in former years "silk mills" with a small number of artificial silk establishments. Of late years the latter have become the most important and the statistics are now combined with those for "mixed origin".



## Subsection 4.—The Forty Leading Manufacturing Industries.

A prominent feature of Canadian manufacturing development in recent years has been the growth of non-ferrous metal smelting. This industry, based upon mineral resources, has now taken its place among the leading manufactures along with the industries based upon forest, agricultural and live-stock resources. The central electric stations and dyeing, cleaning and laundry industries are not now included among manufacturing industries. The change was made for the year 1936 and the figures of rank in the statement below have been made comparable by dropping central electric stations for each of the years.

In the following statement, the rank of the ten leading industries in 1936, from the standpoint of gross value of production, is compared with their respective ranks in representative years since 1922.

THE TEN LEADING INDUSTRIES, 1936, COMPARED AS TO RANK FOR REPRESENTATIVE YEARS 1922-35.

| Industry.                                 | Rank in— |       |       |       |         |       |       |
|---|----------|-------|-------|-------|---------|-------|-------|
|   | 1936.    | 1935. | 1934. | 1933. | 1929.   | 1926. | 1922. |
| Non-ferrous metal smelting and refining.. | 1        | 1     | 2     | 2     | 9<br>16 | 9     | 37    |
| Pulp and paper.....                       | 2        | 2     | 1     | 1     | 1       | 1     | 2     |
| Slaughtering and meat packing.....        | 3        | 3     | 3     | 3     | 2       | 3     | 3     |
| Flour and feed mills.....                 | 4        | 6     | 4     | 4     | 3       | 2     | 1     |
| Butter and cheese.....                    | 5        | 5     | 5     | 5     | 6       | 6     | 5     |
| Automobiles.....                          | 6        | 4     | 7     | 11    | 4       | 5     | 6     |
| Petroleum products.....                   | 7        | 7     | 6     | 6     | 10      | 11    | 9     |
| Sawmills.....                             | 8        | 8     | 11    | 14    | 5       | 4     | 4     |
| Electrical apparatus and supplies.....    | 9        | 9     | 14    | 16    | 8       | 13    | 16    |
| Cotton yarn and cloth.....                | 10       | 11    | 8     | 8     | 13      | 8     | 7     |

The incidence of the depression resulted in a re-arrangement in the rank of many industries which has already proved temporary in some cases. The suspension or curtailment of capital expenditures greatly reduced the output of such important industries as: sawmills, electrical equipment, automobiles, railway rolling-stock, primary iron and steel, machinery, etc. On the other hand, the demand for goods for immediate consumption was more stable, including such industries as: petroleum products, bakeries, cotton yarn and cloth, printing and publishing, clothing, tobacco, beverages, etc. However, as previously stated, some return to the pre-depression order of importance is in evidence. Comparing the rankings for 1936 with those for 1935, it may be noted that flour and feed mills came up from sixth place to fourth place, whereas just the opposite was true of automobiles. All other industries, among the leading ten, held their relative positions with the exception of cotton yarn and cloth which ranked as eleventh in 1935 but was tenth in 1936, replacing bread and other bakery products. Railway rolling-stock improved its position from seventeenth in 1935 to fourteenth in 1936. On the whole, however, the changes for the latest year are not very pronounced.

**12.—Principal Statistics of the Forty Leading Industries of Canada, Ranked According to the Gross Value of the Products, 1935.**

| Industry.   | Establishments. | Capital.             | Employees.     | Salaries and Wages. | Cost of Materials.   | Value of Products.   |                      |
|---|-----------------|----------------------|----------------|---------------------|----------------------|----------------------|----------------------|
|   |                 |                      |                |                     |                      | Net. <sup>1</sup>    | Gross.               |
|   | No.             | \$                   | No.            | \$                  | \$                   | \$                   | \$                   |
| 1 Non-ferrous metal smelting and refining.....                | 15              | 145,686,299          | 8,944          | 12,687,356          | 120,804,075          | 55,665,202           | 186,245,658          |
| 2 Pulp and paper.....   | 95              | 545,572,938          | 27,836         | 35,593,313          | 57,995,037           | 81,973,562           | 182,651,282          |
| 3 Central electric stations.....                              | 1,041           | 1,459,821,168        | 15,458         | 22,519,993          | Nil                  | 135,060,035          | 137,114,911          |
| 4 Slaughtering and meat packing.....                          | 139             | 58,207,715           | 10,674         | 12,448,347          | 108,191,810          | 23,960,322           | 133,379,312          |
| 5 Automobiles.....  | 20              | 40,765,548           | 13,095         | 18,797,699          | 75,645,998           | 30,258,247           | 106,824,445          |
| 6 Butter and cheese.....                                      | 2,539           | 58,291,763           | 14,786         | 13,905,135          | 69,953,193           | 28,283,638           | 99,888,971           |
| 7 Flour and feed mills.....                                   | 1,127           | 56,475,315           | 5,454          | 5,165,607           | 78,071,667           | 18,139,432           | 97,567,863           |
| 8 Petroleum products.....                                     | 53              | 64,707,454           | 4,856          | 7,153,224           | 58,869,814           | 17,238,662           | 79,950,525           |
| 9 Sawmills.....   | 3,093           | 75,973,627           | 25,727         | 17,711,657          | 35,927,584           | 28,325,290           | 65,906,132           |
| 10 Electrical apparatus and supplies.....                     | 182             | 75,499,255           | 15,549         | 17,594,759          | 25,409,806           | 34,672,227           | 61,152,834           |
| 11 Bread and other bakery products.....                       | 3,045           | 43,738,924           | 19,167         | 16,369,912          | 26,343,545           | 29,141,417           | 59,400,068           |
| 12 Cotton yarn and cloth.....                                 | 35              | 70,741,613           | 18,121         | 13,206,265          | 33,689,873           | 23,812,400           | 59,378,664           |
| 13 Rubber goods including footwear.....                       | 45              | 63,435,798           | 11,023         | 11,017,431          | 20,258,774           | 34,501,782           | 55,949,570           |
| 14 Printing and publishing.....                               | 793             | 53,721,846           | 16,839         | 23,061,512          | 11,197,377           | 43,904,537           | 55,832,925           |
| 15 Clothing, factory, women's.....                            | 501             | 22,668,528           | 17,894         | 14,593,861          | 31,642,215           | 21,938,567           | 53,796,274           |
| 16 Hosiery and knitted goods.....                             | 163             | 50,048,900           | 18,511         | 14,232,653          | 22,948,056           | 22,688,647           | 46,890,103           |
| 17 Railway rolling-stock                                      | 37              | 86,547,010           | 16,921         | 18,785,671          | 20,769,209           | 18,806,965           | 41,213,039           |
| 18 Biscuits, confectionery, cocoa, etc.....                   | 234             | 37,779,319           | 10,448         | 9,315,563           | 19,231,159           | 21,286,428           | 41,197,833           |
| 19 Breweries.....   | 73              | 57,925,295           | 4,460          | 6,155,642           | 15,024,625           | 24,906,377           | 40,699,040           |
| 20 Tobacco, cigars, and cigarettes.....                       | 116             | 58,178,513           | 8,145          | 7,221,048           | 19,701,385           | 19,244,706           | 39,103,875           |
| 21 Castings and forgings                                      | 303             | 63,585,479           | 13,760         | 14,138,972          | 14,042,382           | 23,145,126           | 38,770,813           |
| 22 Primary iron and steel.....                                | 53              | 86,465,490           | 9,523          | 12,279,390          | 18,539,072           | 15,316,330           | 38,700,961           |
| 23 Coke and gas products.....                                 | 44              | 98,939,160           | 4,107          | 5,627,861           | 15,233,519           | 20,809,159           | 38,474,789           |
| 24 Fruit and vegetable preparations.....                      | 208             | 38,272,379           | 7,912          | 5,063,481           | 22,252,826           | 15,446,860           | 38,270,487           |
| 25 Sugar refineries.....                                      | 8               | 33,017,874           | 2,134          | 3,086,691           | 25,137,568           | 10,496,252           | 30,597,997           |
| 26 Clothing, factory, men's.....                              | 170             | 16,271,865           | 9,296          | 8,990,370           | 20,676,934           | 15,769,464           | 36,578,897           |
| 27 Boots and shoes, leather.....                              | 217             | 24,313,445           | 15,930         | 11,742,871          | 19,431,799           | 16,276,684           | 35,989,612           |
| 28 Sheet metal products                                       | 129             | 47,369,004           | 6,580          | 6,802,698           | 18,971,146           | 14,070,732           | 33,564,302           |
| 29 Printing and book-binding.....                             | 1,182           | 40,331,944           | 12,194         | 13,707,159          | 11,653,559           | 21,097,502           | 33,188,331           |
| 30 Machinery.....   | 211             | 59,899,705           | 8,940          | 10,531,251          | 12,194,263           | 20,050,537           | 32,850,175           |
| 31 Automobile supplies  | 82              | 23,260,333           | 6,614          | 7,411,434           | 18,528,296           | 13,407,926           | 22,064,252           |
| 32 Silk and artificial silk.....                              | 33              | 35,063,023           | 10,088         | 8,371,037           | 10,946,739           | 16,166,863           | 28,045,340           |
| 33 Coffee, tea and spices                                     | 86              | 13,431,195           | 2,118          | 2,537,077           | 17,543,308           | 6,568,747            | 24,214,761           |
| 34 Boxes and bags, paper.....                                 | 146             | 21,183,422           | 5,562          | 5,432,060           | 12,952,362           | 10,278,576           | 23,466,368           |
| 35 Fish curing and packing.....                               | 630             | 17,144,806           | 4,766          | 2,874,553           | 14,772,722           | 8,340,063            | 23,458,586           |
| 36 Furnishing goods, men's.....                               | 176             | 15,569,465           | 8,957          | 5,788,255           | 13,910,201           | 9,095,917            | 23,152,780           |
| 37 Medicinal and pharmaceutical preparations.....             | 166             | 20,091,688           | 3,664          | 4,500,252           | 7,009,191            | 14,126,453           | 21,292,751           |
| 38 Leather tanneries.....                                     | 85              | 22,982,210           | 3,967          | 3,920,106           | 12,991,558           | 7,006,369            | 20,497,553           |
| 39 Paints and varnishes.....                                  | 80              | 23,709,466           | 3,060          | 4,242,110           | 9,610,743            | 10,440,819           | 20,341,407           |
| 40 Woollen cloth.....   | 65              | 19,620,649           | 6,308          | 5,108,603           | 10,342,336           | 8,402,570            | 19,345,305           |
| <b>Totals, Forty Leading Industries.....</b>                  | <b>13,260</b>   | <b>3,845,333,433</b> | <b>429,442</b> | <b>440,012,655</b>  | <b>1,166,422,555</b> | <b>991,227,867</b>   | <b>2,222,917,466</b> |
| <b>Totals, All Industries.....</b>                            | <b>25,491</b>   | <b>4,698,991,853</b> | <b>582,574</b> | <b>590,326,904</b>  | <b>1,420,885,153</b> | <b>1,302,179,099</b> | <b>2,807,337,381</b> |
| Percentage of forty leading industries to all industries..... | 71-6            | 81-2                 | 73-7           | 74-5                | 82-9                 | 76-1                 | 79-2                 |

<sup>1</sup> See footnote 1 to Table 1, p. 405.

### 12A.—Principal Statistics of the Forty Leading Industries of Canada, Ranked According to Gross Value of Products, 1936.

NOTE.—The central electric stations and dyeing, cleaning and laundry industries ceased to be regarded as 'manufacturing' industries for 1936, and figures for previous years will be adjusted as soon as possible. This affects the comparability of the figures given in this table in comparison with those of earlier years.

| Industry.  | Estab-lish-ments. | Capital.                  | Em-ploy-ees.   | Salaries and Wages. | Cost of Materials.   | Value of Products.   |                      |
|--|-------------------|---------------------------|----------------|---------------------|----------------------|----------------------|----------------------|
|  |                   |                           |                |                     |                      | Net. <sup>1</sup>    | Gross.               |
| No.  |                   | \$                        | No.            | \$                  | \$                   | \$                   | \$                   |
| 1 Non-ferrous metal smelting and re-fining.....                | 15                | 143,858,717               | 10,015         | 14,346,050          | 154,604,285          | 71,276,645           | 229,737,420          |
| 2 Pulp and paper.....  | 93                | 539,350,001               | 30,054         | 40,063,852          | 72,202,983           | 87,150,666           | 185,144,603          |
| 3 Slaughtering and meat packing.....                           | 142               | 61,806,675                | 11,770         | 13,921,410          | 126,630,086          | 29,028,206           | 156,971,640          |
| 4 Flour and feed mills.....                                    | 1,118             | 61,897,287                | 5,465          | 5,542,945           | 90,614,236           | 22,680,670           | 114,617,009          |
| 5 Butter and cheese.....                                       | 2,573             | 60,301,575                | 15,545         | 14,772,250          | 80,953,372           | 30,018,633           | 112,712,327          |
| 6 Automobiles.....   | 16                | 46,497,259                | 12,933         | 18,164,012          | 71,201,646           | 33,540,762           | 105,350,035          |
| 7 Petroleum products.....                                      | 63                | 61,883,928                | 5,019          | 7,309,955           | 66,555,855           | 15,313,844           | 85,862,363           |
| 8 Sawmills.....  | 3,638             | 78,294,341                | 28,786         | 21,357,038          | 43,598,856           | 35,982,067           | 80,343,291           |
| 9 Electrical apparatus and supplies.....                       | 186               | 79,794,524                | 17,037         | 19,501,882          | 30,484,468           | 40,616,138           | 72,288,548           |
| 10 Cotton yarn and cloth                                       | 35                | 71,564,046                | 17,910         | 14,218,231          | 37,042,911           | 26,630,505           | 65,635,305           |
| 11 Bread and other bakery products...                          | 3,101             | 46,108,482                | 19,568         | 17,703,572          | 32,124,708           | 31,458,312           | 65,558,437           |
| 12 Rubber goods, in-cluding footwear...                        | 50                | 64,600,470                | 11,881         | 11,954,016          | 23,598,661           | 37,109,378           | 62,054,808           |
| 13 Printing and pub-lishing.....                               | 789               | 53,273,296                | 17,377         | 24,035,719          | 11,967,553           | 45,559,802           | 58,275,911           |
| 14 Railway rolling-stock                                       | 37                | 33,258,169                | 18,633         | 22,161,277          | 30,486,569           | 24,701,059           | 56,969,453           |
| 15 Clothing, factory, women's.....                             | 583               | 25,114,251                | 18,924         | 15,255,735          | 32,709,792           | 23,187,289           | 50,118,773           |
| 16 Hosiery and knitted goods.....                              | 168               | 51,398,078                | 19,429         | 15,120,277          | 24,360,941           | 24,337,987           | 49,469,140           |
| 17 Fruit and vegetable preparations.....                       | 304               | 41,572,514                | 9,258          | 6,066,761           | 27,455,449           | 19,215,422           | 47,337,397           |
| 18 Primary iron and steel                                      | 55                | 92,103,774                | 11,138         | 13,830,377          | 21,424,052           | 17,772,711           | 40,636,892           |
| 19 Biscuits, confection-ery, cocoa, etc.....                   | 206               | 39,802,756                | 11,201         | 10,101,275          | 22,191,155           | 23,120,592           | 46,051,641           |
| 20 Breweries.....  | 70                | 55,969,772                | 4,604          | 6,517,804           | 15,540,509           | 27,796,122           | 44,047,794           |
| 21 Machinery.....  | 218               | 61,206,806                | 10,277         | 12,305,422          | 15,761,565           | 28,006,145           | 41,447,473           |
| 22 Clothing, factory, men's.....                               | 188               | 18,570,989                | 10,578         | 10,255,745          | 22,798,166           | 17,647,628           | 40,526,745           |
| 23 Sugar refineries.....                                       | 10                | 33,199,993                | 2,559          | 3,413,098           | 27,924,998           | 11,430,093           | 40,405,377           |
| 24 Tobacco, cigars, and cigarettes.....                        | 95                | 58,785,007                | 7,593          | 7,207,737           | 20,111,289           | 20,020,045           | 40,287,359           |
| 25 Sheet metal products  | 138               | 50,323,623                | 7,482          | 7,942,100           | 22,617,288           | 10,796,358           | 39,994,151           |
| 26 Coke and gas pro-ducts.....                                 | 42                | 99,088,722                | 4,110          | 5,714,483           | 16,355,571           | 20,505,282           | 30,871,898           |
| 27 Boots and shoes, leather.....                               | 219               | 25,318,549                | 15,961         | 11,622,002          | 18,889,035           | 16,372,950           | 35,543,115           |
| 28 Printing and book-binding.....                              | 1,224             | 41,738,465                | 12,677         | 14,509,486          | 12,404,562           | 22,243,119           | 35,099,335           |
| 29 Automobile supplies.....                                    | 35                | 24,730,610                | 6,842          | 7,776,726           | 18,453,840           | 14,208,086           | 33,378,508           |
| 30 Castings and forgings                                       | 238               | 46,429,034                | 10,391         | 11,225,938          | 11,524,940           | 18,184,280           | 31,011,884           |
| 31 Silk and artificial silk.....                               | 35                | 34,947,843                | 10,189         | 8,877,373           | 10,732,371           | 15,221,509           | 26,930,821           |
| 32 Fish curing and pack-ing.....                               | 624               | 18,614,592                | 5,252          | 3,279,581           | 16,459,638           | 9,837,729            | 26,684,801           |
| 33 Coffee, tea, and spices                                     | 92                | 13,347,535                | 2,086          | 2,364,413           | 19,140,291           | 7,173,270            | 26,412,092           |
| 34 Boxes and bags, paper                                       | 141               | 20,919,171                | 5,902          | 5,701,998           | 14,310,960           | 11,022,563           | 25,588,431           |
| 35 Brass and copper pro-ducts.....                             | 126               | 22,890,531                | 4,596          | 5,293,457           | 14,182,328           | 10,198,031           | 24,947,467           |
| 36 Furnishing goods, men's.....                                | 170               | 16,626,096                | 9,410          | 6,363,980           | 14,743,645           | 9,735,990            | 24,625,615           |
| 37 Leather tanneries.....                                      | 87                | 23,627,727                | 4,306          | 4,227,441           | 15,394,803           | 7,379,439            | 23,294,210           |
| 38 Paints, pigments and varnishes.....                         | 78                | 23,274,568                | 3,124          | 4,428,387           | 10,817,694           | 11,544,016           | 22,651,225           |
| 39 Medicinal and phar-maceutical prepar-ations.....            | 109               | 20,760,912                | 3,887          | 4,797,458           | 7,384,370            | 14,697,547           | 22,251,550           |
| 40 Furniture.....  | 425               | 26,577,141                | 9,677          | 8,111,577           | 9,261,878            | 12,400,577           | 22,177,929           |
| <b>Totals, Forty Lead-ing Industries...</b>                    |                   | <b>17,622,243,298,946</b> | <b>443,678</b> | <b>457,423,850</b>  | <b>1,335,194,709</b> | <b>960,181,687</b>   | <b>2,364,252,923</b> |
| <b>Totals, All Indus-tries.....</b>                            |                   | <b>24,202,327,263,531</b> | <b>594,359</b> | <b>612,071,434</b>  | <b>1,624,213,996</b> | <b>1,289,592,672</b> | <b>3,002,403,814</b> |
| Percentages of forty leading industries to all industries..... | 72-9              |                           | 74-4           | 74-6                | 74-7                 | 82-2                 | 74-5                 |
|  |                   |                           |                |                     |                      |                      | 78-7                 |

<sup>1</sup> See footnote 1 to Table 1, p. 405.

### Section 3.—Provincial Distribution of Manufacturing Production.

Ontario and Quebec are the most important manufacturing provinces of Canada. Their combined production in 1935 amounted to \$2,244,583,270 or nearly 80 p.c. of the gross value of manufactured products of the Dominion. The proximity of Ontario to the coal-fields of Pennsylvania, the water-power and other varied resources of the two provinces, and their nearness to the larger markets of Canada and the United States have all contributed to the above result. British Columbia had in 1935 the third largest gross manufacturing production, with 7.1 p.c. of the total, and Manitoba the fourth with 4.2 p.c. Alberta, Nova Scotia, New Brunswick, Saskatchewan, and Prince Edward Island followed in the order named.

#### Subsection 1.—The Manufactures of the Maritime Provinces, 1935.

Table 13 gives the statistics of each of the Maritime Provinces for the year 1935. In Prince Edward Island, fish canning and curing, with a gross production of \$633,242 was foremost, followed by butter and cheese, slaughtering and meat packing, central electric stations, etc. Manufacturing in Nova Scotia and New Brunswick is, of course, dominated to a considerable extent by the steel and forest industries in the former and the forest industries in the latter, although there is a large sugar refinery in each province. The pulp and paper industry, with a gross value of production of \$14,860,796 in 1935, was the most important industry in New Brunswick, followed by sawmills with an output of \$4,453,221, central electric stations with an output of \$3,233,679, the coffee, tea and spice industry with an output of \$2,803,886, and fish canning and curing with a value of production of \$2,462,790. These five industries combined provided 49.4 p.c. of the gross manufacturing production of the province. In Nova Scotia, primary iron and steel was in first place. This industry was so severely affected by the depression that in 1933 it was only in fourth place, but it recovered first place in 1934 and maintained this position in 1935. The increase in production was about 112 p.c., from \$3,763,242 in 1933 to \$7,987,949 in 1935. Other leading industries with their values of production were: fish curing and packing, \$5,368,117; central electric stations, \$5,096,453; pulp and paper, \$4,331,670; sawmills, \$2,276,841; butter and cheese, \$2,120,922.

#### 13.—Statistics of the Leading Industries of each of the Maritime Provinces, 1935.

##### PRINCE EDWARD ISLAND.

| Industry.                              | Estab-<br>lish-<br>ments. | Capital.         | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials. | Gross<br>Value of<br>Products. <sup>1</sup> |
|--|---------------------------|------------------|-----------------|---------------------------|--------------------------|---|
|  | No.                       | \$               | No.             | \$                        | \$                       | \$  |
| 1 Fish curing and packing.....         | 95                        | 180,375          | 325             | 70,743                    | 469,306                  | 633,242                                     |
| 2 Butter and cheese.....               | 28                        | 262,697          | 87              | 53,610                    | 378,735                  | 488,473                                     |
| 3 Slaughtering and meat packing...     | 3                         | 96,652           | 44              | 34,852                    | 285,412                  | 384,363                                     |
| 4 Central electric stations.....       | 12                        | 1,160,625        | 59              | 56,366                    | NEI                      | 278,727                                     |
| 5 Printing and publishing.....         | 4                         | 261,626          | 96              | 82,238                    | 20,578                   | 172,612                                     |
| 6 Flour and feed mills.....            | 11                        | 57,478           | 14              | 7,235                     | 114,365                  | 106,290                                     |
| 7 Bread and other bakery products      | 11                        | 100,502          | 46              | 29,966                    | 80,222                   | 138,371                                     |
| 8 Sawmills.....                        | 54                        | 135,014          | 81              | 17,691                    | 71,673                   | 129,800                                     |
| 9 Foods, stock and poultry.....        | 3                         | 45,227           | 21              | 23,110                    | 60,594                   | 124,878                                     |
| 10 All other leading industries.....   | 3                         | 397,082          | 67              | 56,625                    | 106,507                  | 287,732                                     |
| <b>Totals, Leading Industries.....</b> | <b>224</b>                | <b>2,706,278</b> | <b>840</b>      | <b>435,450</b>            | <b>1,587,483</b>         | <b>2,754,487</b>                            |
| <b>Totals, All Industries.....</b>     | <b>261</b>                | <b>3,508,905</b> | <b>1,108</b>    | <b>618,406</b>            | <b>1,894,499</b>         | <b>3,356,006</b>                            |

For footnotes see end of table, p. 440.

13.—Statistics of the Leading Industries of each of the Maritime Provinces, 1935  
—concluded.

## NOVA SCOTIA.

| Industry.  | Estab-<br>lish-<br>ments. | Capital.           | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials. | Gross<br>Value of<br>Products. <sup>1</sup> |
|--|---------------------------|--------------------|-----------------|---------------------------|--------------------------|---|
|  | No.                       | \$                 | No.             | \$                        | \$                       | \$  |
| 1 Primary iron and steel.....                          | 6                         | 19,233,969         | 1,630           | 2,161,043                 | 4,431,450                | 7,987,949                                   |
| 2 Fish curing and packing.....                         | 176                       | 3,010,112          | 1,754           | 931,108                   | 3,414,973                | 5,368,117                                   |
| 3 Central electric stations.....                       | 76                        | 30,020,072         | 838             | 924,419                   | Nil                      | 5,096,453                                   |
| 4 Pulp and paper.....                                  | 5                         | 12,354,017         | 754             | 927,194                   | 1,238,885                | 4,331,070                                   |
| 5 Sawmills.....  | 572                       | 1,592,368          | 1,747           | 405,212                   | 1,239,760                | 2,276,841                                   |
| 6 Butter and cheese.....                               | 30                        | 1,108,992          | 230             | 277,907                   | 1,239,355                | 2,120,922                                   |
| 7 Hosiery and knitted goods.....                       | 3                         | 2,308,705          | 662             | 477,204                   | 964,468                  | 1,916,899                                   |
| 8 Printing and publishing.....                         | 34                        | 1,953,216          | 665             | 803,970                   | 308,200                  | 1,847,287                                   |
| 9 Biscuits, confectionery, cocoa and<br>chocolate..... | 10                        | 2,010,786          | 687             | 538,556                   | 785,138                  | 1,841,562                                   |
| 10 Shipbuilding and repairs.....                       | 8                         | 2,524,442          | 465             | 560,359                   | 527,069                  | 1,531,520                                   |
| 11 Castings and forgings.....                          | 12                        | 1,969,067          | 485             | 597,029                   | 482,900                  | 1,306,754                                   |
| 12 Bread and other bakery products                     | 74                        | 678,935            | 347             | 251,000                   | 662,323                  | 1,227,848                                   |
| 13 All other leading industries <sup>2</sup> .....     | 6                         | 20,344,154         | 1,422           | 1,780,055                 | 9,845,471                | 17,392,276                                  |
| <b>Totals, Leading Industries.....</b>                 | <b>1,612</b>              | <b>106,091,835</b> | <b>11,736</b>   | <b>10,704,111</b>         | <b>25,479,101</b>        | <b>54,246,098</b>                           |
| <b>Totals, All Industries.....</b>                     | <b>1,250</b>              | <b>118,999,064</b> | <b>16,069</b>   | <b>14,042,674</b>         | <b>31,647,800</b>        | <b>67,109,172</b>                           |

## NEW BRUNSWICK.

|  |            |                    |               |                   |                   |                   |
|--|------------|--------------------|---------------|-------------------|-------------------|-------------------|
| 1 Pulp and paper.....                                  | 6          | 34,374,039         | 2,097         | 2,345,339         | 4,460,481         | 14,860,796        |
| 2 Sawmills.....  | 270        | 6,107,218          | 2,120         | 952,643           | 2,777,106         | 4,452,221         |
| 3 Central electric stations.....                       | 38         | 32,009,810         | 472           | 480,397           | Nil               | 3,233,679         |
| 4 Coffee, tea, and spices.....                         | 5          | 2,003,986          | 262           | 289,905           | 2,022,012         | 2,803,886         |
| 5 Fish canning and curing.....                         | 137        | 2,111,287          | 727           | 272,795           | 1,520,568         | 2,462,790         |
| 6 Biscuits, confectionery, cocoa and<br>chocolate..... | 7          | 1,642,199          | 555           | 289,464           | 760,947           | 1,503,170         |
| 7 Butter and cheese.....                               | 33         | 932,476            | 203           | 131,327           | 842,014           | 1,282,759         |
| 8 Bread and other bakery products                      | 88         | 785,504            | 389           | 269,351           | 648,431           | 1,274,811         |
| 9 Castings and forgings.....                           | 10         | 2,028,536          | 448           | 459,048           | 318,494           | 1,176,533         |
| 10 Slaughtering and meat packing...                    | 7          | 402,501            | 145           | 147,452           | 948,521           | 1,185,960         |
| 11 Printing and publishing.....                        | 24         | 1,311,043          | 306           | 480,690           | 144,250           | 1,021,652         |
| 12 All other leading industries <sup>2</sup> .....     | 6          | 14,434,451         | 2,546         | 2,517,867         | 6,253,088         | 9,891,731         |
| <b>Totals, Leading Industries.....</b>                 | <b>631</b> | <b>98,533,680</b>  | <b>10,369</b> | <b>8,786,368</b>  | <b>20,705,512</b> | <b>45,100,988</b> |
| <b>Totals, All Industries.....</b>                     | <b>872</b> | <b>115,635,568</b> | <b>13,837</b> | <b>11,680,095</b> | <b>25,551,371</b> | <b>56,344,196</b> |

<sup>1</sup> Net value is derived from gross value by deducting costs of materials, fuel, and electricity. Figures are not available for these individual industries.

<sup>2</sup> Individual statistics cannot be given because there are fewer than three establishments in each industry. Such industries are: in Prince Edward Island, castings and forgings, and sheet metal products; in Nova Scotia, petroleum products, sugar refineries, coke and gas products, wire and wire goods and cotton yarn and cloth; in New Brunswick, sugar refineries, railway rolling-stock, and cotton yarn and cloth.

## Subsection 2.—The Manufactures of Quebec, 1935.

The pulp and paper mills of Quebec, the most important manufacturing unit of the province, produced goods with a selling value at the factory of \$78,701,994 in 1935. This exceeded by nearly \$31,000,000 the total value produced by central electric stations (\$47,808,550), the industry which ranked second in importance. This was followed by non-ferrous metal smelting and refining (\$45,565,844), cotton yarn and cloth (\$41,660,189), tobacco, cigars, and cigarettes (\$33,358,806), women's factory clothing (\$32,912,629), butter and cheese (\$27,625,840), petroleum products (\$23,157,263), men's factory clothing (\$22,686,491), and slaughtering and meat packing (\$22,087,549). A change took place in the ranking of some of the more important industries of the province. Non-ferrous metal products advanced from fourth to third place, petroleum products from ninth to eighth and men's factory clothing from tenth to ninth. Cotton yarn and cloth dropped from third to fourth place and slaughtering and meat packing from eighth to tenth.

The importance of the pulp and paper industry in Quebec is shown by comparison with the industry throughout Canada. The Quebec section of the industry, in addition to supplying about 10 p.c. of the total gross value of all products manufactured in the province, furnished 48 p.c. of the products of pulp and paper mills throughout the country. The gross value of cotton yarn and cloth products from Quebec mills formed 70 p.c., the value of railway rolling-stock 44 p.c., the value of tobacco, cigars, and cigarettes 85 p.c., and the value of boots and shoes 58 p.c. of the Dominion totals for these products. Thus, Quebec is an outstanding manufacturing province rather on account of her individual industries than because of the diversification of her industrial activity.

14.—Principal Statistics of the Leading<sup>2</sup> Industries of the Province of Quebec, 1935.

| Industry.  | Estab-<br>lish-<br>ments. | Capital.      | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials. | Gross<br>Value<br>of<br>Products. <sup>1</sup> |
|--|---------------------------|---------------|-----------------|---------------------------|--------------------------|--|
|  | No.                       | \$            | No.             | \$                        | \$                       | \$   |
| 1 Pulp and paper.....  | 41                        | 270,317,060   | 13,450          | 16,723,580                | 27,212,951               | 78,701,994                                     |
| 2 Central electric stations.....   | 135                       | 643,826,223   | 3,710           | 5,391,621                 | Nil                      | 47,803,650                                     |
| 3 Non-ferrous metal smelting.....  | 3                         | 23,571,156    | 1,288           | 1,722,984                 | 32,612,333               | 45,665,844                                     |
| 4 Cotton yarn and cloth.....   | 15                        | 46,350,393    | 11,845          | 8,549,162                 | 24,829,092               | 41,660,189                                     |
| 5 Tobacco, cigars, and cigarettes...   | 66                        | 49,409,020    | 6,769           | 5,915,878                 | 16,938,781               | 33,388,806                                     |
| 6 Clothing, women's, factory.....  | 312                       | 12,079,513    | 10,475          | 8,327,937                 | 19,688,226               | 32,012,629                                     |
| 7 Butter and cheese.....   | 1,234                     | 15,119,000    | 4,522           | 3,308,608                 | 21,338,616               | 27,625,840                                     |
| 8 Petroleum products.....  | 8                         | 21,989,741    | 1,035           | 1,501,324                 | 17,357,448               | 23,157,263                                     |
| 9 Clothing, men's, factory.....  | 113                       | 9,566,002     | 4,813           | 4,366,194                 | 13,313,516               | 22,686,491                                     |
| 10 Slaughtering and meat packing.....  | 34                        | 9,585,239     | 1,553           | 2,056,159                 | 18,553,236               | 22,087,649                                     |
| 11 Boots and shoes, leather.....   | 126                       | 13,283,269    | 10,136          | 6,824,680                 | 11,276,912               | 20,654,682                                     |
| 12 Silk and artificial silk.....   | 22                        | 23,639,442    | 7,109           | 5,627,452                 | 8,043,582                | 19,329,540                                     |
| 13 Railway rolling-stock.....  | 11                        | 37,556,898    | 7,273           | 8,235,112                 | 9,275,358                | 18,040,841                                     |
| 14 Bread and other bakery products   | 934                       | 11,360,034    | 5,081           | 4,157,189                 | 7,702,987                | 15,354,214                                     |
| 15 Breweries.....  | 8                         | 19,363,415    | 1,808           | 2,145,285                 | 6,186,217                | 14,434,156                                     |
| 16 Hosiery and knitted goods.....  | 51                        | 14,107,468    | 5,719           | 3,082,890                 | 6,536,597                | 13,323,591                                     |
| 17 Electrical apparatus and supplies.  | 24                        | 19,434,818    | 3,905           | 4,807,431                 | 5,497,744                | 13,046,493                                     |
| 18 Printing and publishing.....  | 73                        | 13,811,826    | 4,134           | 5,304,223                 | 2,671,826                | 12,643,205                                     |
| 19 Flour-mills.....  | 223                       | 5,390,990     | 752             | 792,346                   | 10,203,899               | 12,271,911                                     |
| 20 Furnishing goods, men's.....  | 75                        | 6,768,978     | 4,514           | 2,622,358                 | 6,788,963                | 11,022,343                                     |
| 21 Biscuits, confectionery, cocoas, etc  | 62                        | 8,333,614     | 3,001           | 2,379,372                 | 5,625,268                | 10,963,751                                     |
| 22 Coke and gas products.....  | 5                         | 13,177,446    | 809             | 1,242,146                 | 3,127,230                | 10,176,560                                     |
| 23 Sawmills.....   | 1,365                     | 10,111,001    | 4,762           | 2,097,161                 | 5,494,211                | 9,860,342                                      |
| 24 Rubber goods, including footwear  | 12                        | 10,215,430    | 2,745           | 2,164,637                 | 3,266,794                | 9,444,001                                      |
| 25 Machinery.....  | 35                        | 20,012,094    | 3,062           | 3,452,245                 | 3,029,305                | 9,387,717                                      |
| 26 Sheet metal products.....   | 23                        | 12,425,083    | 1,857           | 1,786,408                 | 5,056,138                | 8,823,244                                      |
| 27 Printing and bookbinding.....   | 341                       | 10,686,533    | 3,327           | 3,408,125                 | 2,799,561                | 8,264,470                                      |
| 28 Paints, pigments and varnishes.....   | 22                        | 11,201,265    | 1,439           | 1,267,568                 | 3,928,071                | 7,690,889                                      |
| 29 Castings and forgings.....  | 64                        | 17,924,568    | 2,820           | 2,614,435                 | 3,048,870                | 7,895,522                                      |
| 30 Distilleries.....   | 5                         | 12,108,331    | 655             | 631,858                   | 1,108,990                | 7,668,846                                      |
| 31 Coffee, tea, and spices.....  | 21                        | 2,747,316     | 482             | 559,126                   | 4,461,160                | 6,697,198                                      |
| 32 Medicinal and pharmaceutical<br>preparations.....   | 61                        | 7,475,151     | 1,244           | 1,569,440                 | 2,130,543                | 6,424,875                                      |
| 33 Boxes and bags, paper.....  | 38                        | 6,500,863     | 1,655           | 1,381,073                 | 3,265,983                | 6,015,992                                      |
| 34 Aerated and mineral waters.....   | 122                       | 4,940,744     | 1,118           | 1,086,545                 | 1,012,379                | 5,960,017                                      |
| 35 Brass and copper products.....  | 26                        | 7,633,114     | 1,162           | 1,267,568                 | 3,928,071                | 7,690,889                                      |
| 36 Miscellaneous food products.....  | 37                        | 3,534,443     | 619             | 693,772                   | 2,234,111                | 5,758,697                                      |
| 37 Fur goods.....  | 113                       | 4,773,718     | 1,253           | 1,268,963                 | 3,723,530                | 5,644,809                                      |
| 38 Miscellaneous textile products.....   | 7                         | 8,974,274     | 655             | 1,163,531                 | 2,358,333                | 5,578,322                                      |
| 39 Fruit and vegetable preparations..  | 54                        | 5,007,445     | 1,384           | 807,136                   | 3,455,482                | 5,554,464                                      |
| 40 Hats and caps.....  | 68                        | 2,500,999     | 1,834           | 1,525,108                 | 2,358,369                | 4,909,312                                      |
| Totals, Forty <sup>2</sup> Industries.....   | 5,979                     | 1,447,867,367 | 145,764         | 135,149,561               | 332,069,686              | 674,842,066                                    |
| Totals, All Industries.....  | 7,942                     | 1,664,198,107 | 189,671         | 173,354,555               | 398,566,702              | 821,020,796                                    |
| Percentages of above forty in-<br>dustries to totals of all industries<br>in the province..... | 75.3                      | 87.0          | 76.9            | 78.0                      | 83.3                     | 82.2   |

<sup>1</sup> See footnote 1 to Table 13.<sup>2</sup> Statistics for sugar refining, which is also one of the leading industries of this province, cannot be published, since there are less than three establishments reporting.

### Subsection 3.—The Manufactures of Ontario, 1935.

Ontario is the most important manufacturing province of the Dominion. The gross value of its manufactured products in 1935 represented about 51 p.c. of the total for the whole Dominion, while that of Quebec, the second province in importance in this respect, amounted to about 29 p.c. This premier position in manufacturing has been fairly uniformly maintained by Ontario over a long period, as the following percentages show: in 1926, 52 p.c.; 1918, 53 p.c.; 1910, 50 p.c.; 1900, 50 p.c.; 1890, 51 p.c.; and 1880, 51 p.c. Thus, in spite of the rapid industrial development in recent years in other provinces, such as Quebec, British Columbia, and Manitoba, Ontario is maintaining a manufacturing production roughly equal to that of the remainder of the Dominion.

The value of manufactured products totalled \$1,423,562,474 in 1935. In value of production, automobiles headed the list with an output valued at \$105,810,655. Other leading industries in the order of their importance were: non-ferrous metal smelting and refining \$105,035,029, slaughtering and meat packing \$56,932,181, central electric stations \$53,535,095, flour and feed mills \$51,760,071, pulp and paper \$51,041,765, electrical apparatus and supplies \$47,503,325, rubber goods including footwear \$46,466,350, and butter and cheese \$44,221,126. Some significant changes took place in the ranking of the leading industries. The automobile industry regained the dominant position held for several years prior to the depression and non-ferrous metal smelting and refining, which led all industries for the first time in 1934, dropped to second place. Central electric stations moved up from seventh to fourth place and electrical apparatus from ninth to seventh.

The turning point of the depression was reached in the summer of 1933. The increases in the latter part of the year, however, were not sufficiently pronounced to offset the losses of the beginning of the year. The result was that the principal statistics for 1933 were the lowest since 1929. Considerable improvement was reported for 1934 and again for 1935, although to a lesser degree in the latter year. Compared with 1934 there was in 1935 an increase of 8.4 p.c. in the number of employees, with a greater increase in the amount paid out in salaries and wages, namely, 12.1 p.c. The increase in the value of production was 13.4 p.c. and in the value added by manufacture 9.4 p.c.

The depression was particularly hard on industries producing capital or durable goods, and these constitute an important factor in the manufactures of Ontario. Thus, production was disproportionately curtailed in such important industries as automobiles, electrical equipment, machinery, agricultural implements, primary iron and steel, etc. This resulted not only in a drop in the rank of such industries within the province, but in a lowering of the manufacturing production of the whole province relatively to that of other provinces less affected by these influences. Since 1933, however, these industries in general have made a good recovery, and Ontario, which accounted for 48 p.c. of the gross value of all products manufactured in the Dominion in 1933, had by 1935 increased the relative value to 51 p.c.

Indicating the greater diversification of industry in Ontario as compared with Quebec, the percentages which the forty leading industries bore to the total manufactures of the province were higher in every particular in Quebec than in Ontario, especially in the capital employed and the number of establishments reporting. Outstanding among the industries in which the province of Ontario was pre-eminent, was that of automobile manufacturing, which was carried on practically in this province alone. Other important industries in which Ontario led, with the percentage

which the production of each bore to that of the Dominion in 1935, were as follows: agricultural implements, 96 p.c.; leather tanneries, 88 p.c.; rubber goods, 83 p.c.; furniture and upholstery, 63 p.c.; fruit and vegetable canning, preserving, etc., 68 p.c.; electrical apparatus and supplies, 78 p.c.; castings and forgings, 68 p.c.; primary iron and steel, 65 p.c.; slaughtering and meat packing, 43 p.c.; flour and feed mills, 53 p.c.; hosiery and knitted goods, 65 p.c.

**15.—Principal Statistics of the Forty Leading Industries of the Province of Ontario, 1935.**

| Industry.  | Estab-<br>lish-<br>ments. | Capital.             | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials<br>Used. | Gross<br>Value of<br>Products. <sup>1</sup> |
|--|---------------------------|----------------------|-----------------|---------------------------|----------------------------------|---|
|  | No.                       | \$                   | No.             | \$                        | \$                               | \$  |
| 1 Automobiles.....   | 14                        | 39,682,410           | 12,805          | 18,362,764                | 75,360,707                       | 105,810,655                                 |
| 2 Non-ferrous metal smelting....   | 8                         | 75,623,641           | 4,209           | 6,294,014                 | 64,210,471                       | 105,035,029                                 |
| 3 Slaughtering and meat packing....  | 56                        | 25,926,152           | 4,091           | 5,097,613                 | 46,333,415                       | 56,932,181                                  |
| 4 Central electric stations.....   | 451                       | 511,711,819          | 6,628           | 10,340,908                | Nil                              | 53,535,096                                  |
| 5 Flour and feed mills.....  | 641                       | 23,933,336           | 2,808           | 2,423,682                 | 42,340,378                       | 51,760,071                                  |
| 6 Pulp and paper.....  | 36                        | 171,500,472          | 8,655           | 11,941,503                | 20,635,693                       | 51,041,765                                  |
| 7 Electrical apparatus and supplies..  | 134                       | 65,448,550           | 11,454          | 12,595,146                | 19,681,797                       | 47,503,325                                  |
| 8 Rubber goods, including footwear   | 31                        | 53,133,433           | 8,255           | 8,836,236                 | 16,980,950                       | 40,466,350                                  |
| 9 Butter and cheese.....   | 973                       | 26,230,831           | 6,604           | 6,594,043                 | 30,010,225                       | 44,221,125                                  |
| 10 Automobile supplies.....  | 62                        | 22,871,741           | 6,453           | 7,263,348                 | 13,351,048                       | 32,273,003                                  |
| 11 Hosiery and knitted goods.....  | 96                        | 32,288,148           | 11,641          | 9,455,540                 | 14,877,304                       | 30,030,875                                  |
| 12 Bread and other bakery products   | 1,220                     | 20,402,304           | 9,527           | 8,327,093                 | 13,324,372                       | 29,204,032                                  |
| 13 Printing and publishing.....  | 298                       | 23,037,276           | 7,425           | 10,602,477                | 9,922,152                        | 27,072,537                                  |
| 14 Castings and forgings.....  | 167                       | 36,427,049           | 9,045           | 9,436,464                 | 9,614,587                        | 26,200,691                                  |
| 15 Fruit and vegetable preparations.   | 151                       | 26,875,484           | 4,654           | 3,001,295                 | 14,002,082                       | 25,971,236                                  |
| 16 Primary iron and steel.....   | 24                        | 53,889,173           | 5,682           | 7,948,325                 | 12,175,025                       | 25,268,288                                  |
| 17 Petroleum products.....   | 14                        | 21,661,413           | 2,055           | 3,026,101                 | 19,440,932                       | 25,121,188                                  |
| 18 Biscuits, confectionery, cocoa and<br>chocolate.....  | 92                        | 22,685,940           | 5,215           | 5,189,059                 | 10,438,580                       | 23,336,850                                  |
| 19 Machinery.....  | 147                       | 37,444,498           | 5,564           | 6,637,008                 | 8,795,587                        | 22,449,725                                  |
| 20 Coke and gas products.....  | 23                        | 55,219,123           | 2,479           | 3,387,637                 | 8,337,312                        | 21,543,851                                  |
| 21 Sheet metal products.....   | 68                        | 25,005,530           | 3,877           | 4,139,412                 | 10,556,222                       | 19,342,333                                  |
| 22 Printing and bookbinding.....   | 516                       | 21,100,143           | 6,269           | 7,404,927                 | 6,724,445                        | 18,435,605                                  |
| 23 Leather tanneries.....  | 31                        | 20,200,090           | 3,356           | 3,412,425                 | 11,559,737                       | 18,128,743                                  |
| 24 Clothing, factory, women's.....   | 236                       | 8,480,297            | 6,364           | 5,426,556                 | 10,074,587                       | 17,332,670                                  |
| 25 Breweries.....  | 30                        | 19,293,030           | 1,661           | 2,249,599                 | 5,352,194                        | 14,879,017                                  |
| 26 Boxes and bags, paper.....  | 86                        | 12,053,960           | 3,335           | 3,460,430                 | 8,275,960                        | 14,839,165                                  |
| 27 Cotton yarn and cloth.....  | 15                        | 16,968,131           | 4,883           | 3,630,498                 | 7,216,780                        | 14,015,279                                  |
| 28 Woollen cloth.....  | 40                        | 14,461,801           | 4,607           | 3,889,586                 | 7,202,002                        | 13,953,672                                  |
| 29 Acids, alkalies and salts.....  | 11                        | 20,203,778           | 1,653           | 2,277,701                 | 3,111,304                        | 13,800,723                                  |
| 30 Boots and shoes, leather.....   | 72                        | 9,768,114            | 5,243           | 4,528,288                 | 7,450,870                        | 13,751,113                                  |
| 31 Medicinal and pharmaceutical<br>preparations.....   | 86                        | 11,223,691           | 2,196           | 2,704,519                 | 4,387,923                        | 13,536,450                                  |
| 32 Agricultural implements.....  | 25                        | 54,674,771           | 4,799           | 5,181,589                 | 6,220,163                        | 13,142,562                                  |
| 33 Clothing, factory, men's.....   | 43                        | 6,068,179            | 4,040           | 4,319,239                 | 6,679,779                        | 12,801,594                                  |
| 34 Soaps, washing compounds, etc..   | 48                        | 9,878,184            | 1,276           | 1,703,166                 | 7,137,941                        | 12,169,468                                  |
| 35 Furniture.....  | 215                       | 17,866,175           | 5,682           | 4,553,198                 | 4,926,740                        | 12,037,972                                  |
| 36 Brass and copper products.....  | 80                        | 12,813,879           | 2,650           | 2,674,627                 | 6,199,438                        | 11,954,358                                  |
| 37 Sawmills.....   | 757                       | 17,894,698           | 4,216           | 2,585,799                 | 5,711,222                        | 10,696,071                                  |
| 38 Hardware and tools.....   | 97                        | 17,995,719           | 3,730           | 3,809,263                 | 3,239,664                        | 10,478,050                                  |
| 39 Paints, pigments and varnishes..  | 40                        | 7,372,442            | 1,450           | 2,077,482                 | 4,275,557                        | 9,735,695                                   |
| 40 Foods, breakfast.....   | 14                        | 4,863,297            | 610             | 724,270                   | 3,214,907                        | 9,412,039                                   |
| <b>Totals, Forty Leading<br/>Industries.....</b>   | <b>7,148</b>              | <b>1,664,278,708</b> | <b>207,151</b>  | <b>227,903,340</b>        | <b>681,456,618</b>               | <b>1,128,784,372</b>                        |
| <b>Totals, All Industries.....</b>   | <b>10,260</b>             | <b>2,061,194,151</b> | <b>281,438</b>  | <b>303,897,297</b>        | <b>718,579,816</b>               | <b>1,423,562,474</b>                        |
| Percentages of the forty leading<br>industries to totals of all indus-<br>tries in the province..... | 69.6                      | 80.6                 | 73.6            | 74.9                      | 80.9                             | 79.1  |

<sup>1</sup> See footnote 1 to Table 13.

**Subsection 4.—The Manufactures of the Prairie Provinces, 1935.**

The slaughtering and meat packing industry in 1935 was outstanding among the manufactures of the Prairie Provinces when treated as a single unit. During 1935, as may be seen from Table 16, the gross value of production of this industry



was \$44,421,578 (Manitoba \$21,832,403, Saskatchewan \$6,500,945, and Alberta \$16,088,230). The second industry, from the point of view of gross value of production, was flour and feed mills with products valued at \$31,912,049 (Manitoba \$7,400,427, Saskatchewan \$12,785,321, and Alberta \$11,726,301). Butter and cheese comprised the third largest group, with an output valued at \$20,472,766, followed by central electric stations \$15,884,005, petroleum products \$14,774,603, railway rolling-stock \$12,099,233, etc.

The order of the leading industries is somewhat different in each province. In Manitoba the leading industries with their gross value of products in 1935 were as follows: slaughtering and meat packing \$21,832,403, railway rolling-stock \$9,264,003, butter and cheese \$7,602,065, flour and feed mills \$7,400,427, and central electric stations \$6,729,818. In Saskatchewan the leading industries were: flour and feed mills \$12,785,321, butter and cheese \$6,557,615, slaughtering and meat packing \$6,500,945, petroleum products \$5,683,815, and central electric stations \$4,377,205. In Alberta slaughtering and meat packing with an output of \$16,088,230 was the leading industry. This was followed by flour and feed mills with \$11,726,301, petroleum products \$7,791,296, butter and cheese \$6,313,086, and central electric stations \$4,776,982.

The importance of these industries, based mainly on such natural resources of the Prairie Provinces as grain-growing and cattle-raising areas, is evident.

#### 16.—Principal Statistics of the Leading Industries of Manitoba, Saskatchewan, and Alberta, 1935.

##### MANITOBA.

| Industry.  | Estab-<br>lish-<br>ments. | Capital.    | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials. | Gross<br>Value<br>of<br>Products. <sup>1</sup> |
|--|---------------------------|-------------|-----------------|---------------------------|--------------------------|--|
|  | No.                       | \$          | No.             | \$                        | \$                       | \$   |
| 1 Slaughtering and meat packing...                   | 6                         | 7,823,569   | 1,674           | 1,937,528                 | 17,501,844               | 21,832,403                                     |
| 2 Railway rolling-stock.....                         | 4                         | 14,242,168  | 4,223           | 4,558,528                 | 4,267,986                | 9,264,003                                      |
| 3 Butter and cheese.....                             | 79                        | 5,240,530   | 1,079           | 1,358,778                 | 4,755,263                | 7,602,065                                      |
| 4 Flour and feed mills.....                          | 38                        | 6,132,255   | 491             | 469,827                   | 6,095,455                | 7,400,427                                      |
| 5 Central electric stations.....                     | 41                        | 80,938,184  | 1,208           | 1,587,614                 | Nil                      | 6,729,818                                      |
| 6 Printing and publishing.....                       | 30                        | 3,639,120   | 1,083           | 1,574,190                 | 558,569                  | 3,709,337                                      |
| 7 Printing and bookbinding.....                      | 83                        | 3,942,825   | 1,145           | 1,305,327                 | 1,097,181                | 3,139,875                                      |
| 8 Bread and other bakery products.                   | 140                       | 2,980,845   | 1,028           | 899,724                   | 1,498,109                | 3,024,618                                      |
| 9 Malt and malt products.....                        | 4                         | 2,943,280   | 109             | 211,093                   | 1,819,515                | 2,907,106                                      |
| 10 Breweries.....                                    | 6                         | 3,833,553   | 372             | 480,052                   | 657,088                  | 2,634,199                                      |
| 11 Bags, cotton and jute.....                        | 5                         | 1,814,317   | 229             | 257,758                   | 2,081,567                | 2,326,072                                      |
| 12 Clothing, factory, women's.....                   | 22                        | 859,968     | 739             | 606,226                   | 1,448,885                | 2,295,615                                      |
| 13 Furnishing goods, men's.....                      | 16                        | 1,162,068   | 802             | 569,351                   | 1,488,110                | 2,245,359                                      |
| 14 Coffee, tea, and spices.....                      | 8                         | 1,481,237   | 148             | 193,230                   | 1,649,520                | 2,159,016                                      |
| 15 Biscuits, confectionery, cocoa and chocolate..... | 21                        | 1,696,308   | 509             | 406,024                   | 860,495                  | 1,803,960                                      |
| 16 Dyeing, cleaning and laundry work.....            | 23                        | 1,761,308   | 835             | 710,259                   | 173,175                  | 1,383,042                                      |
| 17 Petroleum products.....                           | 4                         | 590,080     | 67              | 70,813                    | 975,766                  | 1,398,492                                      |
| 18 Boxes and bags, paper.....                        | 7                         | 1,232,456   | 254             | 273,685                   | 719,912                  | 1,246,847                                      |
| 19 Fur goods.....                                    | 31                        | 916,027     | 375             | 327,170                   | 776,596                  | 1,248,832                                      |
| 20 Paints, pigments and varnishes...                 | 4                         | 1,649,907   | 202             | 224,623                   | 641,500                  | 1,221,662                                      |
| 21 Coke and gas products.....                        | 3                         | 5,508,514   | 157             | 195,603                   | 444,149                  | 1,114,457                                      |
| 22 Mattresses and springs.....                       | 4                         | 1,061,325   | 284             | 303,101                   | 569,794                  | 1,112,174                                      |
| 23 Medicinal and pharmaceutical preparations.....    | 7                         | 1,163,913   | 146             | 146,223                   | 439,066                  | 1,101,225                                      |
| 24 Primary iron and steel.....                       | 4                         | 1,723,715   | 304             | 375,631                   | 268,644                  | 1,040,816                                      |
| Totals, Twenty-four Industries.....                  | 640                       | 153,324,367 | 17,463          | 19,042,808                | 50,783,879               | 90,191,920                                     |
| Totals, All Industries.....                          | 1,099                     | 198,822,314 | 23,239          | 24,761,066                | 67,929,760               | 117,734,292                                    |

For footnotes see end of table, p. 445.

## 16.—Principal Statistics of the Leading Industries of Manitoba, Saskatchewan, and Alberta, 1935—concluded.

## SASKATCHEWAN.

| Industry.                                 | Estab-lish-ments. | Capital.   | Em-ployees. | Salaries and Wages. | Cost of Materials. | Gross Value of Products. <sup>1</sup> |
|---|-------------------|------------|-------------|---------------------|--------------------|---------------------------------------|
|   | No.               | \$         | No.         | \$                  | \$                 | \$                                    |
| 1 Flour and feed mills.....               | 80                | 13,556,885 | 579         | 620,246             | 9,320,682          | 12,785,321                            |
| 2 Butter and cheese.....                  | 74                | 3,554,338  | 801         | 826,508             | 4,367,932          | 6,557,615                             |
| 3 Slaughtering and meat packing...        | 6                 | 2,411,659  | 648         | 643,259             | 5,300,274          | 6,500,945                             |
| 4 Petroleum.....                          | 14                | 4,970,398  | 418         | 525,803             | 4,176,195          | 5,683,815                             |
| 5 Central electric stations.....          | 125               | 25,576,944 | 552         | 785,384             | Nil                | 4,377,205                             |
| 6 Printing and publishing.....            | 126               | 2,521,132  | 826         | 1,080,606           | 417,008            | 2,302,508                             |
| 7 Bread and other bakery products.        | 148               | 2,019,627  | 540         | 427,882             | 862,340            | 1,680,547                             |
| 8 Breweries.....                          | 9                 | 3,244,737  | 248         | 289,138             | 576,284            | 1,597,638                             |
| 9 Sawmills.....                           | 121               | 639,764    | 468         | 179,932             | 277,280            | 625,177                               |
| 10 Dyeing, cleaning and laundry work..... | 15                | 779,183    | 256         | 190,298             | 59,614             | 412,874                               |
| Totals, Ten Industries <sup>2</sup> ..... | 718               | 59,265,667 | 5,336       | 5,569,056           | 25,357,611         | 42,523,643                            |
| Totals, All Industries.....               | 880               | 66,271,171 | 6,355       | 6,524,411           | 28,946,921         | 46,821,302                            |

## ALBERTA.

| Industry.  | Estab-lish-ments. | Capital.   | Em-ployees. | Salaries and Wages. | Cost of Materials. | Gross Value of Products. <sup>1</sup> |
|--|-------------------|------------|-------------|---------------------|--------------------|---------------------------------------|
|  | No.               | \$         | No.         | \$                  | \$                 | \$                                    |
| 1 Slaughtering and meat packing...                 | 10                | 7,630,689  | 1,462       | 1,673,682           | 12,440,832         | 16,088,230                            |
| 2 Flour and feed mills.....                        | 88                | 7,595,661  | 677         | 737,575             | 8,774,013          | 11,726,304                            |
| 3 Petroleum products.....                          | 9                 | 5,554,504  | 452         | 605,744             | 6,023,776          | 7,791,296                             |
| 4 Butter and cheese.....                           | 104               | 4,102,057  | 806         | 851,078             | 4,369,149          | 6,313,086                             |
| 5 Central electric stations.....                   | 76                | 27,103,959 | 578         | 841,770             | Nil                | 4,776,982                             |
| 6 Railway rolling-stock.....                       | 3                 | 6,733,906  | 1,505       | 1,588,896           | 1,145,486          | 2,335,230                             |
| 7 Breweries.....                                   | 5                 | 4,484,315  | 219         | 352,552             | 864,765            | 2,687,557                             |
| 8 Printing and publishing.....                     | 83                | 2,014,200  | 795         | 1,042,837           | 441,479            | 2,487,017                             |
| 9 Bread and other bakery products.                 | 151               | 1,985,331  | 661         | 570,272             | 1,109,073          | 2,352,226                             |
| 10 Sawmills.....                                   | 190               | 1,540,670  | 1,054       | 425,118             | 465,092            | 1,198,640                             |
| 11 All other leading industries <sup>2</sup> ..... | 4                 | 6,147,610  | 408         | 420,585             | 2,617,150          | 4,205,565                             |
| Totals, Above Industries <sup>2</sup> .....        | 723               | 75,795,899 | 8,614       | 9,170,109           | 38,315,815         | 62,492,139                            |
| Totals, All Industries.....                        | 1,002             | 96,332,781 | 12,087      | 12,594,449          | 42,531,636         | 73,282,607                            |

<sup>1</sup> See footnote 1 to Table 13.<sup>2</sup> Other leading industries, individual statistics of which cannot be given because there are fewer than three establishments in each industry, are: Manitoba and Saskatchewan, non-ferrous metal smelting and refining, and, in Alberta, sugar refining, wood preservation, and malt and malt products. The statistics of the three industries of Alberta are included under the heading "All other leading industries".

## Subsection 5.—The Manufactures of British Columbia,\* 1935.

British Columbia was, in 1935, the third most important manufacturing province in the Dominion, producing goods with a gross value of \$198,106,542. About 18 p.c. of this production, or \$35,713,189, is seen in Table 17 to be that of the sawmilling industry; the predominance of forest products industries in the industrial life of the province is still further emphasized if to this figure be added \$13,141,602, the value of the pulp and paper industry which ranks third. Second in importance among the industries of the province is that of fish curing and packing with a gross value of production of \$14,421,861. As previously stated, pulp and paper occupied third place, and this was followed by central electric stations with \$11,278,402, petroleum products \$9,229,363, and slaughtering and meat packing \$8,339,127.

\* Including the Yukon Territory.

### 17.—Principal Statistics of the Leading Industries of British Columbia and the Yukon Territory, 1935.

| Industry.  | Estab-<br>lish-<br>ments. | Capital.           | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials. | Gross<br>Value of<br>Products. <sup>1</sup> |
|--|---------------------------|--------------------|-----------------|---------------------------|--------------------------|---|
|  | No.                       | \$                 | No.             | \$                        | \$                       | \$  |
| 1 Sawmills.....  | 257                       | 36,737,170         | 10,788          | 10,723,066                | 10,394,227               | 35,713,189                                  |
| 2 Fish curing and packing.....   | 91                        | 11,386,402         | 1,569           | 1,503,646                 | 8,940,688                | 14,421,861                                  |
| 3 Pulp and paper.....  | 6                         | 46,917,533         | 2,716           | 3,785,589                 | 4,038,812                | 13,141,602                                  |
| 4 Central electric stations.....   | 87                        | 106,272,532        | 1,407           | 2,108,530                 | Nil                      | 11,278,402                                  |
| 5 Petroleum products.....  | 7                         | 5,382,984          | 398             | 612,712                   | 6,144,262                | 9,229,363                                   |
| 6 Slaughtering and meat packing....  | 13                        | 4,233,311          | 736             | 837,488                   | 6,768,629                | 8,339,127                                   |
| 7 Fruit and vegetable preparations....   | 48                        | 4,347,073          | 1,191           | 824,550                   | 3,267,508                | 5,130,120                                   |
| 8 Bread and other bakery products....  | 279                       | 3,472,842          | 1,548           | 1,437,426                 | 2,400,188                | 5,114,001                                   |
| 9 Printing and publishing.....   | 71                        | 4,221,807          | 1,420           | 2,090,275                 | 813,315                  | 4,576,770                                   |
| 10 Sheet metal products.....   | 16                        | 6,434,911          | 420             | 505,808                   | 2,689,949                | 4,184,413                                   |
| 11 Butter and cheese.....  | 34                        | 1,680,842          | 404             | 462,677                   | 2,551,003                | 3,677,086                                   |
| 12 Breweries.....  | 11                        | 6,546,576          | 308             | 459,002                   | 1,027,410                | 3,569,009                                   |
| 13 Coffee, tea, and spices.....  | 9                         | 1,344,933          | 238             | 250,946                   | 2,909,987                | 3,535,221                                   |
| 14 Planing mills, sash and door<br>factories.....                                      | 48                        | 2,261,706          | 879             | 734,533                   | 1,498,485                | 2,699,863                                   |
| 15 Fertilizers.....  | 3                         | 11,095,264         | 470             | 713,061                   | 1,710,739                | 2,288,749                                   |
| 16 Coke and gas products.....  | 6                         | 14,857,198         | 303             | 387,197                   | 558,541                  | 2,170,842                                   |
| 17 Dyeing, cleaning and laundry<br>work.....   | 62                        | 2,344,292          | 1,248           | 1,004,928                 | 184,139                  | 1,941,655                                   |
| 18 Foods, stock and poultry.....   | 30                        | 1,136,241          | 256             | 243,672                   | 1,457,557                | 1,912,685                                   |
| 19 Furniture.....  | 48                        | 1,341,667          | 534             | 508,106                   | 721,057                  | 1,561,411                                   |
| 20 Printing and bookbinding.....   | 100                       | 2,012,870          | 607             | 609,004                   | 507,168                  | 1,560,265                                   |
| 21 Boxes, wooden.....  | 20                        | 1,344,743          | 582             | 471,956                   | 875,706                  | 1,525,173                                   |
| 22 Shipbuilding and repairs.....   | 15                        | 6,587,784          | 591             | 720,880                   | 337,279                  | 1,432,310                                   |
| 23 Acids, alkalies and salts.....  | 3                         | 1,116,703          | 43              | 59,207                    | 25,652                   | 1,216,844                                   |
| 24 All other leading industries <sup>2</sup> .....                                     | 81                        | 57,798,528         | 4,956           | 6,350,531                 | 26,380,003               | 37,195,390                                  |
| <b>Totals, Above Industries<sup>2</sup>.....</b>                                       | <b>1,345</b>              | <b>340,845,002</b> | <b>33,672</b>   | <b>37,532,097</b>         | <b>95,202,974</b>        | <b>177,415,351</b>                          |
| <b>Totals, All Industries.....</b>   | <b>1,819</b>              | <b>371,939,792</b> | <b>38,979</b>   | <b>43,094,611</b>         | <b>105,545,738</b>       | <b>198,106,542</b>                          |
| Percentages of above industries<br>to totals of all industries in the<br>province..... | 73.9                      | 91.9               | 86.4            | 87.1                      | 89.9                     | 89.6  |

<sup>1</sup> See footnote 1 to Table 13.<sup>2</sup> In this group, individual statistics cannot be published, because there are fewer than three establishments in each industry. Such industries are: biscuits, confectionery, cocoa and chocolate; distilleries; sugar refineries; castings and forgings; non-ferrous metal smelting and refining; explosives, ammunition and fireworks; and paints, pigments and varnishes.

## Section 4.—Principal Factors in Manufacturing Production.

### Subsection 1.—Capital Employed.

The remarkable increase in capital employed in Canadian manufactures from the beginning of the twentieth century denotes rapid growth in industrial operations. From 1900 to 1905 the capital increased from \$446,900,000 to \$833,900,000, and advanced to \$1,958,700,000 in 1915. During this period returns were received from establishments with 5 hands or over, and, while the rise in wholesale prices did not exceed 37 p.c., the capital employed in manufactures increased nearly 340 p.c.

The capital investment in 1935 in all establishments, irrespective of the number of employees, was \$4,698,991,853 as compared with \$4,703,917,730 in 1934 and with \$2,696,154,030 in 1917, an increase of 75 p.c. in 18 years.

The provincial distribution of the manufactures of Canada may be illustrated by the investment of capital. Capital employed in Ontario in 1917 was 48.3 p.c. of the total, 52.4 p.c. in 1923, and 44.0 p.c. in 1935. The percentages employed in the plants of Quebec were: 29.4 in 1917, 29.5 in 1924, and 35.4 in 1935. British Columbia held third place in 1935 with a capital investment of 7.9 p.c. of the total,

while Manitoba, Nova Scotia, New Brunswick, Alberta, and Saskatchewan followed in the order named, with proportions varying between 4.2 p.c. and 1.4 p.c. (Table 18.)

From a survey of the industrial groups in which the capital of the country is invested, it appears that the central electric stations industry led again in 1935, with an investment of 31.1 p.c. of the total. The wood and paper group was second with 18.6 p.c., the iron and its products group third with 11.8 p.c. and the vegetable products group fourth with 10.6 p.c. Up to 1930, the wood and paper group had been first since 1919 in capital invested, but since 1931 the central electric stations group has assumed the premier position.

The statistics of capital employed in the manufacturing industries are of interest in deducing the proportions of fixed and liquid assets. In 1923, land, buildings, machinery, and tools constituted 64 p.c. of the total capital, while in 1929 the proportion had increased to 66 p.c. and in 1935 to 74 p.c. The fixed assets amounted to \$3,485,074,067 in 1935, while current assets, including inventories of raw materials and finished products, bills and accounts receivable, cash, and sundries, were valued at \$1,213,917,786. Details by provinces and industrial groups are given in Table 19.

**18.—Distribution of Capital Employed in the Manufacturing Industries of Canada, in Percentages, by Provinces and Industrial Groups, Representative Years 1917-35.**

| Province or Group.                 | 1917.        | 1920.        | 1926.        | 1929.        | 1933.        | 1934.        | 1935.        |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                    | p.c.         | p.c.         | p.c.         | p.c.         | p.c.         | p.c.         | p.c.         |
| <b>PROVINCE.</b>                   |              |              |              |              |              |              |              |
| Prince Edward Island.....          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          |
| Nova Scotia.....                   | 4.8          | 4.2          | 3.0          | 2.7          | 2.6          | 2.5          | 2.5          |
| New Brunswick.....                 | 2.4          | 3.1          | 2.4          | 2.3          | 2.6          | 2.6          | 2.5          |
| Quebec.....                        | 29.4         | 30.5         | 30.6         | 32.0         | 35.2         | 35.7         | 35.4         |
| Ontario.....                       | 48.3         | 49.5         | 49.8         | 47.6         | 44.5         | 43.9         | 44.0         |
| Manitoba.....                      | 3.5          | 3.4          | 3.2          | 3.4          | 3.6          | 3.0          | 4.2          |
| Saskatchewan.....                  | 1.1          | 0.9          | 0.8          | 1.1          | 1.4          | 1.4          | 1.4          |
| Alberta.....                       | 2.3          | 1.8          | 1.8          | 2.1          | 2.1          | 2.1          | 2.0          |
| British Columbia and Yukon.....    | 8.1          | 6.5          | 8.3          | 7.8          | 7.7          | 7.8          | 7.9          |
| <b>Totals.....</b>                 | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| <b>INDUSTRIAL GROUP.</b>           |              |              |              |              |              |              |              |
| Vegetable products.....            | 10.2         | 11.7         | 11.3         | 11.2         | 10.9         | 10.8         | 10.6         |
| Animal products.....               | 7.7          | 6.6          | 5.6          | 4.8          | 4.3          | 4.5          | 4.5          |
| Textiles and textile products..... | 7.3          | 9.0          | 8.0          | 7.5          | 6.9          | 7.0          | 7.0          |
| Wood and paper products.....       | 19.9         | 22.9         | 23.3         | 22.7         | 19.0         | 18.8         | 18.6         |
| Iron and its products.....         | 23.5         | 19.1         | 15.0         | 14.8         | 12.4         | 11.7         | 11.8         |
| Non-ferrous metal products.....    | 2.6          | 3.3          | 5.1          | 5.9          | 5.7          | 5.6          | 5.6          |
| Non-metallic mineral products..... | 5.6          | 6.5          | 6.6          | 6.5          | 6.6          | 6.5          | 6.4          |
| Chemicals and allied products..... | 6.5          | 3.6          | 3.3          | 3.3          | 3.3          | 3.3          | 3.1          |
| Miscellaneous industries.....      | 3.5          | 4.0          | 2.8          | 2.5          | 1.4          | 1.4          | 1.3          |
| Central electric stations.....     | 13.2         | 13.3         | 19.0         | 20.8         | 29.5         | 30.4         | 31.1         |

19.—Forms of Capital Employed in the Manufacturing Industries of Canada, by Provinces and by Groups of Industries, 1933, and Totals for Representative Years 1923-35.

| Province or Group and Year.          | Establishments. | Fixed Capital.   | Working Capital.  |   | Total Capital. |
|--------------------------------------|-----------------|--|---|---|----------------|
|                                      |                 | Land, Buildings, Fixtures, Machinery, Tools and other Equipment. | Inventory Value of Raw Materials and Finished Products on Hand, Stocks in Process, Fuel, Supplies, etc. | Cash, Bills and Accounts Receivable, Prepaid Expenses, etc. |                |
|                                      | No.             | \$   | \$  | \$  | \$             |
| Totals, 1923.....                    | 22,643          | 2,165,497,811  | 655,775,934   | 559,049,205   | 3,380,322,950  |
| Totals, 1924.....                    | 22,128          | 2,310,288,012  | 677,168,191   | 551,347,237   | 3,538,813,460  |
| Totals, 1926.....                    | 22,768          | 2,626,963,690  | 722,451,467   | 632,154,433   | 3,981,569,590  |
| Totals, 1927.....                    | 22,936          | 2,866,366,199  | 773,824,436   | 697,440,923   | 4,337,631,558  |
| Totals, 1929.....                    | 23,597          | 3,377,598,099  | 873,783,691   | 829,640,964   | 5,083,014,754  |
| Totals, 1930.....                    | 24,020          | 3,554,344,724  | 848,927,120   | 770,044,916   | 5,263,316,760  |
| Totals, 1931.....                    | 24,501          | 3,526,611,380  | 721,537,778   | 713,163,050   | 4,961,312,468  |
| Totals, 1932.....                    | 24,544          | 3,511,994,696  | 608,951,917   | 626,399,087   | 4,741,255,610  |
| Totals, 1933.....                    | 25,232          | 3,483,675,723  | 583,891,868   | 622,806,013   | 4,689,373,704  |
| Totals, 1934.....                    | 25,663          | 3,489,235,519  | 605,609,883   | 606,612,328   | 4,703,917,730  |
| PROVINCE.                            |                 |  |   |   |                |
| Prince Edward Island.....            | 261             | 2,489,254  | 460,181   | 550,470   | 3,508,005      |
| Nova Scotia.....                     | 1,350           | 88,943,991   | 10,933,018  | 13,121,155  | 118,999,064    |
| New Brunswick.....                   | 872             | 89,971,347   | 13,704,489  | 11,959,732  | 115,635,568    |
| Quebec.....                          | 7,942           | 1,300,535,330  | 181,724,629   | 181,938,248   | 1,664,198,107  |
| Ontario.....                         | 10,266          | 1,450,701,837  | 310,242,172   | 308,250,142   | 2,064,194,151  |
| Manitoba.....                        | 1,099           | 158,262,388  | 21,241,973  | 19,317,953  | 198,822,314    |
| Saskatchewan.....                    | 830             | 46,879,961   | 9,886,951   | 9,504,289   | 66,271,171     |
| Alberta.....                         | 1,002           | 72,319,740   | 15,288,106  | 8,714,873   | 96,322,731     |
| British Columbia and Yukon.....      | 1,819           | 274,970,199  | 51,062,932  | 45,006,061  | 371,039,792    |
| Totals, 1935.....                    | 25,491          | 3,485,074,067  | 620,554,311   | 593,363,475   | 4,698,991,853  |
| INDUSTRIAL GROUP.                    |                 |  |   |   |                |
| Vegetable products.....              | 5,402           | 261,650,130  | 134,287,937   | 100,318,418   | 496,256,485    |
| Animal products.....                 | 4,402           | 123,720,384  | 60,626,520  | 37,316,604  | 221,657,508    |
| Textiles and textile products.....   | 2,275           | 191,604,127  | 72,311,683  | 65,281,444  | 329,197,254    |
| Wood and paper products.....         | 8,136           | 675,959,651  | 97,889,147  | 99,933,151  | 873,786,949    |
| Iron and its products.....           | 1,249           | 332,484,430  | 110,929,692   | 111,730,145   | 555,144,467    |
| Non-ferrous metal products.....      | 505             | 161,424,208  | 53,624,774  | 46,676,926  | 261,625,997    |
| Non-metallic mineral products.....   | 1,138           | 223,968,512  | 51,854,334  | 24,804,879  | 300,627,725    |
| Chemicals and chemical products..... | 734             | 86,819,923   | 30,214,629  | 30,408,082  | 147,442,534    |
| Miscellaneous industries.....        | 509             | 42,802,013   | 9,754,653   | 11,032,730  | 63,588,796     |
| Central electric stations.....       | 1,041           | 1,384,603,629  | 9,261,442   | 65,956,067  | 1,459,821,198  |

### Subsection 2.—Employment in Manufactures.

The total number of persons engaged in those manufacturing industries of Canada for which statistics were obtained in 1935 was in that year 582,874, as compared with 493,903 in the same industries in 1933 and 694,434 in 1929. The 1935 employees included 105,579 salaried employees, this figure being obtained from the manufacturers at the end of the year, and 477,295 wage-earners, the average number employed as derived from the manufacturers' records of the numbers on the pay-rolls on the 15th of each of the twelve months. Prior to 1925, the number of wage-earners was computed as the sum of the number recorded each month divided by 12 whether the establishment was operating the 12 months or not. Beginning with the statistics for 1925, in seasonal industries which are in operation only a limited number of months in each year, such as sawmilling, fruit and vegetable canning, etc., the average was computed by dividing the sum of the wage-earners reported on the 15th of each month by the number of months in operation. This change of method increased the apparent number of employees, not only in seasonal industries

but also in the groups containing such seasonal industries and in provincial and Dominion totals. Consequently, the change of method had a reducing influence on apparent average wages and on all other averages per wage-earner and per employee. In 1931, however, the old method of computing the average number of wage-earners was again adopted. A change was also made in the compilation of the number of salaried employees. Prior to 1931, owners who were working as ordinary wage-earners, such as small bakers, reported themselves as wage-earners. In 1931, however, all such owners were required to report themselves as salaried employees. In 1931, also, travelling salesmen who were attached to the plant and devoted all or the greater part of their time in selling the products of that plant were included with salaried employees. Prior to this they were not reported at all. These changes, therefore, explain the apparent increase in the number of salaried employees in 1931 as compared with the previous year; actually there was a decrease, this apparent increase being attributable in part to a decrease in the number of wage-earners.

The number of salaried employees and of wage-earners, as thus ascertained, is given for each of the years since 1917, the year of the first annual census of manufacturing production, in Table 20. Then, taking the percentages of the wage-earners and the total employees in each year to those of 1917, and dividing these percentages into the volume of manufacturing production in each year (see p. 415 for the index of volume), the quotients give tentative conclusions regarding the efficiency of production per wage-earner and per employee in years subsequent to 1917, as compared with that year. Since central electric stations were excluded in computing the index of the volume of production, employees in these establishments have been excluded also in computing the percentages relative to 1917 for both wage-earners and total employees, and consequently from the indexes of efficiency of production. These indexes of the efficiency of production are, of course, affected by the changes in the method of computing the number of employees adopted in 1925 and then again in 1931. Inasmuch as the change increased the apparent number of employees between 1925 and 1930, it proportionately decreased the index of the efficiency of production. The table illustrates the development of modern industry which has accomplished a large increase in production with a comparatively small increase in wage-earners, by better organization and the use of improved equipment. Capital invested in manufacturing industries, exclusive of central electric stations, has increased by 38.0 p.c. from 1917 to 1935, compared with a decrease of 14.5 p.c. in wage-earners, while the horse-power used per wage-earner has increased from about 3 in 1917 to 9 in 1935. The factor of better organization is not susceptible of measurement. However, salaried employees have increased 52 p.c. since 1917, or more nearly in proportion to the growth in production than wage-earners. The result of these developments has been the increase of 59.5 p.c. in the volume of production per wage-earner and a smaller increase of 47.3 p.c. per employee, owing to the increased proportion of salaried employees in the total. The indexes may be considered as supplying satisfactory evidence of a general gain in volume of production per person employed. In this connection it should be remembered, however, that in 1917, owing to the large numbers overseas, many persons of low efficiency were being employed, their inefficiency being concealed at the time by the prevailing inflation of prices; it is possible that the sudden rise in the indexes of efficiency in 1921 and 1922 may be partly accounted for by their elimination in the contraction of industrial operations which occurred at that time. During the recent depression years the reduced volume of production lowered the indexes of efficiency.

Statistics of employment in manufacturing industries during 1935, derived from the Census of Manufactures, are shown in Table 24. According to these statistics, the 25,491 establishments covered, employed 105,579 salaried employees and 477,295 wage-earners, a total of 582,874 persons. Out of every 1,000 persons employed in manufacturing, 181 were classed as salary earners and 819 as wage-earners; the former earned 29 p.c. and the latter 71 p.c. of the total amount paid out as remuneration for services.

**20.—Salaried Employees and Wage-Earners in the Manufacturing Industries of Canada, with Volume of Manufacturing Production and Comparative Efficiency of Production, 1917-35.**

NOTE.—Employees of central electric stations are excluded in this table since factors of production and efficiency for that industry are not representative and would vitiate the result.

| Year.     | Salaried Employees. | Wage-Earners. | Total Employees. | Percentages Relative to 1917. |                     | Index Number of Volume of Mfd. Products. | Indexes of Efficiency of Production. |               |
|-----------|---------------------|---------------|------------------|-------------------------------|---------------------|--|--------------------------------------|---------------|
|           |                     |               |                  | Of Wage-Earners.              | Of Total Employees. |  | Per Wage-Earner.                     | Per Employee. |
|           | No.                 | No.           | No.              | p.c.                          | p.c.                |  |                                      |               |
| 1917..... | 65,380              | 547,467       | 612,847          | 100.0                         | 100.0               | 100.0                                    | 100.0                                | 100.0         |
| 1918..... | 66,733              | 541,931       | 608,664          | 99.0                          | 99.3                | 102.0                                    | 103.0                                | 103.2         |
| 1919..... | 77,125              | 524,122       | 601,247          | 95.7                          | 98.1                | 98.1                                     | 102.5                                | 100.0         |
| 1920..... | 78,334              | 520,559       | 598,893          | 95.1                          | 97.7                | 95.0                                     | 99.0                                 | 97.2          |
| 1921..... | 70,253              | 375,109       | 445,362          | 68.5                          | 72.6                | 86.1                                     | 125.6                                | 118.6         |
| 1922..... | 71,686              | 393,160       | 464,846          | 71.6                          | 75.6                | 96.0                                     | 134.1                                | 127.0         |
| 1923..... | 73,374              | 440,798       | 514,172          | 80.5                          | 83.9                | 104.8                                    | 130.2                                | 124.9         |
| 1924..... | 70,671              | 426,004       | 496,675          | 77.6                          | 80.8                | 102.9                                    | 132.7                                | 127.3         |
| 1925..... | 71,897              | 459,065       | 530,962          | 83.8                          | 86.6                | 112.7                                    | 134.5                                | 130.1         |
| 1926..... | 75,990              | 492,143       | 568,133          | 89.9                          | 92.7                | 128.1                                    | 142.5                                | 138.2         |
| 1927..... | 79,474              | 524,751       | 604,225          | 95.8                          | 98.6                | 136.5                                    | 142.5                                | 138.5         |
| 1928..... | 85,029              | 557,139       | 642,168          | 101.7                         | 104.7               | 148.8                                    | 146.3                                | 142.0         |
| 1929..... | 89,793              | 588,477       | 678,270          | 107.5                         | 110.6               | 157.5                                    | 146.6                                | 142.4         |
| 1930..... | 85,778              | 540,803       | 626,581          | 98.8                          | 102.2               | 142.8                                    | 144.5                                | 139.7         |
| 1931..... | 92,780              | 447,032       | 540,412          | 81.7                          | 88.2                | 124.1                                    | 151.0                                | 140.7         |
| 1932..... | 88,434              | 391,569       | 480,003          | 71.5                          | 78.3                | 105.0                                    | 140.9                                | 134.1         |
| 1933..... | 87,985              | 391,201       | 479,186          | 71.4                          | 78.2                | 105.1                                    | 147.2                                | 134.4         |
| 1934..... | 93,442              | 436,746       | 530,188          | 79.8                          | 80.5                | 123.7                                    | 156.0                                | 143.0         |
| 1935..... | 99,339              | 468,077       | 567,416          | 85.6                          | 92.6                | 136.4                                    | 159.5                                | 147.3         |

**Distribution of Employees in 1935.**—An analysis of the returns by provinces shows that 53,989 or 51.1 p.c. of all the employees on salaries were employed in Ontario; of this number 40,649 were males and 13,340 were females. The province of Quebec with 30,656 persons or 29 p.c. of the total, recorded the second largest number of salaried workers; of these 24,246 were males and 6,410 females. British Columbia ranked third with 6,484 or 6.2 p.c. of the total salaried employees.

Of the wage-earners employed numbering 477,295, 47.6 p.c. were employed in Ontario, 33.3 p.c. in Quebec and 6.8 p.c. in British Columbia. It is interesting to note that out of every 1,000 salaried employees 223 were females, while in the case of wage-earners 232 out of every 1,000 were females.

The wood and paper industries, with 24,892 salaried employees, reported a larger number than any other group, having 23.6 p.c. of the total. The vegetable products group came next with 16,089 salaried employees or 15.2 p.c. of the total. The textile industries gave employment to a proportionately greater number of female salaried employees than any other group. Out of every 1,000 salaried employees in this group 319 were females, as compared with only 209 for all the other groups.

In the number of wage-earners employed, the textile industries came first with 107,594 or 22.5 p.c. of the total. This was followed by the wood and paper products group, with 98,832 wage-earners or 20.7 p.c. of the total. It is also of interest to

note that out of every 1,000 wage-earners in the textile industries 550 were females, while in all the other groups 139 were females. The importance of the textile industries in providing employment to females is strikingly illustrated by the fact that out of all female employees engaged in the manufacturing industries of Canada, 47.3 p.c. were found in the textile group.

**21.—Percentages of Male and Female Employees on Salaries and Wages and Percentages of Total Salaries and Wages, by Provinces and Groups of Industries, 1935.**

NOTE.—For actual figures upon which this table is based, see Table 24.

| Province or Group.                 | Employees on Salaries. |              |              | Salaries.    | Employees on Wages. |              |              | Wages.       |
|------------------------------------|------------------------|--------------|--------------|--------------|---------------------|--------------|--------------|--------------|
|                                    | Male.                  | Female.      | Total.       |              | Male.               | Female.      | Total.       |              |
| PROVINCE.                          | p.c.                   | p.c.         | p.c.         | p.c.         | p.c.                | p.c.         | p.c.         | p.c.         |
| Prince Edward Island.....          | 0.3                    | 0.1          | 0.2          | 0.1          | 0.1                 | 0.2          | 0.2          | 0.1          |
| Nova Scotia.....                   | 2.4                    | 2.1          | 2.3          | 1.0          | 3.1                 | 2.1          | 2.6          | 2.0          |
| New Brunswick.....                 | 2.1                    | 1.8          | 2.0          | 1.8          | 2.7                 | 1.8          | 2.5          | 2.1          |
| Quebec.....                        | 29.5                   | 27.2         | 29.0         | 29.2         | 30.5                | 42.5         | 33.3         | 29.4         |
| Ontario.....                       | 49.5                   | 56.7         | 51.1         | 52.9         | 48.4                | 45.9         | 47.6         | 50.9         |
| Manitoba.....                      | 4.7                    | 4.0          | 4.5          | 4.3          | 4.1                 | 3.1          | 3.9          | 4.2          |
| Saskatchewan.....                  | 2.1                    | 1.3          | 2.0          | 1.5          | 1.0                 | 0.3          | 0.9          | 0.9          |
| Alberta.....                       | 2.9                    | 1.9          | 2.7          | 2.3          | 2.2                 | 1.0          | 1.9          | 2.0          |
| British Columbia and Yukon         | 6.5                    | 4.9          | 6.2          | 6.0          | 7.9                 | 3.1          | 6.8          | 7.8          |
| <b>Totals.....</b>                 | <b>100.0</b>           | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b>        | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |
| <b>INDUSTRIAL GROUP.</b>           |                        |              |              |              |                     |              |              |              |
| Vegetable products.....            | 15.6                   | 14.1         | 15.2         | 14.7         | 12.0                | 17.4         | 13.2         | 11.0         |
| Animal products.....               | 10.2                   | 8.7          | 9.9          | 8.5          | 10.7                | 9.6          | 10.4         | 9.4          |
| Textiles and textile products      | 10.9                   | 17.7         | 12.4         | 12.4         | 13.2                | 53.5         | 22.5         | 18.0         |
| Wood and paper products....        | 24.4                   | 20.7         | 23.6         | 23.6         | 24.4                | 8.4          | 20.7         | 21.4         |
| Iron and its products.....         | 13.4                   | 12.1         | 13.1         | 14.4         | 21.4                | 2.7          | 17.1         | 20.5         |
| Non-ferrous metal products..       | 6.3                    | 7.0          | 6.4          | 7.2          | 6.2                 | 3.7          | 5.6          | 6.7          |
| Non-metallic mineral products..... | 4.9                    | 3.8          | 4.7          | 4.7          | 4.9                 | 0.5          | 3.9          | 4.6          |
| Chemicals and allied products..... | 6.1                    | 8.0          | 6.5          | 7.1          | 2.5                 | 2.5          | 2.5          | 2.7          |
| Miscellaneous industries.....      | 2.2                    | 2.4          | 2.3          | 2.3          | 2.2                 | 1.7          | 2.1          | 2.0          |
| Central electric stations.....     | 6.0                    | 5.5          | 5.9          | 6.1          | 2.5                 | Nil          | 2.0          | 2.8          |

**Monthly Record of Employment in Manufactures.**—A monthly record of the number of wage-earners employed in Canadian manufactures, as compiled from the Census of Industry, is given in Table 22 for representative years 1922 to 1935 and by sex for certain of the years. Ordinarily, manufacturing employment in Canada reaches its highest point during the summer months. Some of the seasonal industries, such as canning, are most active then, textile industries are preparing winter goods and industry generally feels the active demand of the agricultural purchasing power resulting from the prospects of the season's harvest. In 1929, however, the rising tide of "good times" was checked about midsummer and then the recession set in during the autumn with the stock market crash. Employment during 1930, 1931, 1932 and the first half of 1933 declined steadily, the monthly employment figures in each case being lower than the corresponding month of the previous year. The peak of employment was reached in June, 1929, when 596,544 wage-earners were on the payrolls. This compares with the peak month in 1930 of 556,386 wage-earners, 484,661 in 1931, 417,685 in 1932, 429,018 in 1933, 462,444 in 1934, and 496,510 in 1935. In July, 1933, employment took an upward swing; for the first time since 1929 the number of wage-earners on the payroll was higher than that for the corresponding month of the previous year. The improvement has been generally maintained since then.



**22.—Total Numbers of Wage-Earners Employed in the Manufacturing Industries of Canada, by Months and by Sex, for Representative Years 1922-35.**

**TOTALS OF WAGE-EARNERS.**

| Month.         | 1922.   | 1926.   | 1929.   | 1930.   | 1931.   | 1932.   | 1933.   | 1934.   | 1935.   |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| January.....   | 330,487 | 432,139 | 521,327 | 510,061 | 442,547 | 390,249 | 356,792 | 303,819 | 423,570 |
| February.....  | 342,950 | 445,179 | 537,816 | 517,562 | 455,811 | 400,680 | 363,902 | 410,610 | 439,011 |
| March.....     | 355,340 | 459,554 | 555,908 | 527,966 | 468,222 | 408,363 | 372,782 | 424,270 | 448,586 |
| April.....     | 366,478 | 473,088 | 575,269 | 537,110 | 476,132 | 409,860 | 376,120 | 435,534 | 459,204 |
| May.....       | 383,734 | 494,156 | 594,969 | 556,380 | 484,661 | 417,685 | 395,294 | 458,032 | 477,722 |
| June.....      | 400,165 | 507,889 | 596,544 | 552,106 | 476,692 | 414,556 | 410,110 | 462,444 | 484,735 |
| July.....      | 397,416 | 510,857 | 594,870 | 539,354 | 463,694 | 397,372 | 411,058 | 451,101 | 489,174 |
| August.....    | 398,553 | 505,917 | 588,509 | 529,403 | 456,783 | 394,277 | 420,431 | 454,076 | 482,544 |
| September..... | 395,741 | 506,917 | 586,439 | 530,130 | 460,081 | 401,534 | 429,018 | 459,341 | 496,510 |
| October.....   | 391,492 | 503,679 | 574,566 | 512,215 | 434,556 | 396,253 | 423,547 | 453,278 | 496,205 |
| November.....  | 355,222 | 484,400 | 547,697 | 486,926 | 430,618 | 385,460 | 413,664 | 442,625 | 486,431 |
| December.....  | 373,954 | 465,248 | 519,331 | 464,086 | 417,367 | 364,216 | 397,408 | 426,553 | 470,273 |

**WAGE-EARNERS BY SEX.**

| Month.         | 1922.   |         | 1929.   |         | 1933.   |         | 1934.   |         | 1935.   |         |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                | Male.   | Female. | Male.   | Female. | Male.   | Female. | Male.   | Female. | Male.   | Female. |
| January.....   | 249,012 | 80,575  | 409,663 | 111,564 | 268,855 | 87,937  | 208,816 | 95,003  | 324,154 | 90,416  |
| February.....  | 259,400 | 83,551  | 422,912 | 114,904 | 271,534 | 82,368  | 309,556 | 101,054 | 335,615 | 103,306 |
| March.....     | 270,079 | 85,361  | 439,106 | 116,802 | 278,779 | 94,003  | 320,719 | 103,551 | 342,707 | 104,879 |
| April.....     | 281,651 | 85,427  | 456,326 | 118,943 | 283,088 | 93,032  | 331,049 | 104,485 | 353,450 | 105,538 |
| May.....       | 300,325 | 88,409  | 473,017 | 121,952 | 297,715 | 97,579  | 348,399 | 109,633 | 367,468 | 110,254 |
| June.....      | 310,625 | 89,540  | 474,157 | 122,387 | 309,263 | 100,332 | 353,075 | 109,389 | 373,999 | 110,734 |
| July.....      | 310,260 | 87,166  | 473,261 | 121,618 | 312,835 | 98,323  | 348,215 | 102,880 | 375,118 | 107,058 |
| August.....    | 307,464 | 88,277  | 464,087 | 124,422 | 315,461 | 104,970 | 345,834 | 108,242 | 369,868 | 112,976 |
| September..... | 305,148 | 93,505  | 455,918 | 130,521 | 317,299 | 111,719 | 343,155 | 116,186 | 373,692 | 122,818 |
| October.....   | 298,203 | 93,289  | 446,752 | 127,814 | 313,541 | 110,006 | 340,285 | 112,903 | 376,015 | 120,190 |
| November.....  | 292,741 | 92,481  | 426,729 | 121,968 | 306,768 | 106,890 | 333,780 | 108,845 | 369,263 | 117,178 |
| December.....  | 284,084 | 89,870  | 404,700 | 114,631 | 297,083 | 100,320 | 328,423 | 103,180 | 359,636 | 110,637 |

**Hours Worked by Wage-Earners.**—The number of wage-earners working specified numbers of hours per week in the month of highest employment in 1932 to 1935 and in detail by provinces, industrial groups and in the forty leading industries for 1935 is shown in Table 23. An explanation should be made of the term "month of highest employment" as used in connection with this table. Each firm is required to report the number of hours per week worked by its wage-earners during the month in which the greatest number were employed. It therefore happens that, in the case of one firm, the month of highest employment might be May, while in that of another firm October might be the month of highest employment. The month of highest employment as shown in the following table, therefore, does not refer to any particular month but represents the summation of the different months of highest employment as reported by all firms. For a given industry, however, the month of highest employment is of more significance, as in this case it coincides for a great number of the firms engaged in the same industry.

Average hours worked per week in 1935 for all industries totalled 48.7 as compared with 49.1 hours in 1934, 48.2 hours in 1933, and 48.5 hours in 1932. The number of hours worked per week is affected both by business conditions and by changes due to government legislation and union demands. In times of depression the average number of hours per week is reduced, due to the policy of some employers of spreading the available work over as many employees as possible. With the return of better times the number of hours worked by each employee is naturally increased. This increase is, however, offset by the reduction in hours through legislative enactments and union agreements. As a result of these two factors, the tendency in employment, over a short period of time at least, cannot be ascertained directly from the statistics given in the tables following.

For Canada as a whole, 36 p.c. of the wage-earners worked under 48 hours in 1935, 23 p.c. worked 48 hours, 19 p.c. worked between 49 and 54 hours, while 22 p.c. worked 55 hours or over.

23.—Wage-Earners Working Specified Numbers of Hours in the Month of Highest Employment from 1932 to 1935 and in Detail by Provinces, Groups, and the Forty Leading Industries, 1935.

NOTE.—These are the regular hours worked per week and do not, therefore, include overtime.

| Province or Group.                   | 40 Hours or Less. | 41-43 Hours. | 44 Hours. | 45-47 Hours. | 48 Hours. | 49-50 Hours. | 51-53 Hours. | 54 Hours. | 55 Hours. | 56-59 Hours. | 60 Hours or Over. | Grand Total of Workers. | Average Hours Worked per Week. |
|--------------------------------------|-------------------|--------------|-----------|--------------|-----------|--------------|--------------|-----------|-----------|--------------|-------------------|-------------------------|--------------------------------|
|                                      | No.               | No.          | No.       | No.          | No.       | No.          | No.          | No.       | No.       | No.          | No.               | No.                     | No.                            |
| <b>Totals, 1932.....</b>             | 89,477            | 10,212       | 67,315    | 32,563       | 86,329    | 72,532       | 15,192       | 51,417    | 40,799    | 18,741       | 50,065            | 505,693                 | 48.5                           |
| <b>Totals, 1933.....</b>             | 84,384            | 10,172       | 64,837    | 32,535       | 80,649    | 70,341       | 15,237       | 51,521    | 45,112    | 17,492       | 48,283            | 500,406                 | 48.7                           |
| <b>Totals, 1934.....</b>             | 75,327            | 10,476       | 59,837    | 33,650       | 101,115   | 75,366       | 17,121       | 55,492    | 41,563    | 22,715       | 66,015            | 550,415                 | 49.1                           |
| <b>PROVINCES.</b>                    |                   |              |           |              |           |              |              |           |           |              |                   |                         |                                |
| Prince Edward Island.....            | 256               | 5            | 126       | 82           | 559       | 8            | 33           | 367       | 12        | 49           | 583               | 2,010                   | 51.9                           |
| Nova Scotia.....                     | 1,449             | 156          | 1,194     | 1,098        | 3,177     | 1,464        | 649          | 1,795     | 668       | 3,208        | 4,218             | 10,679                  | 50.9                           |
| New Brunswick.....                   | 2,020             | 233          | 1,542     | 1,145        | 2,741     | 1,600        | 566          | 2,145     | 190       | 1,931        | 4,153             | 17,207                  | 53.4                           |
| Quebec.....                          | 21,095            | 4,101        | 20,686    | 10,490       | 40,557    | 34,706       | 7,550        | 6,253     | 28,313    | 6,898        | 23,203            | 132,025                 | 50.0                           |
| Ontario.....                         | 38,791            | 6,376        | 35,410    | 28,558       | 61,895    | 51,465       | 8,392        | 11,637    | 13,536    | 8,436        | 18,341            | 275,488                 | 49.0                           |
| Manitoba.....                        | 8,791             | 1,375        | 6,416     | 1,556        | 9,895     | 1,461        | 393          | 1,837     | 236       | 371          | 1,835             | 29,682                  | 45.0                           |
| Saskatchewan.....                    | 6,643             | 68           | 6,501     | 996          | 1,474     | 291          | 103          | 433       | 78        | 271          | 1,035             | 5,275                   | 50.6                           |
| Alberta.....                         | 2,219             | 254          | 1,823     | 609          | 2,961     | 407          | 248          | 960       | 59        | 139          | 1,725             | 11,403                  | 48.0                           |
| British Columbia and Yukon.....      | 7,612             | 735          | 7,275     | 1,392        | 20,152    | 457          | 405          | 2,882     | 123       | 589          | 1,933             | 42,658                  | 48.8                           |
| <b>Totals, 1935.....</b>             | 75,715            | 12,005       | 81,352    | 45,719       | 137,378   | 64,809       | 20,099       | 27,546    | 43,535    | 21,879       | 60,850            | 590,587                 | 48.7                           |
| <b>INDUSTRIAL GROUP.</b>             |                   |              |           |              |           |              |              |           |           |              |                   |                         |                                |
| Vegetable products.....              | 12,640            | 3,129        | 7,061     | 8,136        | 13,113    | 9,136        | 3,181        | 8,506     | 5,442     | 4,186        | 13,010            | 88,449                  | 49.6                           |
| Animal products.....                 | 3,282             | 605          | 5,292     | 3,023        | 11,046    | 7,725        | 2,375        | 4,265     | 5,101     | 1,713        | 4,209             | 48,769                  | 50.0                           |
| Textiles and textile products.....   | 6,094             | 1,569        | 24,322    | 9,228        | 20,963    | 24,120       | 6,457        | 2,356     | 23,394    | 2,623        | 3,037             | 125,408                 | 48.8                           |
| Wood and paper products.....         | 8,225             | 1,957        | 13,357    | 6,769        | 47,669    | 6,430        | 2,829        | 5,866     | 3,443     | 6,060        | 30,656            | 133,291                 | 51.5                           |
| Iron and its products.....           | 27,692            | 2,408        | 14,274    | 9,194        | 17,591    | 10,347       | 3,446        | 2,091     | 3,790     | 3,783        | 3,693             | 98,479                  | 46.1                           |
| Non-ferrous metal products.....      | 6,018             | 1,178        | 4,955     | 5,121        | 11,637    | 1,783        | 405          | 1,925     | 415       | 810          | 1,122             | 32,880                  | 45.8                           |
| Non-metallic mineral products.....   | 4,968             | 1,147        | 2,587     | 640          | 3,461     | 1,801        | 380          | 1,351     | 715       | 1,423        | 2,529             | 23,007                  | 45.6                           |
| Chemicals and chemical products..... | 1,561             | 150          | 8,756     | 1,597        | 9,971     | 1,354        | 210          | 800       | 408       | 242          | 565               | 13,554                  | 48.9                           |
| Miscellaneous industries.....        | 1,361             | 150          | 8,756     | 1,597        | 9,971     | 1,354        | 210          | 800       | 408       | 242          | 565               | 13,554                  | 48.9                           |
| Central electric stations.....       | 1,391             | 45           | 1,821     | 1,158        | 3,927     | 887          | 601          | 972       | 103       | 701          | 1,050             | 12,155                  | 48.2                           |

<sup>1</sup> Exclusive of dairy factories.

23.—Wage-Earners Working Specified Numbers of Hours in the Month of Highest Employment from 1932 to 1935 and in Detail by Provinces, Groups, and the Forty Leading Industries, 1935—concluded.

| Industry.                                     | 40 Hours or Less. | 41-43 Hours. | 44 Hours. | 45-47 Hours. | 48 Hours. | 49-50 Hours. | 51-53 Hours. | 54 Hours. | 55 Hours. | 56-59 Hours. | 60 Hours or Over. | Grand Total of Workers. | Average Hours Worked per Week. |
|---|-------------------|--------------|-----------|--------------|-----------|--------------|--------------|-----------|-----------|--------------|-------------------|-------------------------|--------------------------------|
| 1 Non-ferrous metal smelting and refining.    | 2,391             | 0            | 343       | 546          | 4,646     | NH           | 1,102        | 225       | NH        | 473          | 630               | 9,098                   | 45.7                           |
| 2 Rubber, gutta-percha, and plastics.         | 2,337             | 606          | 642       | 546          | 45,841    | 15,820       | 1,102        | 1,146     | 367       | 968          | 3,308             | 27,581                  | 49.6                           |
| 3 Coal and electric stations.                 | 1,591             | 45           | 1,821     | 158          | 3,987     | 887          | 685          | 1,001     | 367       | 367          | 1,589             | 21,585                  | 49.7                           |
| 4 Slaughtering and meat packing.              | 1,568             | 284          | 3,301     | 830          | 2,980     | 1,201        | 685          | 702       | 682       | 367          | 1,589             | 9,416                   | 42.3                           |
| 5 Automobiles.                                | 5,441             | 53           | 3,514     | 254          | 3,718     | 88           | 339          | 1         | 61        | 140          | 155               | 13,857                  | 42.3                           |
| 6 Butter and cheese.                          | 237               | 1            | 1         | 1            | 1         | 1            | 1            | 1         | 1         | 1            | 1                 | 1                       | 1                              |
| 7 Flour and feed mills.                       | 3,358             | 18           | 181       | 18           | 1,579     | 45           | 43           | 375       | 343       | 107          | 1,316             | 4,262                   | 53.7                           |
| 8 Petroleum products.                         | 36                | 157          | 20        | 619          | 21        | 14           | 14           | 62        | 13        | 8            | 117               | 4,425                   | 40.1                           |
| 9 Sawmills.                                   | 625               | 99           | 533       | 335          | 1,312     | 581          | 470          | 2,482     | 541       | 3,034        | 23,045            | 43,937                  | 55.1                           |
| 10 Electrical apparatus and supplies.         | 1,797             | 94           | 2,376     | 337          | 3,468     | 720          | 101          | 118       | 210       | 214          | 249               | 14,584                  | 45.9                           |
| 11 Bread and other bakery products.           | 143               | 99           | 632       | 138          | 3,023     | 883          | 893          | 4,058     | 733       | 1,724        | 2,754             | 16,579                  | 53.4                           |
| 12 Cotton yarn and clothing footwear.         | 1,748             | 465          | 413       | 1,319        | 1,327     | 3,994        | 893          | 1,223     | 11,572    | 164          | 1,075             | 20,722                  | 35.1                           |
| 13 Textiles and publishing.                   | 1,241             | 465          | 413       | 1,319        | 1,327     | 3,994        | 893          | 1,223     | 11,572    | 164          | 1,075             | 20,722                  | 35.1                           |
| 14 Printing and publishing.                   | 1,241             | 465          | 413       | 1,319        | 1,327     | 3,994        | 893          | 1,223     | 11,572    | 164          | 1,075             | 20,722                  | 35.1                           |
| 15 Clothing and knitted goods.                | 992               | 160          | 8,805     | 1,730        | 4,040     | 1,713        | 167          | 124       | 129       | 50           | 123               | 19,843                  | 45.5                           |
| 16 Hosiery and knitted goods.                 | 401               | 88           | 1,810     | 2,734        | 2,842     | 6,053        | 1,170        | 157       | 3,754     | 143          | 216               | 18,934                  | 49.6                           |
| 17 Railway rolling-stock.                     | 14,159            | 572          | 429       | 1,796        | 707       | 92           | 44           | 33        | 54        | 109          | 67                | 18,062                  | 37.5                           |
| 18 Biscuits, confectionery, cocoa, etc.       | 440               | 578          | 680       | 2,166        | 1,641     | 1,537        | 325          | 891       | 1,016     | 194          | 321               | 9,789                   | 48.8                           |
| 19 Breweries.                                 | 327               | 22           | 701       | 215          | 377       | 1,772        | 127          | 63        | 290       | 188          | 642               | 3,734                   | 50.5                           |
| 20 Tobacco, cigars, and cigarettes.           | 1,323             | 890          | 1,822     | 596          | 2,81      | 1,779        | 57           | 58        | 113       | 86           | 54                | 6,679                   | 44.4                           |
| 21 Castings and forgings.                     | 1,335             | 474          | 1,843     | 596          | 2,81      | 1,779        | 57           | 58        | 113       | 86           | 54                | 6,679                   | 44.4                           |
| 22 Machinery and tools.                       | 1,335             | 474          | 1,843     | 596          | 2,81      | 1,779        | 57           | 58        | 113       | 86           | 54                | 6,679                   | 44.4                           |
| 23 Coke and gas products.                     | 309               | 84           | 298       | 1,339        | 819       | 2,63         | 435          | 1,069     | 556       | 2,430        | 338               | 3,990                   | 48.2                           |
| 24 Fruit and vegetable preparations.          | 5,784             | 769          | 722       | 2,824        | 723       | 993          | 609          | 825       | 1,908     | 1,091        | 5,832             | 21,890                  | 50.1                           |
| 25 Sugar refineries.                          | 522               | 31           | 11        | 18           | 1,101     | 17           | 31           | 75        | 17        | 61           | 1,022             | 2,903                   | 52.0                           |
| 26 Clothing, factory, men's.                  | 51                | 52           | 6,525     | 224          | 853       | 370          | 62           | 128       | 201       | NH           | NH                | 8,496                   | 45.1                           |
| 27 Boots and shoes, leather.                  | 1,040             | 193          | 998       | 1,197        | 3,355     | 4,063        | 815          | 1,100     | 2,815     | 840          | 436               | 10,802                  | 52.1                           |
| 28 Sheet metal products.                      | 497               | 141          | 1,897     | 399          | 1,458     | 579          | 219          | 54        | 422       | 159          | 350               | 6,199                   | 49.9                           |
| 29 Printing and bookbinding.                  | 602               | 169          | 3,338     | 836          | 5,282     | 282          | 40           | 25        | 92        | 10           | 24                | 10,558                  | 46.0                           |
| 30 Machinery.                                 | 1,072             | 106          | 2,268     | 831          | 1,965     | 1,992        | 818          | 107       | 225       | 162          | 328               | 8,134                   | 47.5                           |
| 31 Automobile supplies.                       | 1,497             | 102          | 683       | 518          | 1,433     | 2,045        | 1,79         | 179       | 838       | 178          | 457               | 7,091                   | 46.9                           |
| 32 Cuffs and socks.                           | 1,497             | 102          | 683       | 518          | 1,433     | 2,045        | 1,79         | 179       | 838       | 178          | 457               | 7,091                   | 46.9                           |
| 33 Coats and suits.                           | 1,497             | 102          | 683       | 518          | 1,433     | 2,045        | 1,79         | 179       | 838       | 178          | 457               | 7,091                   | 46.9                           |
| 34 Boxes and bags, paper.                     | 174               | 16           | 504       | 471          | 362       | 41           | 16           | 29        | 8         | 11           | 135               | 5,349                   | 47.8                           |
| 35 Fish canning and curing.                   | 1,261             | 58           | 142       | 93           | 2,288     | 1,450        | 96           | 1,542     | 84        | 311          | 2,889             | 9,003                   | 53.0                           |
| 36 Furnishing goods, men's.                   | 1,355             | 199          | 2,318     | 1,241        | 1,029     | 1,573        | 441          | 412       | 496       | 18           | 6                 | 9,088                   | 45.8                           |
| 37 Medicinal and pharmaceutical preparations. | 238               | 81           | 736       | 937          | 262       | 175          | 20           | 5         | NH        | 1            | 7                 | 2,452                   | 44.8                           |
| 38 Leather tanneries.                         | 54                | 27           | 585       | 256          | 578       | 1,142        | 17           | 460       | 770       | 33           | 186               | 4,108                   | 50.4                           |
| 39 Paints, pigments and varnishes.            | 314               | 19           | 542       | 333          | 273       | 321          | 32           | 3         | 14        | 29           | 39                | 1,909                   | 50.2                           |
| 40 Woolen cloth.                              | 47                | 10           | 28        | 101          | 51        | 2,461        | 693          | 399       | 2,080     | 372          | 370               | 6,566                   | 52.9                           |
| Totals, Forty Leading Industries.             | 59,250            | 7,733        | 59,739    | 31,573       | 103,437   | 44,575       | 15,675       | 20,560    | 34,164    | 16,657       | 51,159            | 434,512                 | 48.0                           |
| Totals, All Industries.                       | 75,715            | 12,005       | 81,323    | 45,719       | 137,378   | 61,809       | 20,099       | 27,516    | 43,535    | 21,879       | 60,856            | 596,887                 | 48.7                           |

<sup>1</sup> Not available.

## Subsection 3.—Wages and Salaries in Canadian Manufacturing Industries.

The total salaries and wages disbursed by manufacturers in 1935 was \$590,326,904 paid to 582,874 workers, compared with \$813,049,842 paid to 694,434 persons in 1929 and \$509,382,027 paid to 621,694 persons in 1917. Of the 1935 aggregate, \$173,020,195 or 29 p.c. was paid to 105,579 salaried employees who constituted 18 p.c. of the total number, and \$417,306,709 or 71 p.c. was paid in wages to 477,295 wage-earners, who formed 82 p.c. of the aggregate number of employees.

The average salary paid in the manufacturing industries during 1935 was \$1,639, compared with \$1,982 in 1930 and \$1,299 in 1917, while the average wage in 1935 was \$874, compared with \$785 in 1933, \$1,045 in 1929 and \$760 in 1917. Thus during the eighteen years since 1917, average salaries have increased by 26 p.c., while average wages have increased by only 15 p.c. (See Table 25.)

## 24.—Employees on Salaries and Wages in the Manufacturing Industries, 1935, by Sex, and Average Salaries and Wages, 1934 and 1935, by Provinces and Groups.

| Province or Group.                 | Employees on Salaries. |               |                | Average Salaries. |              | Employees on Wages. |                |                | Average Wages. |            |
|------------------------------------|------------------------|---------------|----------------|-------------------|--------------|---------------------|----------------|----------------|----------------|------------|
|                                    | Male.                  | Female.       | Total.         | 1935.             | 1934.        | Male.               | Female.        | Total.         | 1935.          | 1934.      |
|                                    | No.                    | No.           | No.            | \$                | \$           | No.                 | No.            | No.            | \$             | \$         |
| <b>PROVINCE.</b>                   |                        |               |                |                   |              |                     |                |                |                |            |
| Prince Edward Island....           | 221                    | 39            | 260            | 818               | 765          | 592                 | 256            | 848            | 478            | 478        |
| Nova Scotia.....                   | 1,939                  | 492           | 2,431          | 1,344             | 1,270        | 11,346              | 2,283          | 13,629         | 791            | 744        |
| New Brunswick.....                 | 1,691                  | 410           | 2,101          | 1,482             | 1,460        | 9,840               | 1,996          | 11,836         | 724            | 728        |
| Quebec.....                        | 24,246                 | 6,410         | 30,656         | 1,646             | 1,624        | 112,034             | 46,981         | 159,015        | 773            | 748        |
| Ontario.....                       | 40,649                 | 13,340        | 53,989         | 1,695             | 1,672        | 176,789             | 50,660         | 227,449        | 933            | 891        |
| Manitoba.....                      | 3,826                  | 931           | 4,757          | 1,547             | 1,532        | 15,090              | 3,392          | 18,482         | 938            | 880        |
| Saskatchewan.....                  | 1,756                  | 313           | 2,069          | 1,274             | 1,263        | 3,912               | 374            | 4,286          | 907            | 893        |
| Alberta.....                       | 2,383                  | 449           | 2,832          | 1,423             | 1,412        | 8,100               | 1,155          | 9,255          | 916            | 897        |
| B.C. and Yukon.....                | 5,330                  | 1,154         | 6,484          | 1,609             | 1,574        | 20,075              | 3,420          | 23,495         | 1,005          | 958        |
| <b>Totals.....</b>                 | <b>82,611</b>          | <b>23,338</b> | <b>105,949</b> | <b>1,639</b>      | <b>1,614</b> | <b>366,778</b>      | <b>110,517</b> | <b>477,295</b> | <b>874</b>     | <b>837</b> |
| <b>INDUSTRIAL GROUP.</b>           |                        |               |                |                   |              |                     |                |                |                |            |
| Vegetable products.....            | 12,778                 | 3,311         | 16,089         | 1,577             | 1,552        | 43,974              | 19,222         | 63,196         | 763            | 765        |
| Animal products.....               | 8,378                  | 2,044         | 10,422         | 1,400             | 1,350        | 39,121              | 10,581         | 49,702         | 794            | 770        |
| Textiles and textile products..... | 8,927                  | 4,178         | 13,105         | 1,635             | 1,649        | 48,410              | 50,184         | 107,594        | 698            | 682        |
| Wood and paper products            | 20,026                 | 4,866         | 24,892         | 1,568             | 1,545        | 89,513              | 9,319          | 98,832         | 902            | 867        |
| Iron and its products.....         | 10,964                 | 2,854         | 13,818         | 1,799             | 1,784        | 78,623              | 2,985          | 81,608         | 1,048          | 964        |
| Non-ferrous metal products.....    | 5,137                  | 1,657         | 6,794          | 1,838             | 1,874        | 22,781              | 4,038          | 26,819         | 1,038          | 997        |
| Non-metallic mineral products..... | 4,045                  | 885           | 4,930          | 1,658             | 1,653        | 17,868              | 544            | 18,412         | 1,045          | 1,009      |
| Chemicals and allied products..... | 4,089                  | 1,879         | 5,968          | 1,706             | 1,815        | 9,311               | 2,754          | 12,065         | 943            | 915        |
| Miscellaneous industries..         | 1,847                  | 574           | 2,421          | 1,660             | 1,679        | 7,959               | 1,890          | 9,849          | 839            | 837        |
| Central electric stations..        | 4,950                  | 1,290         | 6,240          | 1,716             | 1,659        | 9,218               | Nil            | 9,218          | 1,281          | 1,312      |

**Average Earnings, by Provinces and Industrial Groups.**—In 1935, Ontario showed the highest average salary of \$1,695, followed by Quebec with \$1,646, British Columbia with \$1,609, and Manitoba with \$1,547. The head offices of many large corporations being located in Montreal, Toronto, Vancouver, and Winnipeg tends to raise the average salaries in the provinces in which these cities are situated. In the other provinces the averages were smaller, the lowest being in Saskatchewan. No regional tendency is observable in salary payments as the following averages for 1935 show: New Brunswick \$1,482, Alberta \$1,423, Nova Scotia \$1,344, and Saskatchewan \$1,274.

British Columbia, with average wages paid of \$1,005 per annum, was the highest in 1935, being \$131 higher than the general average. In the western provinces average wages are usually higher, due to an unusually small proportion of women workers, while many of the male employees were engaged in the better-paid wood and paper, electric light and power industries. In the four provinces situated to the east, average wages in manufacturing were lower than the mean for the Dominion, while from Ontario westward the opposite was the case. The seasonal nature of some of the leading industries, notably fish preserving and lumbering, tends to reduce the mean wage in the Maritime Provinces and Quebec, while, in addition to this, Quebec also has a larger proportion of female wage-earners (employed chiefly in the textile, food, and tobacco industries), than any other province, except Prince Edward Island.

The highest average salary, *viz.*, \$1,838, was reported by the non-ferrous metal products group, while the animal products group, with an average salary of \$1,400 in 1935, was the lowest. In wages paid, central electric stations came first with an average of \$1,281, there being no female wage-earners in this industry. The textile industries, on the other hand, had the lowest average wage of \$698, due to the fact that in this group about 55 p.c. of the wage-earners were females. As is stated at the top of p. 451, of all the female wage-earners employed in the manufacturing industries of Canada, over 47 p.c. found employment in the textile industries.

**Average Earnings in the Forty Leading Industries.**—Table 25 shows employees by sex and the average salaries and wages paid in the forty leading industries during 1935, together with average salaries and wages paid in 1934. The rank of each industry is based on the aggregate salaries and wages paid.

In only ten industries did the average salaries exceed \$2,000; in fifteen they ranged from \$1,700 to \$2,000; in seven they ranged from \$1,500 to \$1,700; while in the remaining eight they were below \$1,500. None of the six industries paying the highest salaries—sugar refining \$2,779, pulp and paper \$2,379, leather tanneries \$2,361, non-ferrous metal smelting and refining \$2,199, breweries \$2,173, and petroleum products \$2,108—reported a proportion of female salaried employees equal to the general percentage of the forty leading industries. The lowest salaries were reported by the sawmilling, butter and cheese, and bread and other bakery products industries.

The highest wages, those above \$1,200, were paid in seven industries—non-ferrous metal smelting and refining \$1,327, petroleum products \$1,323, automobiles \$1,321, coke and gas products \$1,282, central electric stations \$1,281, printing and publishing \$1,275, and primary iron and steel \$1,247—in all of which the proportion of skilled workers is probably high. In seven other industries average wages ranged from \$1,000 to \$1,200. These were: sugar refining \$1,150, pulp and paper \$1,143, breweries \$1,138, railway rolling-stock \$1,040, automobile supplies \$1,031, machinery \$1,010, and paints and varnishes \$1,001. In most of these industries the proportion of women workers is low. In thirteen other industries average wages ranged between \$800 and \$1,000, while in the remaining thirteen they were below \$800. This last group includes seasonal industries, such as fruit and vegetable canning, fish curing and packing, and industries which contain a large number of small units in which the work is intermittent, such as feed mills. Other industries with low average wages were: textiles, tobacco, and boots and shoes, in which the proportion of female wage-earners is high, the number in several of these industries being greater than those of the male.

25.—Statistics of Salaries and Wages Paid in the Forty Leading Industries, 1935, together with Comparative Figures of Average Salaries and Wages Paid in 1934, and Totals and Averages Paid in Representative Years 1917-35.

NOTE.—Industries ranked according to the aggregate salaries and wages paid.

| Industry.   | Salaries.           |               |                    |                   |              |                | Wages.        |                    |              |                |       |  |
|---|---------------------|---------------|--------------------|-------------------|--------------|----------------|---------------|--------------------|--------------|----------------|-------|--|
|   | Salaried Employees. |               | Total Salaries.    | Average Salaries. |              |                | Wage-Earners. |                    | Total Wages. | Average Wages. |       |  |
|   | Male.               | Female.       |                    | 1935.             | 1934.        |                | Male.         | Female.            |              | 1935.          | 1934. |  |
|   |                     |               |                    |                   |              |                |               |                    |              |                |       |  |
| No.   | No.                 | \$            | \$                 | No.               | No.          | \$             | \$            |                    |              |                |       |  |
| 1 Pulp and paper.....                             | 2,791               | 499           | 7,827,961          | 2,379             | 2,252        | 23,913         | 633           | 28,065,352         | 1,143        | 1,098          |       |  |
| 2 Printing and publishing.....                    | 5,798               | 1,914         | 11,363,513         | 1,473             | 1,448        | 7,955          | 1,222         | 11,697,999         | 1,275        | 1,254          |       |  |
| 3 Central electric stations.....                  | 4,980               | 1,290         | 10,708,868         | 1,716             | 1,659        | 9,218          | Nil           | 11,811,125         | 1,281        | 1,312          |       |  |
| 4 Automobiles.....                                | 1,459               | 471           | 4,046,338          | 2,097             | 1,902        | 10,866         | 299           | 14,751,261         | 1,321        | 1,161          |       |  |
| 5 Railway rolling-stock.....                      | 1,228               | 68            | 2,529,387          | 1,952             | 1,948        | 15,602         | 23            | 16,256,284         | 1,040        | 935            |       |  |
| 6 Sawmills.....                                   | 2,622               | 190           | 2,250,109          | 800               | 780          | 22,755         | 100           | 15,461,548         | 675          | 606            |       |  |
| 7 Electrical apparatus and supplies.....          | 2,927               | 1,082         | 7,144,241          | 1,782             | 1,746        | 8,565          | 2,975         | 10,450,518         | 900          | 879            |       |  |
| 8 Bread and other bakery products.....            | 2,260               | 564           | 2,866,264          | 1,015             | 965          | 14,382         | 1,961         | 13,503,648         | 826          | 831            |       |  |
| 9 Clothing, factory, women's.....                 | 1,672               | 889           | 3,892,895          | 1,520             | 1,556        | 4,311          | 11,022        | 10,700,906         | 698          | 681            |       |  |
| 10 Hosiery and knitted goods.....                 | 921                 | 578           | 2,710,446          | 1,808             | 1,796        | 6,038          | 10,974        | 11,542,207         | 678          | 662            |       |  |
| 11 Castings and forgings.....                     | 1,476               | 412           | 3,363,053          | 1,781             | 1,700        | 11,720         | 152           | 10,775,919         | 908          | 886            |       |  |
| 12 Butter and cheese.....                         | 2,850               | 726           | 3,405,689          | 978               | 958          | 10,561         | 849           | 10,400,440         | 928          | 895            |       |  |
| 13 Printing and bookbinding.....                  | 2,595               | 699           | 5,162,026          | 1,567             | 1,540        | 6,610          | 2,290         | 8,545,133          | 957          | 936            |       |  |
| 14 Cotton yarn and cloth.....                     | 423                 | 144           | 1,163,749          | 2,052             | 1,988        | 11,294         | 6,260         | 12,042,510         | 686          | 718            |       |  |
| 15 Non-ferrous metal smelting and refining.....   | 817                 | 118           | 2,055,694          | 2,199             | 2,170        | 8,000          | Nil           | 10,631,602         | 1,327        | 1,237          |       |  |
| 16 Slaughtering and meat packing.....             | 2,154               | 317           | 4,265,175          | 1,726             | 1,703        | 7,319          | 884           | 8,183,172          | 998          | 978            |       |  |
| 17 Primary iron and steel.....                    | 706                 | 125           | 1,441,393          | 1,735             | 1,166        | 8,662          | 30            | 10,837,997         | 1,247        | 1,136          |       |  |
| 18 Boots and shoes, leather.....                  | 1,085               | 428           | 2,481,228          | 1,640             | 1,629        | 8,946          | 5,471         | 9,261,043          | 642          | 614            |       |  |
| 19 Rubber goods, including rubber footwear.....   | 1,209               | 410           | 2,947,122          | 1,718             | 1,736        | 6,684          | 2,624         | 8,070,309          | 807          | 847            |       |  |
| 20 Machinery.....                                 | 1,656               | 487           | 3,658,097          | 1,707             | 1,553        | 6,684          | 122           | 6,873,154          | 1,010        | 963            |       |  |
| 21 Biscuits, confectionery, cocoa, etc.....       | 1,798               | 480           | 3,880,159          | 1,707             | 1,688        | 3,666          | 4,502         | 5,426,404          | 604          | 642            |       |  |
| 22 Clothing, factory, men's.....                  | 1,250               | 385           | 2,272,203          | 1,300             | 1,387        | 3,901          | 3,760         | 6,718,167          | 877          | 790            |       |  |
| 23 Silk and artificial silk.....                  | 593                 | 311           | 1,053,953          | 1,830             | 1,700        | 5,551          | 3,633         | 6,717,064          | 731          | 719            |       |  |
| 24 Automobile supplies.....                       | 548                 | 237           | 1,400,411          | 1,784             | 1,740        | 5,231          | 598           | 6,011,023          | 1,031        | 963            |       |  |
| 25 Tobacco, cigars, and cigarettes.....           | 1,002               | 602           | 3,479,509          | 1,579             | 1,620        | 2,113          | 3,828         | 3,741,539          | 630          | 585            |       |  |
| 26 Petroleum products.....                        | 830                 | 99            | 1,057,994          | 2,108             | 1,910        | 3,917          | 10            | 5,195,230          | 1,325        | 1,174          |       |  |
| 27 Sheet metal products.....                      | 998                 | 283           | 2,101,001          | 1,640             | 1,664        | 4,591          | 708           | 4,701,007          | 887          | 866            |       |  |
| 28 Breweries.....                                 | 917                 | 126           | 2,266,507          | 2,173             | 2,189        | 3,381          | 36            | 3,889,135          | 1,138        | 1,047          |       |  |
| 29 Furnishing goods, men's.....                   | 642                 | 316           | 1,586,914          | 1,650             | 1,602        | 1,411          | 6,858         | 4,201,341          | 525          | 506            |       |  |
| 30 Coke and gas products.....                     | 987                 | 321           | 2,038,602          | 1,559             | 1,619        | 2,798          | 1             | 3,589,259          | 1,282        | 1,194          |       |  |
| 31 Boxes and bags, paper.....                     | 705                 | 268           | 1,978,139          | 2,054             | 2,018        | 2,461          | 2,138         | 3,453,921          | 751          | 742            |       |  |
| 32 Flour and feed mills.....                      | 1,599               | 181           | 2,094,324          | 1,197             | 1,094        | 3,561          | 143           | 3,071,183          | 829          | 821            |       |  |
| 33 Woollen cloth.....                             | 361                 | 126           | 982,524            | 2,018             | 2,016        | 3,482          | 2,336         | 4,126,079          | 709          | 686            |       |  |
| 34 Fruit and vegetable preparations.....          | 748                 | 236           | 1,423,060          | 1,446             | 1,497        | 3,253          | 3,675         | 3,040,421          | 525          | 514            |       |  |
| 35 Medicinal and pharmaceutical preparations..... | 979                 | 530           | 2,760,890          | 1,830             | 1,785        | 981            | 1,174         | 1,730,362          | 807          | 827            |       |  |
| 36 Paints and varnishes.....                      | 1,045               | 322           | 2,546,999          | 1,863             | 1,886        | 1,580          | 163           | 1,695,117          | 1,001        | 944            |       |  |
| 37 Leather tanneries.....                         | 296                 | 69            | 861,933            | 2,361             | 2,315        | 3,480          | 110           | 3,058,213          | 840          | 826            |       |  |
| 38 Sugar refineries.....                          | 333                 | 55            | 1,078,262          | 2,779             | 2,745        | 1,654          | 92            | 2,008,435          | 1,150        | 1,124          |       |  |
| 39 Fish curing and packing.....                   | 475                 | 75            | 703,075            | 1,278             | 1,234        | 3,185          | 1,031         | 2,171,478          | 515          | 533            |       |  |
| 40 Coffee, tea, and spices.....                   | 595                 | 173           | 1,392,881          | 1,814             | 1,727        | 788            | 562           | 1,144,106          | 848          | 843            |       |  |
| <b>Totals, Forty Leading Industries.....</b>      | <b>58,960</b>       | <b>16,602</b> | <b>122,841,542</b> | <b>1,639</b>      | <b>1,598</b> | <b>271,065</b> | <b>82,815</b> | <b>316,171,143</b> | <b>893</b>   | <b>856</b>     |       |  |
| <b>Grand Totals, All Industries—</b>              |                     |               |                    |                   |              |                |               |                    |              |                |       |  |
| 1935.....   | 82,041              | 22,533        | 173,026,195        | 1,639             |              | 366,778        | 110,517       | 417,306,709        |              | 874            |       |  |
| 1934.....   | 77,721              | 22,069        | 160,966,876        | 1,614             |              | 338,953        | 106,479       | 372,607,769        |              | 837            |       |  |
| 1933.....   | 73,909              | 20,555        | 151,866,323        | 1,607             |              | 299,109        | 100,300       | 312,701,767        |              | 785            |       |  |
| 1932.....   | 74,364              | 20,706        | 164,695,065        | 1,732             |              | 301,308        | 99,820        | 341,187,718        |              | 852            |       |  |
| 1931.....   | 77,576              | 22,322        | 186,816,794        | 1,872             |              | 351,553        | 106,075       | 437,724,767        |              | 957            |       |  |
| 1930.....   | 70,525              | 22,418        | 184,239,117        | 1,982             |              | 431,463        | 120,053       | 551,853,649        |              | 1,001          |       |  |
| 1929.....   | 73,792              | 22,815        | 188,747,672        | 1,954             |              | 468,043        | 129,784       | 624,302,170        |              | 1,045          |       |  |
| 1928.....   | 68,481              | 18,313        | 182,705,944        | 1,967             |              | 385,202        | 114,543       | 501,144,988        |              | 1,003          |       |  |
| 1927.....   | 50,412              | 16,818        | 139,614,639        | 1,831             |              | 333,156        | 99,117        | 426,269,406        |              | 972            |       |  |
| 1926.....   | 76,010              |               | 136,219,171        | 1,791             |              | 398,390        |               | 374,212,141        |              | 939            |       |  |
| 1925.....   | 83,015              |               | 148,267,340        | 1,786             |              | 526,571        |               | 583,853,225        |              | 1,109          |       |  |
| 1917.....   | 63,726              |               | 89,287,158         | 1,290             |              | 532,968        |               | 420,694,869        |              | 760            |       |  |

1 See headnote to Table 26, p. 458.

**Real Earnings of Employees in Recent Years.**—When the index number representing the average yearly wages, with 1917 as a base, is divided by the index number of the cost of living, converted to the same base, it is seen that real wages advanced by 24.2 p.c. between 1917 and 1935. The details of the computation are given in Table 26. There was little change in real wages during the three years 1917 to 1920, when prices were rising rapidly. During the following two years, 1921 and 1922, when prices dropped rapidly, real wages increased by 6 p.c. From then until 1931 there was a definite and almost continuous upward trend. In 1931 real wages reached 120.2 and then declined to 113.8 in 1933 and rose again to 124.2 in 1935, the highest on record.

**26.—Average Yearly Earnings, and Index Numbers of Earnings, Cost of Living and Real Wages of Wage-Earners, in Manufacturing Industries, 1917-35.**

**NOTE.**—The figures of average numbers of wage-earners and average earnings for the years 1931 to 1935 are strictly comparable with those for the years prior to 1925 but not with those for the intervening years. The figures for the latest years—as for the earliest—represent the earnings for complete man-years of work, with no allowance for periods of unemployment. The difference amounts only to about 3 or 4 p.c. in the total figures and affects chiefly the seasonal industries. (See footnote 1 to Table 4, p. 411.)

| Year.     | Amount of Wages Paid. | Average Number of Wage-Earners. | Average Yearly Earnings. | Index Numbers.           |                 |  |
|-----------|-----------------------|---------------------------------|--------------------------|--------------------------|-----------------|--|
|           |                       |                                 |                          | Average Yearly Earnings. | Cost of Living. | Real Value of Average Yearly Earnings. |
|           | \$                    | No.                             | \$                       |                          |                 |  |
| 1917..... | 420,094,869           | 552,968                         | 750                      | 100.0                    | 100.0           | 100.0                                  |
| 1918..... | 480,949,590           | 547,590                         | 878                      | 115.5                    | 114.0           | 101.3                                  |
| 1919..... | 490,970,905           | 520,327                         | 938                      | 123.4                    | 125.3           | 98.5                                   |
| 1920..... | 583,853,225           | 526,571                         | 1,109                    | 145.9                    | 145.9           | 100.4                                  |
| 1921..... | 381,910,145           | 381,203                         | 1,002                    | 131.8                    | 127.6           | 103.2                                  |
| 1922..... | 374,212,141           | 398,390                         | 939                      | 123.6                    | 116.8           | 105.8                                  |
| 1923..... | 428,731,347           | 446,994                         | 959                      | 126.1                    | 116.8           | 107.9                                  |
| 1924..... | 420,269,406           | 432,273                         | 972                      | 127.9                    | 114.5           | 111.7                                  |
| 1925..... | 452,958,655           | 466,602                         | 971                      | 127.8                    | 116.0           | 110.2                                  |
| 1926..... | 501,144,980           | 499,745                         | 1,003                    | 132.0                    | 116.8           | 113.0                                  |
| 1927..... | 531,583,250           | 533,450                         | 997                      | 131.3                    | 115.1           | 114.1                                  |
| 1928..... | 580,428,493           | 566,780                         | 1,024                    | 134.8                    | 115.6           | 116.5                                  |
| 1929..... | 624,302,170           | 597,827                         | 1,045                    | 137.5                    | 116.8           | 117.7                                  |
| 1930..... | 551,553,649           | 551,496                         | 1,001                    | 131.7                    | 115.9           | 113.6                                  |
| 1931..... | 497,734,767           | 487,628                         | 957                      | 125.8                    | 104.7           | 120.2                                  |
| 1932..... | 341,137,718           | 400,328                         | 852                      | 112.1                    | 95.1            | 117.9                                  |
| 1933..... | 313,701,767           | 399,409                         | 755                      | 103.3                    | 90.8            | 113.8                                  |
| 1934..... | 372,607,759           | 445,432                         | 837                      | 110.1                    | 91.9            | 119.8                                  |
| 1935..... | 417,306,709           | 477,295                         | 874                      | 115.0                    | 92.6            | 124.2                                  |

**Percentages of Wages and Salaries to Value of Products.**—Table 27 shows the relation between wages and salaries paid by manufacturers and the total net value of production. Figures of gross production are often used in such calculations, but the values out of which the wages of employees must come in the long run are the values added to the raw materials while they are in the factory. Such added values constitute the real production of the manufacturing plant and are alone available for payment of wages and salaries, of interest, rent and taxes, repairs, and all other overhead charges that must be ordinarily met. The percentage of salaries was highest in the years 1931 to 1935. These were years in which manufacturing production was curtailed and it is probable that, salaried employees being a part of the organization of an industry rather than of its productive force, salaries were an abnormally high percentage of the lower levels of production then prevailing. The percentage declined steadily with the increasing manufacturing production maintained during the period 1924 to 1929, while from 1931

to 1935, due to decreased industrial activity, the percentage of salaries to value added rose to 13.4, 15.0, 14.5, 13.2, and 13.3, respectively. It should be borne in mind, however, that salaried employees increased 38.5 p.c. during the period 1924-35 while wage-earners increased but 10.4 p.c. The percentage of wages has fluctuated much less than that of salaries. The number of wage-earning employees may be more readily adjusted to the activity of the industry and wage levels likewise more readily adjusted to the price levels of the products. The percentage of wages to the values added in manufacture was thus only 3.5 p.c. lower in 1935 than in 1924. The percentage was highest in 1920, when, in the post-war inflation, average wages were highest (Table 26) and the efficiency of production lowest (Table 20).

In previous reports on manufactures the percentage of wages and salaries paid to the value added by manufacture was carried back to 1917. Under the new method of calculating the value added, whereby the cost of materials plus fuel and electricity is deducted from the gross value of the products, it is possible to go back to 1924 only. Under the old method of calculating the value added by manufacture only the cost of the materials used was deducted from the gross value of the products.

**27.—Percentages of Wages and Salaries Paid to the Total Net Values of Manufacturing Production, 1924-35.**

| Year.     | Value Added<br>by Processes<br>of<br>Manufacture. | Salaries<br>Paid. | Wages<br>Paid. | Percentage—                       |                                |  |
|-----------|---|-------------------|----------------|-----------------------------------|--------------------------------|--|
|           |   |                   |                | of Salaries<br>to Value<br>Added. | of Wages<br>to Value<br>Added. | of Total<br>Salaries and<br>Wages to<br>Value Added. |
|           | \$  | \$                | \$             | p.c.                              | p.c.                           | p.c.   |
| 1924..... | 1,180,690,241                                     | 130,614,639       | 420,269,406    | 11.8                              | 35.6                           | 47.4   |
| 1925..... | 1,280,504,159                                     | 143,056,516       | 452,958,655    | 11.2                              | 35.4                           | 46.0   |
| 1926..... | 1,406,574,164                                     | 152,705,944       | 501,144,989    | 10.9                              | 35.6                           | 46.5   |
| 1927..... | 1,544,296,557                                     | 162,348,978       | 531,583,250    | 10.5                              | 34.4                           | 44.9   |
| 1928..... | 1,725,338,540                                     | 174,770,879       | 580,428,493    | 10.1                              | 33.6                           | 43.7   |
| 1929..... | 1,894,910,456                                     | 188,747,672       | 624,302,170    | 10.0                              | 32.9                           | 42.9   |
| 1930..... | 1,665,631,770                                     | 184,239,117       | 551,853,649    | 11.1                              | 33.1                           | 44.2   |
| 1931..... | 1,390,409,237                                     | 186,810,794       | 437,734,767    | 13.4                              | 31.5                           | 44.9   |
| 1932..... | 1,097,284,201                                     | 164,695,605       | 341,187,718    | 15.0                              | 31.1                           | 46.1   |
| 1933..... | 1,048,259,450                                     | 151,860,323       | 313,701,767    | 14.5                              | 29.9                           | 44.4   |
| 1934..... | 1,222,943,899                                     | 160,986,876       | 372,607,759    | 13.2                              | 30.5                           | 43.7   |
| 1935..... | 1,302,179,099                                     | 173,020,195       | 417,306,709    | 13.3                              | 32.1                           | 45.4   |

**Subsection 4.—Size of Manufacturing Establishments.**

A modern characteristic of industry in all industrial countries has been the increase in the size of the typical manufacturing establishment. The full utilization of highly specialized machinery necessitates large-scale production, while the improvements in transportation have widened the market.

The size of the manufacturing establishment is generally measured either by the number of employees or by the value of product, but each of these methods has its limitations. The former takes no account of the differences in capital equipment at different times or in various industries and obviously the increased use of machinery, as in the flour-milling industry, may lead to increased production concurrently with a decrease in the number of employees. The latter measure has to be adjusted for changes in the price level; and, as between industries, it makes those which handle expensive raw materials appear to operate on a larger scale. Both measures are subject to two limitations: firstly, they depend on the fluctuation of business



activity and the demand of the consumer; secondly, over any lengthy period of time there is the difficulty of comparability resulting from changes in the method of the census. Since 1932, for example, due to the difficulty of eliminating duplication in the value of production in central electric stations, as well as the difficulty of apportioning the capital investment as between different cities, it has been found necessary to exclude figures for central electric stations in showing statistics of size of establishment as well as statistics of cities and towns.

**Size as Measured by Gross Value of Products.**—While in 1922 the 420 establishments each producing over \$1,000,000 had an aggregate value of products of \$1,268,056,129 or 51 p.c. of the total production of all manufacturing industries, the 719 establishments producing over \$1,000,000 each in 1929 had an aggregate value of products of \$2,516,064,954, or 62 p.c. of the grand total for all manufacturing establishments—a very significant change in the short period of eight years. In 1931, however, the number of plants with a production of over a million dollars dropped again to 482, their output being valued at \$1,451,658,954 or 53 p.c. of the total. Due to the elimination of central electric stations, the figures since 1932 are not directly comparable with those for 1929 or 1922.

**28.—Manufacturing Establishments Grouped According to Gross Values of Products, with Total and Average Values of Products in each Class, for Canada, 1922, 1929, 1934, and 1935.**

| Group of Gross Values.             | 1922.              |                      |                      | 1929. <sup>1</sup> |                      |                      |
|------------------------------------|--------------------|----------------------|----------------------|--------------------|----------------------|----------------------|
|                                    | Estab-lish-ments.  | Total Production.    | Average Pro-duction. | Estab-lish-ments.  | Total Production.    | Average Pro-duction. |
|                                    | No.                | \$                   | \$                   | No.                | \$                   | \$                   |
| Under \$25,000.....                | 14,978             | 114,205,770          | 7,625                | 14,024             | 100,735,470          | 7,611                |
| \$ 25,000 but under \$ 50,000..... | 2,401              | 35,075,807           | 35,433               | 2,802              | 99,529,725           | 35,521               |
| 50,000 " 100,000.....              | 1,793              | 129,320,947          | 72,125               | 2,209              | 158,308,744          | 70,760               |
| 100,000 " 200,000.....             | 1,355              | 191,675,689          | 141,458              | 1,688              | 237,532,492          | 140,718              |
| 200,000 " 500,000.....             | 1,078              | 330,533,712          | 306,617              | 1,519              | 504,213,217          | 331,941              |
| 500,000 " 1,000,000.....           | 516                | 363,341,076          | 704,149              | 636                | 443,597,677          | 697,481              |
| 1,000,000 " 5,000,000.....         | 364                | 692,463,530          | 1,902,372            | 601                | 1,217,866,089        | 2,026,400            |
| 5,000,000 or over.....             | 56                 | 575,592,599          | 10,278,439           | 118                | 1,298,198,865        | 11,001,655           |
| <b>Totals and Averages.....</b>    | <b>22,541</b>      | <b>2,482,266,136</b> | <b>110,119</b>       | <b>23,597</b>      | <b>4,063,987,279</b> | <b>172,225</b>       |
|                                    | 1934. <sup>2</sup> |                      |                      | 1935. <sup>2</sup> |                      |                      |
|                                    | No.                | \$                   | \$                   | No.                | \$                   | \$                   |
|                                    | No.                | \$                   | \$                   | No.                | \$                   | \$                   |
| Under \$25,000.....                | 17,070             | 116,445,708          | 6,822                | 16,476             | 117,586,181          | 7,137                |
| \$ 25,000 but under \$ 50,000..... | 2,427              | 80,146,296           | 35,495               | 2,552              | 90,448,169           | 35,442               |
| 50,000 " 100,000.....              | 1,876              | 133,417,838          | 71,118               | 1,943              | 137,698,893          | 70,869               |
| 100,000 " 200,000.....             | 1,300              | 182,914,474          | 140,703              | 1,377              | 192,476,536          | 139,780              |
| 200,000 " 500,000.....             | 1,116              | 346,314,102          | 310,317              | 1,191              | 372,397,600          | 312,676              |
| 500,000 " 1,000,000.....           | 422                | 297,821,747          | 705,739              | 452                | 315,147,466          | 697,229              |
| 1,000,000 " 5,000,000.....         | 354                | 714,932,036          | 2,019,582            | 396                | 786,490,824          | 1,986,088            |
| 5,000,000 or over.....             | 55                 | 531,303,140          | 9,660,057            | 63                 | 657,976,801          | 10,444,076           |
| <b>Totals and Averages.....</b>    | <b>24,620</b>      | <b>2,400,295,341</b> | <b>97,859</b>        | <b>24,450</b>      | <b>2,670,222,470</b> | <b>109,212</b>       |

<sup>1</sup> The value of production in 1929 shown above is greater in the aggregate by \$34,615,939 than the value of production shown in the other tables of this chapter. This is due to the elimination from the other tables of the value of electric energy purchased by central electric stations from other generating plants for distribution to local consumers. For the reporting plant, however, the cost of such power is regarded as the cost of materials. This necessarily involves a duplication in the value of product for which it is impossible to make compensation as between the groups.

<sup>2</sup> The figures for 1934 and 1935 do not include central electric stations.

**29.—Manufacturing Establishments, Grouped According to Gross Values of Products, with Total Values of Products in each Class, by Provinces, 1935.**

NOTE.—The figures in this table do not include central electric stations.

| Group of Gross Values.      | Prince Edward Island. |                  | Nova Scotia.      |                   | New Brunswick.    |                   |
|-----------------------------|-----------------------|------------------|-------------------|-------------------|-------------------|-------------------|
|                             | Estab-lish-ments.     | Production.      | Estab-lish-ments. | Production.       | Estab-lish-ments. | Production.       |
|                             | No.                   | \$               | No.               | \$                | No.               | \$                |
| Under \$25,000.....         | 225                   | 1,398,400        | 1,059             | 5,044,273         | 654               | 3,988,381         |
| \$ 25,000 to \$ 50,000..... | 13                    | 456,982          | 74                | 2,590,925         | 72                | 2,516,971         |
| 50,000 " 100,000.....       | 7                     | 511,043          | 65                | 4,512,448         | 38                | 2,079,178         |
| 100,000 " 200,000.....      | 4                     | 710,794          | 30                | 4,104,919         | 28                | 3,711,811         |
| 200,000 " 500,000.....      | Nil                   | -                | 30                | 8,831,038         | 26                | 8,008,699         |
| 500,000 " 1,000,000.....    | Nil                   | -                | 4                 | 2,765,814         | 5                 | 3,441,100         |
| 1,000,000 " 5,000,000.....  | Nil                   | -                | 12                | 33,563,302        | 11                | 28,764,361        |
| 5,000,000 or over.....      | Nil                   | -                | Nil               | -                 | Nil               | -                 |
| <b>Totals.....</b>          | <b>249</b>            | <b>3,077,279</b> | <b>1,274</b>      | <b>62,012,719</b> | <b>834</b>        | <b>53,110,511</b> |

|                             | Quebec.      |                    | Ontario.     |                      | Manitoba.    |                    |
|-----------------------------|--------------|--------------------|--------------|----------------------|--------------|--------------------|
|                             |              |                    |              |                      |              |                    |
|                             | No.          | \$                 | No.          | \$                   | No.          | \$                 |
| Under \$25,000.....         | 5,023        | 38,475,667         | 5,901        | 47,983,880           | 673          | 4,424,689          |
| \$ 25,000 to \$ 50,000..... | 705          | 25,081,023         | 1,196        | 42,221,419           | 116          | 4,149,179          |
| 50,000 " 100,000.....       | 506          | 36,153,685         | 947          | 67,172,929           | 107          | 7,321,298          |
| 100,000 " 200,000.....      | 346          | 48,904,871         | 712          | 99,252,910           | 70           | 10,004,530         |
| 200,000 " 500,000.....      | 368          | 114,288,161        | 586          | 183,925,919          | 50           | 14,957,067         |
| 500,000 " 1,000,000.....    | 128          | 90,278,186         | 240          | 166,604,131          | 25           | 17,483,594         |
| 1,000,000 " 5,000,000.....  | 108          | 229,853,496        | 207          | 403,403,877          | 14           | 27,841,208         |
| 5,000,000 or over.....      | 23           | 190,177,157        | 26           | 359,462,252          | 3            | 24,822,370         |
| <b>Totals.....</b>          | <b>7,897</b> | <b>773,212,246</b> | <b>9,815</b> | <b>1,370,027,379</b> | <b>1,058</b> | <b>111,004,474</b> |

|                             | Saskatchewan. |                   | Alberta.   |                   | British Columbia. |                    |
|-----------------------------|---------------|-------------------|------------|-------------------|-------------------|--------------------|
|                             |               |                   |            |                   |                   |                    |
|                             | No.           | \$                | No.        | \$                | No.               | \$                 |
| Under \$25,000.....         | 584           | 3,048,928         | 664        | 4,423,160         | 1,093             | 8,198,728          |
| \$ 25,000 to \$ 50,000..... | 60            | 2,114,973         | 112        | 3,955,644         | 204               | 7,361,053          |
| 50,000 " 100,000.....       | 50            | 3,450,831         | 69         | 4,684,363         | 154               | 11,213,118         |
| 100,000 " 200,000.....      | 35            | 4,874,474         | 35         | 4,520,440         | 118               | 16,713,772         |
| 200,000 " 500,000.....      | 17            | 5,587,975         | 21         | 7,481,584         | 93                | 29,496,808         |
| 500,000 " 1,000,000.....    | Nil           | -                 | 9          | 6,454,654         | 40                | 27,611,746         |
| 1,000,000 " 5,000,000.....  | 9             | 23,366,916        | 16         | 36,979,771        | 26                | 45,540,725         |
| 5,000,000 or over.....      | Nil           | -                 | Nil        | -                 | 4                 | 40,692,190         |
| <b>Total's.....</b>         | <b>755</b>    | <b>42,444,097</b> | <b>926</b> | <b>63,505,625</b> | <b>1,732</b>      | <b>186,828,140</b> |

**Size of Establishments as Measured by Number of Employees.**—In 1923, establishments employing 501 hands or over accounted for 21.4 p.c. of the total number of employees engaged in manufacturing. By 1929 it had increased to 27.3 p.c. of the total, thereby showing the increasing concentration of production into larger units. This tendency, however, was checked by the depression, the percentage having dropped in 1933 to 20.5 p.c. (central electric stations included). The same also holds true for all establishments employing 101 hands or over. In 1923 they employed 58.5 p.c. of the total, in 1929, 61.9 p.c., and in 1933, 55.7 p.c.

**30.—Establishments and Employees in Canadian Manufactures, Grouped According to the Number of Employees per Establishment, 1923, 1929, 1931, and 1935.**

| Group.                        | 1923.              |                |                   | 1929. <sup>1</sup> |                |                   |
|-------------------------------|--------------------|----------------|-------------------|--------------------|----------------|-------------------|
|                               | Establishments.    | Employees.     | Average Employed. | Establishments.    | Employees.     | Average Employed. |
|                               | No.                | No.            | No.               | No.                | No.            | No.               |
| Fewer than 5 employees....    | 13,156             | 22,789         | 1.7               | 12,273             | 30,446         | 2.5               |
| 5 to 20 employees.....        | 5,310              | 53,852         | 10.1              | 6,160              | 62,310         | 10.1              |
| 21 " 50 " .....               | 2,068              | 67,408         | 32.2              | 2,531              | 81,846         | 32.4              |
| 51 " 100 " .....              | 1,031              | 73,449         | 71.2              | 1,262              | 90,255         | 71.5              |
| 101 " 200 " .....             | 566                | 79,737         | 140.8             | 745                | 103,944        | 139.5             |
| 201 " 500 " .....             | 374                | 116,585        | 309.0             | 444                | 136,337        | 307.1             |
| 501 or over.....              | 112                | 112,447        | 1,004.0           | 132                | 189,253        | 1,040.0           |
| <b>Totals and Averages...</b> | <b>22,642</b>      | <b>525,267</b> | <b>23.3</b>       | <b>23,597</b>      | <b>604,434</b> | <b>29.4</b>       |
|                               | 1934. <sup>2</sup> |                |                   | 1935. <sup>2</sup> |                |                   |
| Fewer than 5 employees....    | 14,206             | 26,736         | 1.8               | 13,719             | 24,058         | 1.8               |
| 5 to 20 employees.....        | 6,167              | 60,491         | 9.8               | 6,360              | 62,737         | 9.8               |
| 21 " 50 " .....               | 2,109              | 67,436         | 31.9              | 2,173              | 99,792         | 32.1              |
| 51 " 100 " .....              | 991                | 69,717         | 70.3              | 1,027              | 71,660         | 69.7              |
| 101 " 200 " .....             | 583                | 81,465         | 139.7             | 613                | 84,835         | 139.3             |
| 201 " 500 " .....             | 345                | 103,651        | 300.4             | 386                | 115,331        | 298.7             |
| 501 or over.....              | 129                | 120,692        | 935.6             | 142                | 139,013        | 788.9             |
| <b>Totals and Averages...</b> | <b>24,620</b>      | <b>539,188</b> | <b>21.5</b>       | <b>24,450</b>      | <b>567,416</b> | <b>23.2</b>       |

<sup>1</sup> See headnote to Table 26, p. 453.<sup>2</sup> Exclusive of central electric stations.

**31.—Establishments and Employees in Canadian Manufactures, by Provinces, and Average Number of Employees per Establishment, 1935.**

NOTE.—The figures in this table do not include central electric stations.

| Province and Item.              | Under 5 Employees. | 5-20.  | 21-50. | 51-100. | 101-200. | 201-500. | 501 or Over. | Total.  |
|---------------------------------|--------------------|--------|--------|---------|----------|----------|--------------|---------|
| <b>Prince Edward Island—</b>    |                    |        |        |         |          |          |              |         |
| Establishments.....             | 191                | 50     | 8      | Nil     | Nil      | Nil      | Nil          | 249     |
| Employees.....                  | 372                | 419    | 258    | -       | -        | -        | -            | 1,049   |
| Averages per establishment..... | 1.9                | 8.3    | 32.2   | -       | -        | -        | -            | 4.2     |
| <b>Nova Scotia—</b>             |                    |        |        |         |          |          |              |         |
| Establishments.....             | 832                | 809    | 80     | 29      | 9        | 13       | 3            | 1,274   |
| Employees.....                  | 1,573              | 2,787  | 2,491  | 1,968   | 1,306    | 3,471    | 1,026        | 15,222  |
| Averages per establishment..... | 1.8                | 9.01   | 31.1   | 67.8    | 145.1    | 289.2    | 542.0        | 11.9    |
| <b>New Brunswick—</b>           |                    |        |        |         |          |          |              |         |
| Establishments.....             | 512                | 224    | 52     | 21      | 13       | 9        | 3            | 834     |
| Employees.....                  | 1,002              | 2,104  | 1,676  | 1,475   | 1,837    | 2,898    | 2,473        | 13,465  |
| Averages per establishment..... | 1.9                | 9.3    | 32.2   | 70.2    | 141.3    | 332.0    | 834.3        | 16.1    |
| <b>Quebec—</b>                  |                    |        |        |         |          |          |              |         |
| Establishments.....             | 4,742              | 1,733  | 651    | 285     | 204      | 134      | 55           | 7,807   |
| Employees.....                  | 8,508              | 17,059 | 20,787 | 19,745  | 27,504   | 41,869   | 53,474       | 188,936 |
| Averages per establishment..... | 1.8                | 9.8    | 31.9   | 68.5    | 134.8    | 312.3    | 972.2        | 24.2    |
| <b>Ontario—</b>                 |                    |        |        |         |          |          |              |         |
| Establishments.....             | 4,907              | 2,809  | 1,023  | 506     | 306      | 195      | 69           | 9,815   |
| Employees.....                  | 10,371             | 28,063 | 32,683 | 35,723  | 42,862   | 56,494   | 68,314       | 274,810 |
| Averages per establishment..... | 2.1                | 9.9    | 32.2   | 70.6    | 140.7    | 289.6    | 990.05       | 27.9    |
| <b>Manitoba—</b>                |                    |        |        |         |          |          |              |         |
| Establishments.....             | 552                | 316    | 98     | 54      | 28       | 5        | 5            | 1,058   |
| Employees.....                  | 1,174              | 3,039  | 3,266  | 3,775   | 4,029    | 1,392    | 5,356        | 22,031  |
| Averages per establishment..... | 2.1                | 9.6    | 33.3   | 69.9    | 143.8    | 232.0    | 1,071.2      | 20.8    |
| <b>Saskatchewan—</b>            |                    |        |        |         |          |          |              |         |
| Establishments.....             | 534                | 162    | 38     | 13      | 8        | Nil      | Nil          | 755     |
| Employees.....                  | 1,021              | 1,394  | 1,206  | 835     | 1,347    | -        | -            | 5,803   |
| Averages per establishment..... | 1.9                | 8.6    | 31.7   | 64.2    | 168.3    | -        | -            | 7.6     |
| <b>Alberta—</b>                 |                    |        |        |         |          |          |              |         |
| Establishments.....             | 613                | 219    | 47     | 29      | 8        | 10       | Nil          | 926     |
| Employees.....                  | 1,250              | 2,065  | 1,517  | 2,045   | 1,062    | 3,570    | -            | 11,509  |
| Averages per establishment..... | 2.03               | 9.4    | 32.2   | 70.5    | 132.7    | 357.0    | -            | 12.4    |
| <b>British Columbia—</b>        |                    |        |        |         |          |          |              |         |
| Establishments.....             | 836                | 568    | 176    | 87      | 28       | 21       | 6            | 1,732   |
| Employees.....                  | 1,768              | 5,807  | 5,603  | 6,094   | 5,183    | 6,324    | 6,773        | 37,072  |
| Averages per establishment..... | 2.1                | 10.2   | 31.8   | 70.04   | 136.6    | 301.1    | 1,129.6      | 21.6    |

**Size of Establishments of Some of the Leading Industries.**—The following statement and Table 32 show the degree of concentration in some of the leading industries of Canada. Concentration is extremely marked in the case of non-ferrous metal smelting, petroleum products, automobiles, slaughtering and meat packing, and pulp and paper, whereas in the case of butter and cheese, sawmills, and bread and other bakery products, the degree of concentration is but moderate. With regard to flour and feed mills, concentration is marked in the case of flour mills, but the small size of the average feed mill offsets this for the industry as a whole.

PERCENTAGE IMPORTANCE OF ESTABLISHMENTS, EACH WITH A GROSS PRODUCTION OF \$1,000,000 AND OVER, IN CERTAIN INDUSTRIES.

| Industry.                              | Number of Such Establishments. | Percentage to Total Number in the Industry. | Percentage of Total Production in the Industry. |
|--|--------------------------------|---|---|
| Non-ferrous metal smelting.....        | 15                             | 100   | 100   |
| Pulp and paper.....                    | 50                             | 53  | 92  |
| Slaughtering and meat packing.....     | 30                             | 22  | 88  |
| Automobiles.....                       | 8                              | 40  | 98  |
| Butter and cheese.....                 | 9                              | 0.4   | 14  |
| Flour and feed mills.....              | 20                             | 2   | 65  |
| Petroleum products.....                | 15                             | 26  | 91  |
| Sawmills.....                          | 8                              | 0.2   | 18  |
| Electrical apparatus and supplies..... | 10                             | 6   | 59  |
| Bread and other bakery products.....   | 6                              | 0.2   | 15  |

32.—Size of Establishments of Some of the Leading Industries, Grouped According to the Gross Value of Products, and the Number of Persons Employed, 1935.

| Group and Item.                              | Non-Ferrous Metal Smelting. | Pulp and Paper.      | Slaughtering and Meat Packing. | Automobiles.         | Butter and Cheese. |
|--|-----------------------------|----------------------|--------------------------------|----------------------|--------------------|
| GROSS VALUE OF PRODUCTS.                     |                             |                      |                                |                      |                    |
| Under \$25,000— Establishments...No.         | Nil                         | 1                    | 36                             | 3                    | 1,838              |
| Production.....\$                            | —                           | 1                    | 637,169                        | 8,448                | 18,889,977         |
| \$ 25,000 to \$ 50,000— Establishments...No. | Nil                         | 9 <sup>1</sup>       | 14                             | 3 <sup>2</sup>       | 312                |
| Production.....\$                            | —                           | 314,014 <sup>2</sup> | 481,862                        | 142,866 <sup>2</sup> | 10,919,823         |
| 50,000 to 100,000— Establishments...No.      | Nil                         | 6                    | 18                             | 2                    | 253                |
| Production.....\$                            | —                           | 488,390              | 1,290,532                      | 2                    | 17,632,184         |
| 100,000 to 200,000— Establishments...No.     | Nil                         | 3                    | 19                             | 3                    | 120                |
| Production.....\$                            | —                           | 516,204              | 2,645,459                      | 428,210              | 15,943,160         |
| 200,000 to 500,000— Establishments...No.     | 2                           | 15                   | 14                             | 3                    | 46                 |
| Production.....\$                            | 2                           | 4,895,735            | 4,435,271                      | 1,021,656            | 13,495,658         |
| 500,000 to 1,000,000— Establishments...No.   | Nil                         | 12                   | 8                              | Nil                  | 11                 |
| Production.....\$                            | —                           | 8,752,501            | 5,942,037                      | Nil                  | 8,093,440          |
| 1,000,000 to 5,000,000— Establishments...No. | 5 <sup>2</sup>              | 43                   | 22                             | 5                    | 9                  |
| Production.....\$                            | 8,426,820 <sup>2</sup>      | 104,327,868          | 46,726,714                     | 9,121,238            | 14,314,729         |
| 5,000,000 or over— Establishments...No.      | 10                          | 7                    | 7                              | 3                    | Nil                |
| Production.....\$                            | 177,618,838                 | 43,356,480           | 71,220,268                     | 65,902,025           | Nil                |
| NUMBER OF PERSONS EMPLOYED.                  |                             |                      |                                |                      |                    |
| Under 5— Establishments...No.                | Nil                         | Nil                  | 40                             | 3                    | 2,113              |
| Employees.....No.                            | —                           | —                    | 109                            | 9                    | 4,302              |
| 5 to 20— Establishments...No.                | Nil                         | 5                    | 53                             | 4                    | 391                |
| Employees.....No.                            | —                           | 76                   | 597                            | 48                   | 3,345              |
| 21 to 50— Establishments...No.               | —                           | 14                   | 13                             | 4                    | 45                 |
| Employees.....No.                            | 2                           | 504                  | 455                            | 4                    | 1,372              |
| 51 to 100— Establishments...No.              | Nil                         | 15                   | 6                              | 4 <sup>2</sup>       | 22                 |
| Employees.....No.                            | —                           | 1,041                | 435                            | 236 <sup>2</sup>     | 1,435              |
| 101 to 200— Establishments...No.             | —                           | 15                   | 12                             | 3                    | 9                  |
| Employees.....No.                            | 208                         | 2,390                | 1,659                          | 401                  | 1,289              |
| 201 to 500— Establishments...No.             | 4                           | 25                   | 10                             | 5                    | 9 <sup>6</sup>     |
| Employees.....No.                            | 1,268                       | 8,267                | 3,235                          | 5                    | 3,043 <sup>2</sup> |
| 501 or over— Establishments...No.            | 7                           | 21                   | 5                              | 6 <sup>2</sup>       | 8                  |
| Employees.....No.                            | 7,331                       | 15,552               | 4,184                          | 12,341 <sup>2</sup>  | 6                  |

For footnotes, see end of table, p. 464.

32.—Size of Establishments of Some of the Leading Industries, Grouped According to the Gross Value of Products, and the Number of Persons Employed, 1935—concl.

| Group and Item.                    |                       | Flour and Food. | Petroleum Products. | Saw-mills. | Electrical Apparatus and Supplies. | Bread and Other Bakery Products. |
|------------------------------------|-----------------------|-----------------|---------------------|------------|------------------------------------|----------------------------------|
| <b>GROSS VALUE OF PRODUCTS.</b>    |                       |                 |                     |            |                                    |                                  |
| Under \$25,000—                    | Establishments... No. | 739             | 10                  | 3,399      | 52                                 | 2,684                            |
|                                    | Production..... \$    | 8,398,143       | 211,898             | 11,968,783 | 498,861                            | 19,685,975                       |
| \$ 25,000 to \$ 50,000—            | Establishments... No. | 254             | 5                   | 114        | 53                                 | 205                              |
|                                    | Production..... \$    | 8,690,010       | 169,750             | 4,078,108  | 1,209,203                          | 6,955,551                        |
| 50,000 to 100,000—                 | Establishments... No. | 78              | 6                   | 69         | 24                                 | 82                               |
|                                    | Production..... \$    | 5,352,742       | 440,844             | 4,744,633  | 1,853,040                          | 5,680,856                        |
| 100,000 to 200,000—                | Establishments... No. | 14              | 13                  | 50         | 13                                 | 31                               |
|                                    | Production..... \$    | 2,014,182       | 1,878,442           | 0,872,873  | 1,663,848                          | 4,128,049                        |
| 200,000 to 500,000—                | Establishments... No. | 15              | 6                   | 38         | 32                                 | 28                               |
|                                    | Production..... \$    | 4,508,843       | 2,037,544           | 12,731,274 | 10,478,322                         | 8,390,672                        |
| 500,000 to 1,000,000—              | Establishments... No. | 7               | 3                   | 20         | 14                                 | 9                                |
|                                    | Production..... \$    | 4,000,497       | 2,077,926           | 13,381,112 | 9,300,721                          | 5,773,646                        |
| 1,000,000 to 5,000,000—            | Establishments... No. | 15              | 8                   | 8          | 12 <sup>1</sup>                    | 6                                |
|                                    | Production..... \$    | 32,894,637      | 20,230,350          | 12,128,354 | 36,068,833 <sup>2</sup>            | 8,785,919                        |
| 5,000,000 or over—                 | Establishments... No. | 5               | 1                   | Nil        | 7                                  | Nil                              |
|                                    | Production..... \$    | 31,013,912      | 52,864,702          | -          | -                                  | -                                |
| <b>NUMBER OF PERSONS EMPLOYED.</b> |                       |                 |                     |            |                                    |                                  |
| Under 5—                           | Establishments... No. | 1,017           | 11                  | 3,017      | 28                                 | 2,246                            |
|                                    | Employees..... No.    | 1,567           | 27                  | 4,914      | 70                                 | 4,622                            |
| 5 to 20—                           | Establishments... No. | 78              | 23                  | 479        | 70                                 | 582                              |
|                                    | Employees..... No.    | 635             | 22 <sup>3</sup>     | 4,397      | 847                                | 5,523                            |
| 21 to 50—                          | Establishments... No. | 13              | 8                   | 107        | 33                                 | 71                               |
|                                    | Employees..... No.    | 417             | 223                 | 3,474      | 1,154                              | 2,110                            |
| 51 to 100—                         | Establishments... No. | 7               | 5                   | 49         | 20                                 | 23                               |
|                                    | Employees..... No.    | 478             | 312                 | 3,435      | 1,605                              | 1,641                            |
| 101 to 200—                        | Establishments... No. | 8               | 6                   | 31         | 11                                 | 13                               |
|                                    | Employees..... No.    | 1,107           | 704                 | 4,397      | 1,535                              | 1,831                            |
| 201 to 500—                        | Establishments... No. | 4               | 8                   | 12         | 8                                  | 10                               |
|                                    | Employees..... No.    | 1,250           | 8                   | 3,377      | 2,138                              | 3,140                            |
| 501 or over—                       | Establishments... No. | Nil             | 5 <sup>4</sup>      | 3          | 6                                  | Nil                              |
|                                    | Employees..... No.    | -               | 3,303 <sup>5</sup>  | 1,793      | 8,206                              | -                                |

<sup>1</sup> Includes 1 establishment with production of \$25,000 or under.

<sup>2</sup> Includes 1 establishment with production of \$200,000 to \$500,000.

<sup>3</sup> Includes 1 establishment with production of \$200,000 to \$500,000.

<sup>4</sup> Includes 2 establishments with employees from 21 to 50.

<sup>5</sup> Includes 2 establishments with employees of 201 to 500.

<sup>6</sup> Includes 1 establishment with employees of 501 or over.

<sup>7</sup> Includes 2 establishments with production of \$5,000,000 or over.

<sup>8</sup> Includes 3 establishments with employees of 201 to 500.

#### Subsection 5.—Power and Fuel.

**Power.**—The power equipment installed in manufacturing establishments is a very good barometer of the industrial development of Canada, inasmuch as the production is increasingly dependent on the power equipment. Increases and decreases in productive capacity, measured in horse-power, are not the result of temporary fluctuations in costs and values in the same manner as capital investments, values of products, etc. Power equipment will not reflect temporary depressions, but over a period of several years will indicate industrial growth or decline.

Central electric stations, which generate electricity for both lighting and power purposes, are treated, in Table 33, separately from the other groups of industries. Internal combustion engines include all gasoline engines, gas engines (natural, coal, and producer gas), and diesel and semi-diesel or other engines which produce power by burning the fuel in the cylinder.

Of the total increase in primary power equipment since 1923, amounting to 5,021,427 h.p., inclusive of central electric stations, 4,541,985 h.p., or 90.5 p.c., was in water power. However, some sections of Canada are not so well provided with water power and in such sections primary power derived from steam engines

and turbines and internal combustion engines has also increased rapidly during the period covered. In the provinces of Prince Edward Island, Nova Scotia, Saskatchewan, and Alberta, primary power produced from fuels exceeded that from water in 1935. The total installation of electric motors increased 2,071,261 h.p., or 159 p.c., in the 13 years covered, by far the greatest part of this increase being in motors operated by power purchased from central electric stations.

Of the total power equipment installed in the manufacturing industries (first part of Table 33), it will be seen that approximately 50 p.c. is used in the manufacture of wood and paper products; the next group in importance is iron and its products, which accounts for a little over 15 p.c.; non-ferrous metal products is third with 9.6 p.c. Together, these three groups account for about 75 p.c. of such installation.

**Fuel and Electricity.**—Fuel and electricity consumed by the manufacturing industries of Canada in 1935 was valued at \$84,273,129. Of this amount \$43,548,065 was for fuel and \$40,725,064 for electric power. The fuel used in industrial establishments in 1935 included 4,397,580 tons of bituminous coal valued at \$23,642,048, constituting 54.3 p.c. of the total fuel cost. The other chief fuels in order of value were: fuel oil 14.7 p.c., gas (principally manufactured gas) 13.2 p.c., coke 4.5 p.c., wood 3.4 p.c., and anthracite coal 3.0 p.c. Out of a fuel account of \$43,548,065, Ontario's requirements cost \$21,176,658 or 48.6 p.c. of the total; Quebec's cost \$10,887,347; Nova Scotia's, \$3,248,434; and British Columbia's, \$2,415,241.

The groups of industries in which fuel was most extensively used in 1935 were: non-metallic minerals \$8,742,968, wood and paper \$8,664,304, iron and steel products \$7,995,847, and vegetable products \$5,798,332. Fuel is used quite generally throughout the industrial field for the generation of power by means of internal combustion and steam engines. The most important industries where heat is applied directly to materials to transform them or to facilitate their manipulation are foundries and machine shops, blast furnaces and steel mills, smelting plants, brick, tile, lime and cement-making, petroleum refining, and the glass industry. In such industries as the manufacture of coke and gas the coal, used as a material which enters into the actual composition of the product, is not treated as a fuel but as a raw material and is not, therefore, included in the figures of Table 34.

The total annual expenditure on fuel decreased by \$8,092,847 or 15.7 p.c. in the fourteen years 1921-35 covered by the summary figures in Table 34. During this period prices of fuel generally have declined; thus with an increase of 7.2 p.c. in the quantity of bituminous coal used, the value decreased by 32.0 p.c.

The wood and paper products group is the largest user of electric power, the consumption in 1935 being valued at \$18,068,175 or 44.4 p.c. of the total cost of power used by all manufacturing industries. The iron and its products group ranks second with only 11.3 p.c. of the total. Other principal users were non-ferrous metal products, vegetable products, and textiles.

In the provinces of Quebec and British Columbia the cost of electricity exceeds that of fuel. For Quebec, which is the largest user of electrical power, the electricity used was valued at \$17,761,056 as against \$10,887,347 for fuel, while in British Columbia electric power totalled \$3,649,470 and fuel \$2,415,241. Ontario, which ranks second as a user of electrical energy, expended \$14,896,266 for electricity and \$21,176,658 for fuel.

### 33.—Totals for Canada of Power Installed in the Manufacturing Industries other than Central Electric Stations and in Central Electric Stations, 1921-35, with Details by Provinces and Industrial Groups for 1935.

#### MANUFACTURING INDUSTRIES (EXCLUSIVE OF CENTRAL ELECTRIC STATIONS).

| Province or Group.                   | Steam Engines and Turbines. | Internal Combustion Engines. | Hydraulic Turbines and Water Wheels. | Electric Motors Operated by Purchased Power. | Total Power Equipment. | Electric Motors Operated by Power Generated by Establishments Reporting. | Total Electric Motors. |
|--------------------------------------|-----------------------------|------------------------------|--------------------------------------|--|------------------------|--|------------------------|
|                                      | h.p.                        | h.p.                         | h.p.                                 | h.p.   | h.p.                   | h.p.   | h.p.                   |
| Totals, 1921.....                    | 496,534                     | 37,696                       | 492,508                              | 1  | 1                      | 1  | 1,014,216              |
| Totals, 1922.....                    | 554,141                     | 76,271                       | 578,796                              | 1  | 1                      | 1  | 1,162,649              |
| Totals, 1923.....                    | 554,191                     | 46,529                       | 587,191                              | 958,692                                      | 2,146,903              | 357,136  | 1,315,828              |
| Totals, 1924.....                    | 652,913                     | 54,259                       | 575,189                              | 1,256,183                                    | 2,538,535              | 398,001  | 1,654,184              |
| Totals, 1925.....                    | 686,425                     | 57,247                       | 596,738                              | 1,547,754                                    | 2,888,164              | 434,678  | 1,982,432              |
| Totals, 1926.....                    | 704,158                     | 56,128                       | 603,628                              | 1,770,334                                    | 3,134,248              | 392,322  | 2,162,656              |
| Totals, 1927.....                    | 718,157                     | 57,143                       | 587,595                              | 1,924,687                                    | 3,287,582              | 386,552  | 2,311,242              |
| Totals, 1928.....                    | 736,996                     | 58,806                       | 657,253                              | 2,139,129                                    | 3,592,184              | 457,565  | 2,596,694              |
| Totals, 1929.....                    | 768,141                     | 60,654                       | 645,500                              | 2,393,684                                    | 3,867,979              | 496,036  | 2,889,720              |
| Totals, 1930.....                    | 799,041                     | 65,630                       | 685,220                              | 2,518,355                                    | 4,051,744              | 476,548  | 2,957,471              |
| Totals, 1931.....                    | 786,397                     | 73,401                       | 687,558                              | 2,537,411                                    | 4,114,677              | 509,305  | 3,127,211              |
| Totals, 1932.....                    | 741,486                     | 68,554                       | 653,216                              | 2,694,164                                    | 4,137,420              | 516,157  | 3,210,321              |
| Totals, 1933.....                    | 743,433                     | 76,613                       | 657,695                              | 2,671,440                                    | 4,149,181              | 502,706  | 3,174,146              |
| Totals, 1934.....                    | 779,949                     | 87,147                       | 597,687                              | 2,779,913                                    | 4,244,696              | 550,500  | 3,330,413              |
| PROVINCE, 1935.                      |                             |                              |                                      |  |                        |  |                        |
| Prince Edward Island.....            | 1,414                       | 604                          | 1,324                                | 705  | 4,047                  | 1  | 706                    |
| Nova Scotia.....                     | 93,019                      | 4,765                        | 13,935                               | 97,100                                       | 209,719                | 11,027   | 108,127                |
| New Brunswick.....                   | 67,795                      | 3,877                        | 28,491                               | 96,958                                       | 196,821                | 46,875   | 148,833                |
| Quebec.....                          | 172,827                     | 15,586                       | 191,079                              | 1,127,225                                    | 1,506,717              | 101,428  | 1,228,653              |
| Ontario.....                         | 271,629                     | 43,457                       | 244,969                              | 1,146,297                                    | 1,706,352              | 228,408  | 1,374,705              |
| Manitoba.....                        | 16,250                      | 3,862                        | 25                                   | 107,883                                      | 127,820                | 1,060  | 108,743                |
| Saskatchewan.....                    | 13,349                      | 2,651                        | 70                                   | 21,000                                       | 37,070                 | 99   | 21,096                 |
| Alberta.....                         | 24,519                      | 4,164                        | 12                                   | 41,433                                       | 70,123                 | 2,343  | 43,776                 |
| British Columbia and Yukon           | 118,281                     | 9,079                        | 123,849                              | 236,292                                      | 488,101                | 121,158  | 357,450                |
| Totals, 1935.....                    | 779,983                     | 88,345                       | 603,754                              | 2,874,692                                    | 4,346,775              | 512,396  | 3,387,959              |
| INDUSTRIAL GROUP, 1935.              |                             |                              |                                      |  |                        |  |                        |
| Vegetable products.....              | 57,374                      | 20,306                       | 30,630                               | 223,051                                      | 331,361                | 23,088   | 246,139                |
| Animal products.....                 | 27,385                      | 1,584                        | 1,861                                | 87,930                                       | 125,660                | 2,968  | 90,018                 |
| Textile products.....                | 28,704                      | 1,738                        | 27,921                               | 182,189                                      | 240,649                | 22,463   | 204,649                |
| Wood and paper products.....         | 418,614                     | 20,676                       | 512,390                              | 1,202,403                                    | 2,160,033              | 355,091  | 1,558,094              |
| Iron and its products.....           | 159,939                     | 23,004                       | 3,964                                | 473,584                                      | 660,491                | 69,395   | 542,979                |
| Non-ferrous metal products.....      | 23,796                      | 2,548                        | 18,460                               | 367,123                                      | 416,927                | 22,467   | 389,590                |
| Non-metallic mineral products.....   | 33,492                      | 7,747                        | 23                                   | 181,293                                      | 222,555                | 6,147  | 187,440                |
| Chemicals and chemical products..... | 17,034                      | 254                          | 8,505                                | 104,671                                      | 130,464                | 7,600  | 112,271                |
| Miscellaneous industries.....        | 8,645                       | 688                          | Nil                                  | 52,452                                       | 61,785                 | 2,657  | 55,009                 |

#### CENTRAL ELECTRIC STATIONS.

|                            | h.p.    | h.p.   | h.p.      | h.p. | h.p.      | h.p. | h.p. |
|----------------------------|---------|--------|-----------|------|-----------|------|------|
| Totals, 1921.....          | 269,191 | 15,871 | 1,826,357 | -    | 2,111,419 | -    | -    |
| Totals, 1922.....          | 279,615 | 16,751 | 2,112,289 | -    | 2,408,655 | -    | -    |
| Totals, 1923.....          | 273,679 | 17,191 | 2,282,547 | -    | 2,573,417 | -    | -    |
| Totals, 1924.....          | 281,354 | 18,241 | 2,707,957 | -    | 3,017,552 | -    | -    |
| Totals, 1925.....          | 306,491 | 20,189 | 3,416,018 | -    | 3,742,697 | -    | -    |
| Totals, 1926.....          | 314,377 | 22,426 | 3,609,355 | -    | 3,946,158 | -    | -    |
| Totals, 1927.....          | 320,774 | 22,510 | 3,976,012 | -    | 4,318,396 | -    | -    |
| Totals, 1928.....          | 316,311 | 25,059 | 4,445,531 | -    | 4,786,900 | -    | -    |
| Totals, 1929.....          | 347,641 | 30,575 | 4,718,927 | -    | 5,097,443 | -    | -    |
| Totals, 1930.....          | 393,990 | 34,462 | 5,144,100 | -    | 5,572,561 | -    | -    |
| Totals, 1931.....          | 433,728 | 34,753 | 5,422,319 | -    | 5,890,300 | -    | -    |
| Totals, 1932.....          | 456,674 | 35,600 | 6,036,259 | -    | 6,528,533 | -    | -    |
| Totals, 1933.....          | 467,453 | 36,125 | 6,305,997 | -    | 6,809,575 | -    | -    |
| Totals, 1934.....          | 464,142 | 36,776 | 6,560,674 | -    | 7,061,592 | -    | -    |
| PROVINCE, 1935.            |         |        |           |      |           |      |      |
| Prince Edward Island.....  | 4,248   | 980    | 464       | -    | 5,692     | -    | -    |
| Nova Scotia.....           | 73,851  | 1,184  | 81,606    | -    | 156,641   | -    | -    |
| New Brunswick.....         | 29,840  | 245    | 105,985   | -    | 136,070   | -    | -    |
| Quebec.....                | 28,474  | 273    | 3,475,705 | -    | 3,614,452 | -    | -    |
| Ontario.....               | 40,213  | 3,831  | 2,077,459 | -    | 2,121,203 | -    | -    |
| Manitoba.....              | 23,581  | 2,754  | 436,025   | -    | 479,260   | -    | -    |
| Saskatchewan.....          | 120,310 | 17,908 | Nil       | -    | 138,218   | -    | -    |
| Alberta.....               | 77,067  | 4,785  | 69,520    | -    | 151,372   | -    | -    |
| British Columbia and Yukon | 49,513  | 4,247  | 580,306   | -    | 614,066   | -    | -    |
| Totals, 1935.....          | 467,697 | 35,907 | 6,807,969 | -    | 7,310,973 | -    | -    |

\* Not available.

34.—Fuel and Electricity Used in the Manufacturing Industries of Canada, 1921-34, with Details by Provinces and Groups, 1935.

| Province or Group                    | Bituminous Coal. |            | Anthracite Coal. |           | Lignite Coal. | Coke.     | Fuel Oils. | Wood.     | Gas.      | Other Fuel, Including Gasoline. | Cost of Electricity. <sup>1</sup> | Total Fuel and Electricity. <sup>1</sup> |
|--------------------------------------|------------------|------------|------------------|-----------|---------------|-----------|------------|-----------|-----------|---------------------------------|-----------------------------------|--|
|                                      | short tons.      | \$         | short tons.      | \$        | \$            | \$        | \$         | \$        | \$        | \$                              | \$                                | \$                                       |
| Totals, 1921                         | 4,103,171        | 34,752,681 | 306,459          | 2,915,752 | 1,236,456     | 2,497,400 | 5,617,809  | 2,055,444 | 1,616,962 | 4,730,823                       | 2                                 | 51,640,912 <sup>2</sup>                  |
| Totals, 1922                         | 3,932,466        | 32,846,359 | 296,289          | 2,816,185 | 1,126,259     | 2,295,016 | 5,419,001  | 2,055,444 | 1,616,962 | 4,730,823                       | 2                                 | 48,970,503 <sup>2</sup>                  |
| Totals, 1923                         | 3,828,125        | 32,283,121 | 275,720          | 2,614,329 | 569,914       | 2,235,257 | 6,241,692  | 2,514,547 | 1,994,658 | 4,432,336                       | 2                                 | 45,796,603 <sup>2</sup>                  |
| Totals, 1924                         | 3,538,257        | 28,343,454 | 258,333          | 2,463,439 | 627,495       | 2,356,232 | 5,759,732  | 2,555,064 | 1,711,586 | 4,022,377                       | 18,876,446                        | 75,914,060                               |
| Totals, 1925                         | 3,097,433        | 24,034,331 | 337,654          | 2,564,459 | 638,257       | 2,474,633 | 7,246,961  | 2,700,977 | 3,370,590 | 1,968,697                       | 22,857,037                        | 89,378,745                               |
| Totals, 1926                         | 2,902,327        | 23,034,331 | 300,179          | 2,356,935 | 578,651       | 2,178,658 | 7,871,769  | 2,645,505 | 3,252,762 | 1,700,001                       | 20,524,408                        | 81,667,379                               |
| Totals, 1927                         | 2,476,838        | 20,733,359 | 317,135          | 2,355,739 | 1,323,121     | 3,590,373 | 7,309,522  | 2,435,194 | 3,453,065 | 1,732,282                       | 23,514,408                        | 81,667,379                               |
| Totals, 1928                         | 2,476,838        | 20,733,359 | 317,135          | 2,355,739 | 1,323,121     | 3,590,373 | 7,309,522  | 2,435,194 | 3,453,065 | 1,732,282                       | 23,514,408                        | 81,667,379                               |
| Totals, 1929                         | 2,476,838        | 20,733,359 | 317,135          | 2,355,739 | 1,323,121     | 3,590,373 | 7,309,522  | 2,435,194 | 3,453,065 | 1,732,282                       | 23,514,408                        | 81,667,379                               |
| Totals, 1930                         | 2,476,838        | 20,733,359 | 317,135          | 2,355,739 | 1,323,121     | 3,590,373 | 7,309,522  | 2,435,194 | 3,453,065 | 1,732,282                       | 23,514,408                        | 81,667,379                               |
| Totals, 1931                         | 2,476,838        | 20,733,359 | 317,135          | 2,355,739 | 1,323,121     | 3,590,373 | 7,309,522  | 2,435,194 | 3,453,065 | 1,732,282                       | 23,514,408                        | 81,667,379                               |
| Totals, 1932                         | 2,476,838        | 20,733,359 | 317,135          | 2,355,739 | 1,323,121     | 3,590,373 | 7,309,522  | 2,435,194 | 3,453,065 | 1,732,282                       | 23,514,408                        | 81,667,379                               |
| Totals, 1933                         | 2,476,838        | 20,733,359 | 317,135          | 2,355,739 | 1,323,121     | 3,590,373 | 7,309,522  | 2,435,194 | 3,453,065 | 1,732,282                       | 23,514,408                        | 81,667,379                               |
| Totals, 1934                         | 2,476,838        | 20,733,359 | 317,135          | 2,355,739 | 1,323,121     | 3,590,373 | 7,309,522  | 2,435,194 | 3,453,065 | 1,732,282                       | 23,514,408                        | 81,667,379                               |
| Provinces, 1935.                     |                  |            |                  |           |               |           |            |           |           |                                 |                                   |  |
| Prince Edward Island.....            | 8,769            | 54,990     | 41               | 396       | Nil           | 3,320     | 12,002     | 8,015     | Nil       | 4,127                           | 10,246                            | 99,192                                   |
| Nova Scotia.....                     | 369,124          | 1,530,954  | 1,924            | 16,700    | 658           | 100,884   | 504,790    | 33,298    | 617,321   | 364,940                         | 1,217,808                         | 4,660,242                                |
| New Brunswick.....                   | 346,047          | 1,677,308  | 1,241            | 10,766    | 49            | 23,866    | 102,719    | 74,617    | 19,560    | 85,398                          | 1,285,175                         | 3,149,453                                |
| Quebec.....                          | 1,032,332        | 6,011,124  | 120,854          | 730,022   | 9,553         | 231,812   | 1,797,452  | 535,259   | 1,272,946 | 17,701,056                      | 28,638,403                        | 35,683,403                               |
| Ontario.....                         | 2,233,884        | 12,718,713 | 58,476           | 433,275   | 17,089        | 1,270,072 | 2,154,746  | 431,510   | 3,252,030 | 14,890,326                      | 39,022,973                        | 54,336,713                               |
| Manitoba.....                        | 78,780           | 606,891    | 8,099            | 91,957    | 882,202       | 21,743    | 200,777    | 146,050   | 48,152    | 97,831                          | 457,470                           | 1,708,282                                |
| Saskatchewan.....                    | 132,651          | 572,882    | 747              | 4,092     | 127,607       | 39,302    | 800,157    | 25,458    | 344,394   | 58,523                          | 504,267                           | 1,530,171                                |
| Alberta.....                         | 111,853          | 274,917    | 68               | 241       | 1,667         | 105,150   | 1,155,152  | 167,616   | 101,397   | 507,304                         | 3,649,470                         | 6,004,711                                |
| British Columbia and Yukon.....      | 74,247           | 376,244    | 141              | 1,311     | Nil           | 1,686     | 1,155,152  | 167,616   | 101,397   | 507,304                         | 3,649,470                         | 6,004,711                                |
| Totals, 1935.....                    | 4,397,659        | 23,642,945 | 199,191          | 1,259,514 | 861,886       | 1,953,731 | 6,388,274  | 1,490,673 | 5,744,664 | 2,172,275                       | 40,725,064                        | 84,273,429                               |
| Industrial Groups, 1935.             |                  |            |                  |           |               |           |            |           |           |                                 |                                   |  |
| Vegetable products.....              | 546,010          | 3,002,787  | 48,872           | 408,347   | 171,946       | 398,878   | 556,835    | 406,876   | 631,117   | 291,496                         | 3,290,411                         | 9,088,743                                |
| Animal products.....                 | 340,780          | 1,783,172  | 6,043            | 28,616    | 280,406       | 398,878   | 556,835    | 406,876   | 631,117   | 291,496                         | 3,290,411                         | 9,088,743                                |
| Textiles and textile products.....   | 1,069,513        | 6,107,433  | 37,880           | 325,575   | 1,032,332     | 2,318,121 | 3,044,596  | 71,325    | 91,011    | 100,073                         | 1,630,430                         | 4,634,745                                |
| Wood and paper products.....         | 1,908,763        | 9,970,433  | 16,582           | 105,638   | 212,902       | 361,732   | 917,501    | 234,331   | 146,659   | 805,952                         | 2,243,139                         | 6,937,806                                |
| Non-ferrous metal products.....      | 121,853          | 601,622    | 4,516            | 36,300    | 273           | 97,705    | 335,950    | 6,824     | 1,815,740 | 150,924                         | 18,068,175                        | 26,722,479                               |
| Non-metallic mineral products.....   | 435,251          | 2,446,047  | 7,358            | 52,308    | 21,065        | 93,942    | 1,232,974  | 255,196   | 2,731,688 | 29,501                          | 4,346,890                         | 5,717,809                                |
| Chemicals and chemical products..... | 285,659          | 1,506,594  | 4,457            | 33,152    | 889           | 58,506    | 107,023    | 20,864    | 2,731,688 | 29,501                          | 4,346,890                         | 5,717,809                                |
| Miscellaneous industries.....        | 304,191          | 1,338,317  | Nil              | Nil       | 146,272       | 1,347     | 7,614      | 45,512    | 3,453,065 | 1,732,282                       | 23,514,408                        | 81,667,379                               |
| Central electric stations.....       | 304,191          | 1,338,317  | Nil              | Nil       | 146,272       | 1,347     | 7,614      | 45,512    | 3,453,065 | 1,732,282                       | 23,514,408                        | 81,667,379                               |

<sup>1</sup> Cost of electricity for central electric stations excluded.<sup>2</sup> Not available.<sup>3</sup> Does not include cost of electricity.



### Section 5.—Manufacturing Industries in Cities and Towns.

The prosperity of most of the cities and towns of Canada, especially in the East, is intimately connected with their manufacturing industries, which provide employment for a large proportion of their gainfully occupied population. In the West the cities are more largely distributing centres, though manufactures are rapidly increasing there also.

Table 35, indicating the extent to which the manufacturing industries of Canada are concentrated in urban centres, shows by provinces the proportion of the gross manufacturing production contributed by cities and towns having a gross production of over \$1,000,000 each. In the more highly industrialized provinces of Ontario and Quebec such cities and towns account for about 92 p.c. of the total, while in British Columbia and the Maritime Provinces, where sawmilling, fish packing, and dairying are leading industries, the proportion falls to 68 p.c. and 67 p.c., respectively. In the Prairie Provinces manufacturing is confined largely to a few large urban centres.

#### 35.—Cities and Towns with a Gross Manufacturing Production of over \$1,000,000 each, Number of Establishments and Total Gross Production in such Cities and Towns as a Percentage of the Grand Total, by Provinces, 1935.

NOTE.—Figures published in this table are in some cases higher than those published in Table 37, since in the table below are included statistics of towns with less than three establishments and production of over \$1,000,000 each. It was not possible to publish this information in Table 37 without disclosing the operations of individual establishments. The statistics in this table do not include central electric stations.

| Province.                 | Cities and Towns with a Gross Production of over \$1,000,000 each. | Establishments Reporting in Cities and Towns Producing over \$1,000,000 each. | Total Production in Cities and Towns Producing over \$1,000,000 each. | Total Production in each Province. | Production in Cities and Towns as a Percentage of Total Production in each Province. |
|---------------------------|--|---|---|------------------------------------|--|
|                           | No.  | No.   | \$  | \$                                 | p.c.   |
| Prince Edward Island..... | 1  | 36  | 1,433,920   | 3,077,279                          | 46.6   |
| Nova Scotia.....          | 9  | 260   | 40,695,902  | 62,012,719                         | 65.6   |
| New Brunswick.....        | 8  | 256   | 35,833,192  | 53,110,511                         | 69.4   |
| Quebec.....               | 50   | 3,511   | 696,301,304   | 773,212,246                        | 90.1   |
| Ontario.....              | 96   | 6,335   | 1,280,660,702   | 1,370,027,379                      | 93.5   |
| Manitoba.....             | 5  | 673   | 94,389,332  | 111,004,474                        | 85.0   |
| Saskatchewan.....         | 4  | 233   | 33,370,024  | 42,444,097                         | 79.8   |
| Alberta.....              | 5  | 375   | 56,931,416  | 68,505,625                         | 83.1   |
| British Columbia.....     | 9  | 1,139   | 127,782,411   | 186,828,140                        | 68.4   |
| <b>Totals.....</b>        | <b>187</b>   | <b>12,829</b>   | <b>2,363,903,253</b>  | <b>2,670,222,470</b>               | <b>88.7</b>  |

The six chief manufacturing cities of Canada in 1935 were: Toronto, Montreal, Hamilton, Windsor, Vancouver, and Winnipeg. Due to the amalgamation of the border cities, Windsor now ranks among the first six manufacturing centres. Toronto proper exceeded Montreal proper by a slight margin. Greater Montreal, however, is still ahead of Greater Toronto and continues to be the leading manufacturing area in the Dominion. According to the Census of 1931, Hamilton was proportionately the most largely dependent of these cities upon manufacturing industries. About 45 p.c. of its gainfully employed population was employed in manufacturing, as compared with 28 p.c. in Toronto, 27 p.c. in Montreal, 18 p.c. in Winnipeg, and 16 p.c. in Vancouver.

Eighteen other important cities with a gross production of manufactured goods of over \$15,000,000 in 1935 were as follows, in descending order of the value of their products: Oshawa, Montreal East, London, Kitchener, Quebec, Calgary, Ottawa, Peterborough, Three Rivers, Sarnia, Edmonton, Brantford, St. Boniface, New Toronto, Niagara Falls, Cornwall, Saint John, and St. Catharines. Statistics of manufactures of cities and towns with a gross production of \$1,000,000 or over and with three or more establishments are given for 1935 in Table 37.

### 36.—Principal Statistics of the Manufacturing Industries of Five<sup>1</sup> Leading Manufacturing Cities of Canada, 1930 and 1932-35.

NOTE.—Statistics for 1932-35 do not include central electric stations.

| City and Year. | Estab-<br>lish-<br>ments. | Capital.    | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials. | Gross Value<br>of<br>Products. <sup>2</sup> |
|----------------|---------------------------|-------------|-----------------|---------------------------|--------------------------|---|
|                | No.                       | \$          | No.             | \$                        | \$                       | \$  |
| Montreal.....  | 1930 1,825                | 485,832,181 | 98,905          | 115,753,191               | 250,718,415              | 532,404,756                                 |
|                | 1932 2,088                | 363,351,307 | 78,639          | 80,734,197                | 147,093,293              | 310,502,225                                 |
|                | 1933 2,226                | 363,342,078 | 80,212          | 74,150,933                | 148,504,215              | 300,636,197                                 |
|                | 1934 2,300                | 373,098,770 | 88,131          | 84,228,834                | 185,459,720              | 361,038,212                                 |
|                | 1935 2,346                | 382,332,701 | 94,612          | 89,934,540                | 201,022,033              | 383,547,972                                 |
| Toronto.....   | 1930 2,320                | 524,161,983 | 94,745          | 121,221,281               | 253,974,080              | 521,540,080                                 |
|                | 1932 2,370                | 417,748,359 | 76,652          | 88,204,053                | 147,010,801              | 323,326,758                                 |
|                | 1933 2,604                | 388,995,090 | 75,645          | 80,855,883                | 146,280,473              | 308,983,639                                 |
|                | 1934 2,627                | 392,080,083 | 81,629          | 89,569,170                | 174,820,891              | 357,706,747                                 |
|                | 1935 2,689                | 386,898,652 | 86,226          | 97,144,947                | 190,370,255              | 385,883,455                                 |
| Hamilton.....  | 1930 439                  | 214,227,256 | 31,053          | 39,061,672                | 75,785,992               | 166,910,535                                 |
|                | 1932 445                  | 176,081,408 | 21,733          | 23,378,011                | 34,372,679               | 83,088,855                                  |
|                | 1933 460                  | 171,025,714 | 21,524          | 21,523,337                | 35,672,272               | 83,530,255                                  |
|                | 1934 494                  | 174,755,759 | 24,072          | 25,772,968                | 44,548,853               | 100,272,872                                 |
|                | 1935 484                  | 176,246,963 | 26,760          | 30,162,244                | 53,740,074               | 114,691,789                                 |
| Winnipeg.....  | 1930 519                  | 123,781,540 | 19,749          | 25,844,816                | 45,720,031               | 94,407,201                                  |
|                | 1932 559                  | 70,201,107  | 16,119          | 17,426,358                | 26,989,727               | 56,415,238                                  |
|                | 1933 600                  | 73,880,398  | 15,336          | 15,155,537                | 28,355,612               | 59,287,280                                  |
|                | 1934 612                  | 75,513,530  | 15,745          | 15,985,206                | 31,761,326               | 60,890,444                                  |
|                | 1935 616                  | 71,837,683  | 16,649          | 17,568,803                | 30,825,174               | 67,217,042                                  |
| Vancouver..... | 1930 681                  | 128,684,902 | 16,068          | 20,874,524                | 45,730,258               | 99,975,000                                  |
|                | 1932 717                  | 78,670,170  | 11,851          | 12,506,703                | 26,970,636               | 54,532,881                                  |
|                | 1933 746                  | 74,209,271  | 12,094          | 11,754,124                | 28,588,105               | 55,100,883                                  |
|                | 1934 773                  | 84,254,515  | 13,206          | 13,505,812                | 34,258,919               | 63,475,103                                  |
|                | 1935 811                  | 83,594,899  | 15,683          | 16,789,590                | 39,863,397               | 73,981,872                                  |

<sup>1</sup> The amalgamated city, Windsor, ranked fourth among manufacturing cities in 1935, but since no historical series can be given it is omitted here. <sup>2</sup> Net value is derived from gross value by deducting costs of materials, fuel, and electricity. For cost of fuel and electricity in 1935, see Table 37.

### 37.—Statistics of Manufactures of Municipalities, each with a Gross Production of \$1,000,000 or Over, and with Three or More Establishments, 1935.

NOTE.—Statistics in this table do not include central electric stations.

| Municipality.                               | Estab-<br>lish-<br>ments. | Capital<br>Invested. | Total<br>Em-<br>ployees. | Total<br>Salaries<br>and<br>Wages. | Cost of<br>Fuel and<br>Electricity. | Cost of<br>Materials<br>Used. | Gross<br>Value of<br>Production. <sup>1</sup> |
|---|---------------------------|----------------------|--------------------------|------------------------------------|-------------------------------------|-------------------------------|---|
|   | No.                       | \$                   | No.                      | \$                                 | \$                                  | \$                            | \$  |
| Prince Edward Island—<br>Charlottetown..... | 36                        | 1,268,770            | 388                      | 315,871                            | 31,239                              | 783,833                       | 1,433,920                                     |
| Nova Scotia—<br>Sydney.....                 | 30                        | 23,568,939           | 1,899                    | 2,586,198                          | 1,408,806                           | 5,953,602                     | 11,616,575                                    |
| Halifax.....                                | 102                       | 12,306,061           | 2,972                    | 3,077,630                          | 263,878                             | 4,035,555                     | 10,791,529                                    |
| Dartmouth.....                              | 12                        | 4,052,081            | 341                      | 428,420                            | 142,473                             | 2,854,299                     | 4,761,028                                     |
| Liverpool.....                              | 8                         | 10,714,843           | 606                      | 794,393                            | 644,111                             | 1,242,218                     | 4,014,323                                     |
| Toro.....                                   | 27                        | 3,356,321            | 970                      | 680,919                            | 40,185                              | 1,430,284                     | 2,850,645                                     |
| Trantou.....                                | 3                         | 7,535,284            | 405                      | 555,856                            | 141,405                             | 1,290,459                     | 2,328,857                                     |
| Yarmouth.....                               | 32                        | 2,413,639            | 500                      | 364,858                            | 64,441                              | 786,894                       | 1,625,303                                     |
| New Glasgow.....                            | 25                        | 1,831,646            | 508                      | 462,022                            | 89,284                              | 503,868                       | 1,399,980                                     |
| Amherst.....                                | 27                        | 3,285,362            | 490                      | 500,555                            | 57,550                              | 597,874                       | 1,297,056                                     |

<sup>1</sup> Net value is derived from gross value by deducting costs of materials, fuel, and electricity.

27.—Statistics of Manufactures of Municipalities, each with a Gross Production of \$1,000,000 or Over, and with Three or More Establishments, 1935—continued.

| Municipality.            | Estab-lish-ments. | Capital Invested. | Total Em-ployees. | Total Salaries and Wages. | Cost of Fuel and Electricity. | Cost of Materials Used. | Gross Value of Production. <sup>1</sup> |
|--------------------------|-------------------|-------------------|-------------------|---------------------------|-------------------------------|-------------------------|---|
|                          | No.               | \$                | No.               | \$                        | \$                            | \$                      | \$                                      |
| <b>New Brunswick—</b>    |                   |                   |                   |                           |                               |                         |   |
| Saint John.....          | 141               | 19,568,144        | 2,966             | 2,818,894                 | 356,990                       | 8,927,940               | 15,579,709                              |
| Moncton.....             | 44                | 6,310,217         | 2,009             | 1,912,622                 | 155,607                       | 3,012,719               | 5,445,520                               |
| Edmundston.....          | 10                | 5,996,727         | 472               | 450,843                   | 415,771                       | 1,216,551               | 3,371,895                               |
| Bathurst.....            | 12                | 5,306,881         | 420               | 471,019                   | 241,815                       | 655,530                 | 1,930,445                               |
| St. Stephen.....         | 15                | 2,280,736         | 542               | 437,945                   | 40,844                        | 951,689                 | 1,844,539                               |
| Milltown.....            | 3                 | 2,966,517         | 647               | 495,938                   | 33,998                        | 679,709                 | 1,467,136                               |
| Fredericton.....         | 27                | 1,311,670         | 389               | 314,876                   | 32,186                        | 534,900                 | 1,081,177                               |
| <b>Quebec—</b>           |                   |                   |                   |                           |                               |                         |   |
| Montreal.....            | 2,346             | 382,332,791       | 94,612            | 89,934,540                | 6,629,070                     | 201,022,033             | 383,547,972                             |
| Montreal East.....       | 11                | 40,176,067        | 1,627             | 2,099,253                 | 1,324,687                     | 34,347,770              | 43,519,874                              |
| Quebec.....              | 306               | 45,485,413        | 8,515             | 7,632,737                 | 1,807,692                     | 11,937,585              | 27,158,899                              |
| Three Rivers.....        | 54                | 49,871,807        | 5,090             | 4,904,767                 | 2,860,078                     | 8,248,964               | 22,328,837                              |
| La Salle.....            | 10                | 21,562,641        | 1,219             | 1,457,375                 | 739,701                       | 4,701,365               | 14,285,561                              |
| Drummondville.....       | 26                | 18,493,977        | 4,114             | 3,740,619                 | 577,231                       | 4,557,423               | 13,687,707                              |
| Sherbrooke.....          | 71                | 19,926,817        | 4,372             | 3,990,175                 | 330,634                       | 4,909,072               | 11,871,647                              |
| Shawinigan Falls.....    | 27                | 39,313,840        | 2,370             | 2,674,459                 | 1,797,972                     | 4,783,150               | 11,884,406                              |
| St. Hyacinthe.....       | 63                | 10,319,303        | 3,589             | 2,359,340                 | 201,662                       | 6,001,773               | 10,342,180                              |
| Island.....              | 45                | 14,277,601        | 2,305             | 2,226,674                 | 528,040                       | 4,757,653               | 9,608,782                               |
| Magog.....               | 18                | 7,297,000         | 1,718             | 1,310,200                 | 290,314                       | 7,221,138               | 9,550,869                               |
| Granby.....              | 33                | 11,264,177        | 2,861             | 2,171,103                 | 133,965                       | 4,009,578               | 9,044,769                               |
| St. Jean.....            | 41                | 10,157,178        | 2,662             | 2,271,539                 | 233,531                       | 3,047,095               | 8,609,902                               |
| Lachine.....             | 37                | 17,115,611        | 2,014             | 2,548,474                 | 268,524                       | 3,047,095               | 7,567,774                               |
| Valleyfield.....         | 30                | 10,528,509        | 2,885             | 1,845,250                 | 219,156                       | 3,701,810               | 7,184,058                               |
| St. Jérôme.....          | 30                | 7,470,802         | 1,916             | 1,400,596                 | 124,663                       | 2,277,822               | 4,408,348                               |
| Grand'Mère.....          | 14                | 16,144,307        | 1,415             | 1,174,623                 | 601,220                       | 1,969,738               | 4,803,643                               |
| La Tuque.....            | 12                | 11,587,018        | 751               | 859,890                   | 355,092                       | 2,108,531               | 4,016,205                               |
| Beloeil.....             | 7                 | 15,379,425        | 890               | 1,240,389                 | 635,362                       | 1,830,018               | 4,578,683                               |
| Kenora.....              | 10                | 2,261,539         | 406               | 528,656                   | 55,562                        | 1,474,202               | 3,018,660                               |
| Louiseville.....         | 13                | 2,458,697         | 1,197             | 754,997                   | 93,902                        | 1,785,741               | 2,970,438                               |
| Buckingham.....          | 9                 | 9,984,667         | 513               | 692,073                   | 528,701                       | 1,055,729               | 2,739,090                               |
| Westmount.....           | 1                 | 1,856,056         | 747               | 884,203                   | 63,023                        | 854,285                 | 2,705,911                               |
| Barnham.....             | 15                | 4,029,109         | 622               | 458,775                   | 84,527                        | 1,248,867               | 2,493,947                               |
| Brownburg.....           | 6                 | 1,611,265         | 654               | 702,065                   | 25,001                        | 828,443                 | 2,424,089                               |
| Windsor.....             | 9                 | 5,488,701         | 562               | 538,690                   | 170,778                       | 739,776                 | 2,362,057                               |
| East Angus.....          | 8                 | 5,953,374         | 565               | 606,653                   | 404,153                       | 1,163,290               | 2,345,636                               |
| Cowansville.....         | 10                | 2,609,135         | 912               | 665,964                   | 46,557                        | 1,013,790               | 2,307,649                               |
| Dolbeau.....             | 5                 | 10,507,970        | 269               | 439,515                   | 531,201                       | 707,625                 | 2,285,623                               |
| Joliette.....            | 43                | 1,069,434         | 872               | 563,281                   | 84,339                        | 1,087,556               | 2,249,013                               |
| Port Alfred.....         | 3                 | 10,440,637        | 344               | 489,902                   | 584,015                       | 656,612                 | 2,234,624                               |
| Victoriaville.....       | 24                | 2,315,117         | 1,167             | 806,938                   | 48,850                        | 867,665                 | 2,186,138                               |
| Lacerte.....             | 9                 | 3,246,514         | 526               | 421,777                   | 19,716                        | 850,521                 | 2,117,902                               |
| Verdun.....              | 23                | 1,608,086         | 881               | 625,213                   | 78,879                        | 778,124                 | 1,702,884                               |
| Outremont.....           | 8                 | 1,679,175         | 376               | 399,249                   | 13,834                        | 879,105                 | 1,665,178                               |
| Montmagny.....           | 15                | 2,576,980         | 760               | 431,831                   | 33,017                        | 783,518                 | 1,632,297                               |
| Contrecoeur.....         | 21                | 2,248,641         | 629               | 387,180                   | 31,203                        | 941,491                 | 1,621,491                               |
| Beauharnois.....         | 8                 | 2,172,022         | 402               | 406,680                   | 31,438                        | 503,238                 | 1,470,450                               |
| Cap de la Madeleine..... | 11                | 950,394           | 435               | 263,311                   | 18,820                        | 306,878                 | 1,296,201                               |
| Plessisville.....        | 14                | 1,097,562         | 370               | 232,782                   | 19,575                        | 707,820                 | 1,274,684                               |
| Sorel.....               | 19                | 1,054,828         | 590               | 402,238                   | 42,756                        | 361,829                 | 1,106,098                               |
| Ste. Thérèse.....        | 18                | 1,243,796         | 346               | 217,452                   | 24,778                        | 587,590                 | 1,048,991                               |
| Jonquière.....           | 12                | 1,655,922         | 256               | 294,725                   | 80,398                        | 561,118                 | 1,021,824                               |
| <b>Ontario—</b>          |                   |                   |                   |                           |                               |                         |   |
| Toronto.....             | 2,689             | 386,898,052       | 80,226            | 97,144,947                | 6,468,330                     | 190,370,255             | 385,893,455                             |
| Hamilton.....            | 443               | 170,246,963       | 26,769            | 30,162,244                | 4,438,453                     | 53,740,074              | 114,691,789                             |
| Windsor.....             | 236               | 64,298,564        | 15,227            | 20,714,545                | 1,622,096                     | 44,062,711              | 104,908,197                             |
| Oshawa.....              | 43                | 22,042,343        | 5,796             | 7,498,353                 | 457,271                       | 28,260,574              | 43,549,374                              |
| London.....              | 251               | 37,146,164        | 8,614             | 9,090,550                 | 662,597                       | 10,630,023              | 37,613,775                              |
| Kitchener.....           | 159               | 33,432,620        | 8,034             | 7,505,880                 | 536,856                       | 17,198,361              | 34,929,052                              |
| Ottawa.....              | 205               | 32,531,576        | 6,633             | 7,521,545                 | 611,638                       | 9,875,408               | 23,398,859                              |
| Peterborough.....        | 81                | 20,088,682        | 4,515             | 4,140,800                 | 379,178                       | 12,414,632              | 23,128,053                              |
| Sarnia.....              | 47                | 20,138,369        | 3,159             | 3,816,221                 | 1,157,373                     | 16,809,100              | 21,970,254                              |
| Brantford.....           | 115               | 38,487,900        | 6,092             | 6,662,057                 | 521,950                       | 10,168,315              | 20,248,560                              |
| New Toronto.....         | 19                | 24,360,145        | 2,455             | 3,267,037                 | 475,709                       | 8,623,416               | 18,686,957                              |
| Niagara Falls.....       | 59                | 25,734,086        | 2,893             | 3,361,554                 | 1,002,462                     | 5,868,916               | 18,115,465                              |
| Cornwall.....            | 45                | 23,184,787        | 4,604             | 4,344,831                 | 730,855                       | 5,736,060               | 15,460,155                              |
| St. Catharines.....      | 94                | 18,093,201        | 4,226             | 4,308,125                 | 494,907                       | 7,012,290               | 15,428,949                              |
| Sault Ste. Marie.....    | 47                | 39,989,191        | 2,641             | 3,038,125                 | 1,528,135                     | 5,831,044               | 13,049,513                              |
| Welland.....             | 42                | 22,374,768        | 3,367             | 3,318,731                 | 850,438                       | 5,831,747               | 13,049,513                              |
| Guelph.....              | 88                | 13,488,191        | 3,513             | 3,212,549                 | 299,026                       | 5,610,684               | 12,121,172                              |
| Chatham.....             | 56                | 11,116,937        | 1,833             | 1,878,924                 | 269,108                       | 8,264,675               | 11,603,843                              |

<sup>1</sup> Net value is derived from gross value by deducting costs of materials, fuel, and electricity.

37.—Statistics of Manufactures of Municipalities, each with a Gross Production of \$1,000,000 or Over, and with Three or More Establishments, 1935—continued.

| Municipality.       | Estab-<br>lish-<br>ments. | Capital<br>Invested. | Total<br>Em-<br>ployees. | Total<br>Salaries<br>and Wages. | Cost of<br>Fuel and<br>Electricity. | Cost of<br>Materials<br>Used. | Gross<br>Value of<br>Production. <sup>1</sup> |
|---------------------|---------------------------|----------------------|--------------------------|---------------------------------|-------------------------------------|-------------------------------|---|
| No.                 | \$                        | No.                  | \$                       | \$                              | \$                                  | \$                            | \$  |
| Ontario—continued.  |                           |                      |                          |                                 |                                     |                               |   |
| Galt.....           | 78                        | 12,450,048           | 3,599                    | 3,179,457                       | 242,584                             | 4,432,505                     | 10,014,832                                    |
| Thorold.....        | 16                        | 20,885,323           | 1,360                    | 1,855,264                       | 1,246,447                           | 3,809,999                     | 9,408,981                                     |
| Woodstock.....      | 50                        | 6,176,620            | 2,194                    | 1,802,367                       | 144,563                             | 3,997,938                     | 7,652,730                                     |
| Stratford.....      | 57                        | 7,846,632            | 2,360                    | 2,313,880                       | 184,952                             | 4,164,030                     | 7,449,692                                     |
| Leamington.....     | 17                        | 4,378,900            | 939                      | 732,479                         | 98,071                              | 3,826,404                     | 7,171,005                                     |
| Simcoe.....         | 31                        | 9,144,831            | 953                      | 863,465                         | 92,661                              | 4,270,170                     | 7,032,938                                     |
| Lenside.....        | 21                        | 6,742,773            | 1,351                    | 1,636,319                       | 159,370                             | 2,553,318                     | 6,221,225                                     |
| Waterloo.....       | 41                        | 8,526,133            | 1,173                    | 1,084,883                       | 77,833                              | 1,708,273                     | 5,461,595                                     |
| Brookville.....     | 29                        | 5,026,573            | 880                      | 822,690                         | 119,263                             | 3,285,833                     | 4,927,909                                     |
| Preston.....        | 30                        | 5,359,388            | 1,482                    | 1,413,962                       | 92,628                              | 2,549,015                     | 4,889,677                                     |
| Kapuskasing.....    | 6                         | 32,204,322           | 774                      | 1,223,483                       | 400,560                             | 1,701,001                     | 4,875,531                                     |
| Port Arthur.....    | 28                        | 14,774,804           | 971                      | 1,309,747                       | 631,231                             | 1,745,797                     | 4,406,776                                     |
| Tilbury.....        | 8                         | 1,083,038            | 471                      | 484,190                         | 40,418                              | 3,091,590                     | 4,358,982                                     |
| Chippawa.....       | 3                         | 1,126,356            | 251                      | 351,253                         | 262,445                             | 766,898                       | 4,291,746                                     |
| Kingston.....       | 63                        | 7,947,869            | 1,236                    | 1,159,094                       | 132,122                             | 2,199,712                     | 4,240,070                                     |
| Merriton.....       | 8                         | 5,900,946            | 834                      | 1,057,223                       | 215,974                             | 1,890,227                     | 4,100,438                                     |
| Owen Sound.....     | 20                        | 5,396,084            | 1,463                    | 1,135,973                       | 81,132                              | 1,905,843                     | 4,005,921                                     |
| Paris.....          | 20                        | 5,110,531            | 1,151                    | 910,032                         | 91,332                              | 1,746,960                     | 3,643,987                                     |
| Wallaceburg.....    | 17                        | 4,061,596            | 872                      | 937,996                         | 297,444                             | 1,622,658                     | 4,479,816                                     |
| Belleville.....     | 45                        | 6,133,476            | 1,036                    | 801,781                         | 103,124                             | 1,661,562                     | 3,432,318                                     |
| Fort William.....   | 35                        | 15,130,249           | 744                      | 894,650                         | 505,168                             | 1,339,626                     | 3,409,127                                     |
| Fort Francis.....   | 10                        | 7,619,215            | 576                      | 764,430                         | 188,640                             | 1,558,951                     | 3,313,187                                     |
| Newmarket.....      | 13                        | 3,336,871            | 727                      | 705,593                         | 51,404                              | 1,938,823                     | 3,277,049                                     |
| Ingersoll.....      | 21                        | 4,343,422            | 750                      | 702,988                         | 73,347                              | 1,956,456                     | 3,268,809                                     |
| Delhi.....          | 5                         | 940,130              | 350                      | 253,818                         | 7,323                               | 2,841,950                     | 3,177,743                                     |
| Goderich.....       | 15                        | 1,715,307            | 289                      | 270,115                         | 198,586                             | 2,172,958                     | 3,032,076                                     |
| Fergus.....         | 13                        | 619,595              | 971                      | 820,743                         | 46,539                              | 1,572,722                     | 2,937,281                                     |
| Cobourg.....        | 25                        | 2,656,840            | 548                      | 564,228                         | 22,924                              | 1,270,212                     | 2,222,819                                     |
| St. Thomas.....     | 45                        | 3,346,913            | 951                      | 883,998                         | 70,275                              | 1,197,313                     | 3,813,355                                     |
| Perth.....          | 19                        | 2,842,392            | 851                      | 847,991                         | 53,384                              | 1,392,524                     | 2,802,749                                     |
| Trenton.....        | 23                        | 3,157,595            | 613                      | 522,551                         | 153,444                             | 1,423,375                     | 2,776,180                                     |
| Amherstburg.....    | 11                        | 3,035,308            | 276                      | 396,943                         | 251,695                             | 527,279                       | 2,747,036                                     |
| Heesler.....        | 16                        | 3,962,842            | 1,176                    | 918,475                         | 142,552                             | 1,355,217                     | 2,727,942                                     |
| Bowmanville.....    | 13                        | 3,035,093            | 487                      | 506,952                         | 79,872                              | 1,101,272                     | 2,718,550                                     |
| Kenora.....         | 17                        | 10,745,738           | 420                      | 542,032                         | 551,171                             | 1,577,964                     | 2,717,589                                     |
| Weston.....         | 13                        | 3,320,569            | 680                      | 756,675                         | 63,634                              | 1,159,551                     | 2,640,772                                     |
| Port Hope.....      | 32                        | 2,050,871            | 670                      | 705,390                         | 53,679                              | 740,749                       | 2,029,876                                     |
| Hawkesbury.....     | 9                         | 4,426,561            | 464                      | 540,630                         | 305,035                             | 1,259,159                     | 2,550,119                                     |
| Brampton.....       | 24                        | 2,269,301            | 844                      | 827,958                         | 34,655                              | 1,304,533                     | 3,025,925                                     |
| St. Mary's.....     | 19                        | 5,132,405            | 402                      | 440,500                         | 256,907                             | 1,120,114                     | 2,521,343                                     |
| Dunnville.....      | 20                        | 3,555,677            | 786                      | 723,873                         | 47,061                              | 1,258,859                     | 2,471,881                                     |
| Huntsville.....     | 12                        | 2,307,390            | 337                      | 238,652                         | 38,526                              | 1,393,731                     | 2,461,836                                     |
| Port Credit.....    | 3                         | 3,622,203            | 233                      | 304,774                         | 87,651                              | 1,330,189                     | 2,412,321                                     |
| Petrolia.....       | 11                        | 2,327,569            | 185                      | 228,538                         | 103,496                             | 1,621,908                     | 2,332,278                                     |
| Port Erie.....      | 31                        | 2,404,245            | 356                      | 406,680                         | 36,596                              | 1,050,599                     | 2,340,613                                     |
| Pembroke.....       | 17                        | 4,090,800            | 815                      | 567,485                         | 52,533                              | 1,031,232                     | 2,151,404                                     |
| Georgetown.....     | 12                        | 2,449,390            | 407                      | 462,263                         | 75,187                              | 1,151,599                     | 2,118,611                                     |
| Renfrew.....        | 19                        | 2,529,173            | 719                      | 577,458                         | 22,152                              | 1,005,842                     | 2,114,676                                     |
| Tilsonburg.....     | 17                        | 1,357,360            | 411                      | 337,403                         | 57,652                              | 1,565,759                     | 1,01,050                                      |
| Orillia.....        | 32                        | 2,345,874            | 605                      | 552,807                         | 37,224                              | 1,087,998                     | 1,996,081                                     |
| Sudbury.....        | 35                        | 2,500,920            | 471                      | 489,967                         | 46,009                              | 842,180                       | 1,975,200                                     |
| Barrie.....         | 19                        | 1,109,455            | 366                      | 330,921                         | 31,864                              | 1,372,713                     | 1,943,301                                     |
| Hanover.....        | 16                        | 2,812,091            | 654                      | 514,188                         | 42,878                              | 950,428                       | 1,835,957                                     |
| Aurora.....         | 8                         | 1,178,615            | 410                      | 400,406                         | 24,655                              | 1,049,368                     | 1,800,948                                     |
| Lindsay.....        | 33                        | 1,670,350            | 508                      | 429,618                         | 63,104                              | 836,164                       | 1,794,536                                     |
| Aylmer.....         | 11                        | 1,102,349            | 153                      | 183,146                         | 36,111                              | 876,767                       | 1,627,063                                     |
| Dundas.....         | 22                        | 3,105,792            | 553                      | 656,246                         | 38,842                              | 724,487                       | 1,625,735                                     |
| Carleton Place..... | 14                        | 1,551,872            | 693                      | 537,097                         | 55,540                              | 630,854                       | 1,507,530                                     |
| Midland.....        | 14                        | 1,453,960            | 235                      | 171,872                         | 20,868                              | 1,285,862                     | 1,447,698                                     |
| Gananoque.....      | 26                        | 2,113,646            | 304                      | 334,885                         | 48,402                              | 520,154                       | 1,142,193                                     |
| Smith's Falls.....  | 21                        | 2,172,529            | 483                      | 462,029                         | 45,852                              | 680,037                       | 1,361,611                                     |
| Burlington.....     | 11                        | 1,417,826            | 282                      | 225,508                         | 23,616                              | 785,191                       | 1,361,250                                     |
| Chesterville.....   | 4                         | 601,267              | 65                       | 62,740                          | 24,691                              | 828,351                       | 1,342,994                                     |
| Humberstone.....    | 4                         | 708,875              | 398                      | 338,740                         | 4,379                               | 850,885                       | 1,311,739                                     |
| Oakville.....       | 18                        | 1,149,245            | 385                      | 367,146                         | 24,405                              | 571,907                       | 1,277,278                                     |
| Crimsby.....        | 16                        | 1,539,235            | 331                      | 256,631                         | 10,599                              | 636,823                       | 1,243,993                                     |
| Elmira.....         | 16                        | 3,029,553            | 113                      | 308,046                         | 23,393                              | 533,455                       | 1,197,355                                     |
| Strathroy.....      | 15                        | 1,186,393            | 309                      | 221,572                         | 23,093                              | 734,208                       | 1,190,338                                     |
| Arnprior.....       | 16                        | 1,958,843            | 227                      | 267,415                         | 34,410                              | 374,505                       | 1,117,033                                     |
| Listowel.....       | 14                        | 588,758              | 313                      | 231,671                         | 34,876                              | 584,294                       | 1,060,232                                     |
| Timmins.....        | 22                        | 1,215,651            | 246                      | 224,610                         | 25,025                              | 438,995                       | 1,000,607                                     |

<sup>1</sup> Net value is derived from gross value by deducting costs of materials, fuel, and electricity.

37.—Statistics of Manufactures of Municipalities, each with a Gross Production of \$1,000,000 or Over, and with Three or More Establishments, 1935—concluded.

| Municipality.            | Estab-lish-ments. | Capital Invested. | Total Em-ployees. | Total Salaries and Wages. | Cost of Fuel and Electricity. | Cost of Materials Used. | Gross Value of Production. <sup>1</sup> |
|--------------------------|-------------------|-------------------|-------------------|---------------------------|-------------------------------|-------------------------|---|
|                          | No.               | \$                | No.               | \$                        | \$                            | \$                      | \$                                      |
| <b>Manitoba—</b>         |                   |                   |                   |                           |                               |                         |   |
| Winnipeg.....            | 616               | 71,837,683        | 16,649            | 17,568,803                | 1,354,492                     | 36,825,174              | 67,217,042                              |
| St. Boniface.....        | 44                | 10,685,679        | 1,553             | 1,812,401                 | 213,055                       | 14,113,277              | 19,691,474                              |
| Transcona.....           | 3                 | 6,325,022         | 1,409             | 1,643,129                 | 185,779                       | 2,584,439               | 4,681,967                               |
| Selkirk.....             | 8                 | 1,820,561         | 336               | 419,667                   | 139,411                       | 557,060                 | 1,401,398                               |
| Portage la Prairie.....  | 7                 | 561,856           | 100               | 89,369                    | 31,077                        | 1,074,443               | 1,397,501                               |
| <b>Saskatchewan—</b>     |                   |                   |                   |                           |                               |                         |   |
| Moose Jaw.....           | 39                | 13,617,077        | 937               | 980,203                   | 268,181                       | 8,656,054               | 12,027,156                              |
| Saskatoon.....           | 72                | 7,182,566         | 1,189             | 1,353,813                 | 209,938                       | 6,418,024               | 10,149,529                              |
| Regina.....              | 99                | 10,053,783        | 1,660             | 1,918,908                 | 284,862                       | 4,986,254               | 8,866,985                               |
| Prince Albert.....       | 23                | 1,952,160         | 386               | 393,543                   | 58,869                        | 1,939,008               | 2,826,354                               |
| <b>Alberta—</b>          |                   |                   |                   |                           |                               |                         |   |
| Calgary.....             | 164               | 28,209,532        | 4,208             | 4,642,942                 | 527,442                       | 10,368,181              | 25,823,804                              |
| Edmonton.....            | 162               | 17,462,756        | 3,825             | 4,181,126                 | 291,443                       | 13,733,441              | 21,755,017                              |
| Medicine Hat.....        | 20                | 5,861,194         | 464               | 476,532                   | 43,519                        | 3,612,235               | 5,087,496                               |
| Lethbridge.....          | 27                | 1,665,899         | 327               | 393,272                   | 38,504                        | 990,683                 | 2,535,329                               |
| <b>British Columbia—</b> |                   |                   |                   |                           |                               |                         |   |
| Vancouver.....           | 811               | 83,954,899        | 15,683            | 16,780,590                | 1,100,096                     | 39,863,397              | 73,981,872                              |
| New Westminster.....     | 77                | 11,702,090        | 2,275             | 2,251,927                 | 167,408                       | 7,234,116               | 12,349,255                              |
| Victoria.....            | 133               | 10,337,048        | 2,062             | 2,222,224                 | 182,148                       | 2,499,304               | 6,566,104                               |
| North Vancouver.....     | 21                | 4,079,936         | 490               | 564,350                   | 64,095                        | 1,100,668               | 2,531,552                               |
| Prince Rupert.....       | 19                | 4,554,049         | 242               | 343,568                   | 34,369                        | 962,211                 | 1,678,970                               |
| Port Alberni.....        | 8                 | 1,585,533         | 295               | 397,676                   | 1,779                         | 834,310                 | 1,540,436                               |
| Nelson.....              | 25                | 1,529,947         | 309               | 337,700                   | 25,131                        | 403,685                 | 1,071,948                               |
| Kelowna.....             | 26                | 1,041,710         | 344               | 268,617                   | 15,637                        | 511,367                 | 1,015,499                               |

<sup>1</sup> Net value is derived from gross value by deducting costs of materials, fuel, and electricity.

## CHAPTER XV.—CONSTRUCTION.

### **Relation of Construction Industry to General Business Conditions.—**

The construction and building industry is not only the most widespread in its operation, it is one which expands most rapidly in good times when it attracts great numbers of general and casual workmen—a characteristic which explains the high rate of unemployment from which the industry periodically suffers. Again, apart from the effect of cyclical fluctuations of general business conditions, the construction industry is decidedly seasonal, although new types of construction and mechanical improvements are making it possible to work more steadily on all branches of construction the year round. Conditions in the industry are being transformed as the result of the introduction of new types of construction. Nevertheless, in the winter there is a serious contraction, especially in outside operations, while in the other seasons the contractors employ a much larger number of men, casually engaged, than can be retained throughout the year. A considerable number of men are in no sense skilled artisans and the supply of unskilled men is generally in excess of the demand.

Activity in construction is of particular interest not only to those engaged in the industry itself but to those concerned with the supplying of its raw materials, such as lumber, steel, cement, paint, glass, and hardware. All of these latter industries are prosperous when the construction industry is active, and depressed when it is at a standstill; again, the effects of their activity and depression are felt throughout the whole field of industry, so that the current conditions in the construction industry react powerfully upon the whole economic life of the nation. Thus, in the period between 1909 and 1913 and that between 1926 and 1929, construction contributed in large measure to produce the 'booms' of those years, as is indicated in the figures of Table 6.

During the war period the industry was at a low ebb, except for the construction of munition plants, but after the War the housing shortage was a serious problem, and considerable building was undertaken in spite of the high cost of materials and skilled labour, as shown in Table 9. The urgent requirements due to the practical suspension of the industry during the War were fully met in the post-war years, but the peak of the inflation cycle in 1929 was reflected in the highest value of construction contracts on record. This was followed by successive declines until 1933,\* when the industry reached a very low level of activity. There was some recovery in 1934-36 and a further increase of about 38 p.c. in 1937. However, a very great deficiency in housing and other forms of construction must still remain from the suspension of activity during the depression years, to be overtaken when confidence is restored in the future stability of prices and the permanence of the recovery. To facilitate and encourage this process, the Dominion Housing Act was passed in 1935.

**The Dominion Housing Act.**—Administered by the Housing Administration Branch of the Department of Finance, the Dominion Housing Act, 1935, has a twofold purpose: (1) to assist in the improvement of housing conditions and (2) to assist in the absorption of unemployment by the stimulation of the construction and building material industries. The Minister of Finance is empowered to make advances and to pay expenses of administering the Act to the extent of \$10,000,000.

\* October, 1933, marked the lowest point of activity in this industry.

The Act provides for loans for the construction only of new dwellings (including single-family houses, duplexes, and apartment houses), the security taken being in the form of a first mortgage running jointly to an approved lending institution and to the Dominion Government. In most cases, the loan may be for 80 p.c. of the cost of construction of the dwelling or its appraised value, whichever is the lesser; of a loan of 80 p.c., the lending institution advances 60 p.c. and the Government 20 p.c. The remaining 20 p.c. is provided by the borrower. Provision is also made in certain cases for loans of 70 or 75 p.c., where desired by the borrower or deemed advisable by the lending institution. The interest rate paid by the borrower is 5 p.c. This is made possible by the fact that the Government's funds are advanced on an interest basis of 3 p.c. Loans are made for a period of 10 years subject to renewal for a further period of 10 years upon revaluation of the security and on conditions satisfactory to all parties concerned. Interest, principal, and taxes are payable in monthly instalments. Amortization of principal is effected at a rate sufficient to pay off the loan in 20 years, but more rapid amortizations may be arranged to suit the convenience of the borrower. The Act requires sound standards of construction and contains other clauses safeguarding the mortgage.

The results of operations under the Dominion Housing Act, up to the end of February, 1938, were as follows:—

LOANS MADE UNDER THE DOMINION HOUSING ACT, TO FEB. 28, 1938.

| Province.                 | Number of Loans. | Amount.    | Number of Family Units Provided. |
|---------------------------|------------------|------------|----------------------------------|
|                           |                  | \$         |                                  |
| Prince Edward Island..... | 10               | 54,034     | 10                               |
| Nova Scotia.....          | 289              | 1,296,310  | 291                              |
| New Brunswick.....        | 61               | 267,967    | 64                               |
| Quebec.....               | 550              | 4,682,701  | 1,010                            |
| Ontario.....              | 988              | 5,948,653  | 1,422                            |
| Manitoba.....             | 49               | 312,814    | 49                               |
| Saskatchewan.....         | 2                | 8,200      | 2                                |
| Alberta.....              | Nil              | Nil        | Nil                              |
| British Columbia.....     | 312              | 1,262,301  | 414                              |
| Totals.....               | 2,261            | 13,832,980 | 3,202                            |

**The Government Home Improvement Plan.**—Although operative, by agreement between the Dominion Government and lending institutions, since Nov. 1, 1936, the Home Improvement Plan derives its legislative sanction from "An Act to Increase Employment by Encouraging the Repair of Rural and Urban Homes", assented to on Mar. 31, 1937. The object of the legislation is clearly indicated in its title. The method adopted is to stimulate the advance of money for home repair and improvement by a Government guarantee up to 15 p.c. of the aggregate amount loaned under the Plan by each approved lending institution.

The Plan, which is administered by the Department of Finance, was first sponsored by the National Employment Commission, and the Commission, at the request of the Government, undertook to advance it by all possible methods. Voluntary co-operative committees, provincial and local, were set up in every province. Through the co-operation of Canadian industry, an extensive publicity and adver-

tising campaign was initiated and carried on without cost to the Government. Explanatory booklets and leaflets in both languages were distributed extensively throughout the Dominion, speeches and radio broadcasts were utilized, and, in a number of cities, home improvement exhibitions designed to emphasize the desirability of house repair and modernization were held. From time to time statements indicating the increase in loan totals were issued by the Department of Finance.

The Plan provides for the making of loans by chartered banks and other approved lending institutions to owners of residential property (including farm buildings) for repairs, alterations, and additions (including built-in equipment) to urban and rural dwellings. Loans may be made up to a maximum of \$2,000 on any single-family house. In the case of a multiple-family dwelling the maximum amount which can be borrowed is \$1,000, plus \$1,000 for each family unit provided for in the building when the repairs or improvements are completed. The limit of time allowed for the payment of a Home Improvement loan is three years for a loan of \$1,000 or less, and five years for a loan exceeding \$1,000. Payment may be made in equal monthly instalments or in such other instalments as are adapted to the financial circumstances of the borrower. The maximum charge must not exceed a rate of discount of 3½ p.c. for a one-year loan, repayable in equal monthly instalments. This is equivalent to an effective interest rate of 6.32 p.c.

The limit of the aggregate loans is \$50,000,000 and the limit of the Government's guarantee is therefore \$7,500,000.

Loans made under the Government Home Improvement Plan to Feb. 28, 1938, by provinces, were as follows:—

LOANS MADE UNDER THE GOVERNMENT HOME IMPROVEMENT PLAN, TO FEB. 28, 1938.

| Provinces.                | Number<br>of<br>Loans. | Amount<br>of<br>Loans. |
|---------------------------|------------------------|------------------------|
|                           |                        | \$                     |
| Prince Edward Island..... | 429                    | 110,904                |
| Nova Scotia.....          | 2,975                  | 922,110                |
| New Brunswick.....        | 1,446                  | 495,344                |
| Quebec.....               | 5,231                  | 2,633,927              |
| Ontario.....              | 15,406                 | 6,079,236              |
| Manitoba.....             | 2,282                  | 853,530                |
| Saskatchewan.....         | 904                    | 311,858                |
| Alberta.....              | 2,687                  | 1,154,354              |
| British Columbia.....     | 3,821                  | 1,230,449              |
| Totals.....               | 35,241                 | 13,786,712             |

**Industrial Statistics of Construction.\***—The census of construction had its inception in 1934 and figures were collected in 1935 covering the calendar year 1934. Statistics for that year were presented at pp. 473-474 of the 1936 Year Book, and those for 1935 were shown at pp. 476-479 of the 1937 Year Book. No attempt at comparisons with 1934 was made, as the figures for the two years were not strictly comparable. With the completion of the 1936 figures, comparable statistics are now available covering the years 1935 and 1936, and a summary of the principal statistics is given in Table 1.

\* Revised by F. I. Tanner, Officer in Charge of Construction Statistics.



Another matter which should be pointed out is that no relationship exists between the total value of construction, shown for 1936 below, and the value of contracts awarded as indicated on p. 479. In the latter case all values are included as soon as awards are made irrespective of whether the contract is completed or even begun in that year, whereas the tables below cover construction work carried on and actually performed in 1936.

### 1.—Principal Statistics of the Construction Industry in Canada, 1935 and 1936.

| Item.  | 1935.       | 1936.       | Increase (+)<br>or<br>Decrease (—) |
|--|-------------|-------------|------------------------------------|
| Firms reporting.....No.                                    | 7,689       | 9,976       | +2,287                             |
| Capital invested.....\$                                    | 158,471,910 | 164,322,276 | +5,850,366                         |
| Salaries employees.....No.                                 | 18,070      | 21,059      | +2,989                             |
| Salaries paid.....No.                                      | 22,579,526  | 25,270,846  | +2,691,320                         |
| Wage-earning employees (average).....No.                   | 120,098     | 121,287     | +1,189                             |
| Wages paid.....No.   | 82,607,097  | 87,575,538  | +4,968,441                         |
| Totals, employees.....No.                                  | 144,768     | 142,346     | -2,422                             |
| Totals, salaries and wages paid.....\$                     | 105,186,623 | 112,846,384 | +7,659,761                         |
| Cost of materials used.....\$                              | 94,733,584  | 122,189,238 | +27,455,654                        |
| Value of work performed <sup>1</sup> .....\$               | 215,548,873 | 258,040,400 | +42,491,527                        |
| New construction <sup>1</sup> .....\$                      | 140,988,228 | 170,645,824 | +29,657,596                        |
| Alterations, maintenance, and repairs <sup>1</sup> .....\$ | 74,560,645  | 87,394,576  | +12,833,931                        |
| Subcontract work performed.....\$                          | 31,437,070  | 35,710,083  | +4,272,813                         |
| New construction.....\$                                    | 23,813,416  | 29,979,166  | +6,165,750                         |
| Alterations, maintenance, and repairs.....\$               | 8,623,654   | 5,730,917   | -2,892,737                         |

<sup>1</sup> Including subcontract work indicated in the lower part of the table.

Table 2 shows the principal statistics of the industry, divided as between public and private employers.

### 2.—Principal Statistics of the Construction Industry in Canada, by Provinces, 1936.

| Group or Province.                 | Capital<br>Invested. | Em-<br>ployees. | Salaries<br>and<br>Wages. | Cost<br>of<br>Materials. | Values of Work Performed. |                                |             |
|------------------------------------|----------------------|-----------------|---------------------------|--------------------------|---------------------------|--------------------------------|-------------|
|                                    |                      |                 |                           |                          | New<br>Construc-<br>tion. | Alterations<br>and<br>Repairs. | Total.      |
| GROUP.                             |                      | No.             | \$                        | \$                       | \$                        | \$                             |             |
| Contractors, builders, etc.        | 132,449,927          | 76,834          | 75,341,968                | 104,809,637              | 141,802,644               | 54,934,799                     | 196,737,443 |
| Municipalities.....                | 14,720,019           | 22,278          | 12,801,383                | 5,103,036                | 6,443,157                 | 12,194,729                     | 18,637,886  |
| Harbour Commissions...             | 3,029,349            | 1,131           | 1,194,788                 | 398,758                  | 491,643                   | 1,401,501                      | 1,933,044   |
| Provincial Govt. Depts...          | 7,979,427            | 32,253          | 17,531,905                | 9,086,305                | 17,607,633                | 14,308,575                     | 31,916,208  |
| Dominion Govt. Depts...            | 6,143,554            | 9,850           | 5,976,340                 | 2,794,502                | 4,300,847                 | 4,466,972                      | 8,767,819   |
| Totals.....                        | 164,322,276          | 142,346         | 112,846,384               | 122,189,238              | 170,645,824               | 87,394,576                     | 258,040,400 |
| PROVINCE.                          |                      |                 |                           |                          |                           |                                |             |
| Prince Edward Island...            | 231,053              | 496             | 370,082                   | 325,684                  | 530,297                   | 285,844                        | 816,141     |
| Nova Scotia.....                   | 6,415,926            | 10,814          | 7,721,629                 | 6,143,404                | 10,234,246                | 5,200,049                      | 15,434,295  |
| New Brunswick.....                 | 6,675,829            | 8,276           | 5,893,831                 | 4,749,910                | 8,808,421                 | 3,173,832                      | 11,982,253  |
| Quebec.....                        | 48,600,732           | 39,065          | 28,996,765                | 33,067,551               | 41,688,162                | 26,213,925                     | 67,902,087  |
| Ontario.....                       | 73,490,073           | 54,061          | 46,682,679                | 52,872,338               | 73,637,767                | 34,622,660                     | 108,260,433 |
| Manitoba.....                      | 5,466,861            | 6,366           | 5,750,223                 | 6,144,995                | 8,654,638                 | 4,274,384                      | 12,929,022  |
| Saskatchewan.....                  | 3,708,962            | 6,317           | 3,849,407                 | 3,221,337                | 4,965,058                 | 3,349,615                      | 8,314,665   |
| Alberta.....                       | 4,505,629            | 5,008           | 4,360,500                 | 4,197,685                | 5,287,648                 | 4,324,212                      | 9,611,860   |
| British Columbia and<br>Yukon..... | 11,927,211           | 11,323          | 9,211,278                 | 11,466,280               | 16,839,592                | 5,950,049                      | 22,789,641  |

The percentage distribution, by provinces, of the principal statistics shown in Table 2 is given below.

**3.—Percentage Distribution of the Principal Statistics of the Construction Industry, by Provinces, 1936.**

| Province.                       | Capital Invested. | Employees.   | Salaries and Wages. | Cost of Materials. | Value of Work Performed. |
|---------------------------------|-------------------|--------------|---------------------|--------------------|--------------------------|
|                                 | p. c.             | p. c.        | p. c.               | p. c.              | p. c.                    |
| Prince Edward Island.....       | 0.1               | 0.3          | 0.3                 | 0.3                | 0.3                      |
| Nova Scotia.....                | 3.9               | 7.6          | 6.8                 | 5.0                | 6.0                      |
| New Brunswick.....              | 4.1               | 5.8          | 5.2                 | 3.9                | 4.7                      |
| Quebec.....                     | 29.6              | 27.5         | 25.7                | 27.1               | 26.3                     |
| Ontario.....                    | 44.7              | 38.4         | 41.4                | 43.3               | 42.0                     |
| Manitoba.....                   | 5.1               | 4.5          | 5.1                 | 5.0                | 5.0                      |
| Saskatchewan.....               | 2.3               | 4.4          | 3.4                 | 2.6                | 3.2                      |
| Alberta.....                    | 2.9               | 3.5          | 3.9                 | 3.4                | 3.7                      |
| British Columbia and Yukon..... | 7.3               | 8.0          | 8.2                 | 9.4                | 8.8                      |
| <b>Totals.....</b>              | <b>100.0</b>      | <b>100.0</b> | <b>100.0</b>        | <b>100.0</b>       | <b>100.0</b>             |

Table 4 classifies the various types of construction carried out in 1936. The item "trade construction" covers such items as brick laying, carpentry, plumbing, heating, electrical work, etc., reported by contractors who confine themselves to a specific type of work. Details by provinces and more complete information on the industry than it is possible to include in the limited space available here, will be found in the Bureau's report on the construction industry for 1936.

**4.—Description, Classification, and Value of Construction in Canada, 1936.**

| Item.   | New Construction.  | Repairs, Alterations, and Maintenance. | Total Value.       |
|---|--------------------|--|--------------------|
|   | \$                 | \$                                     | \$                 |
| <b>Building Construction—</b>   |                    |  |                    |
| Dwellings and apartments.....   | 24,774,308         | 6,491,321                              | 31,265,629         |
| Hotels, clubs, and restaurants.....   | 1,241,092          | 633,916                                | 1,875,011          |
| Churches, hospitals, etc.....   | 8,362,955          | 853,932                                | 9,216,887          |
| Office buildings, stores, and theatres.....   | 7,361,987          | 4,827,864                              | 12,189,851         |
| Grain elevators, factories, warehouses, farm and mine buildings.....                                | 19,318,400         | 8,205,032                              | 27,523,432         |
| Garages and service stations.....   | 1,931,188          | 1,454,304                              | 3,385,492          |
| Government and municipal buildings.....   | 10,975,920         | 1,815,813                              | 12,791,733         |
| All other building construction.....  | 871,579            | 979,199                                | 1,850,778          |
| <b>Totals, Building Construction.....</b>   | <b>74,837,432</b>  | <b>25,261,401</b>                      | <b>100,098,833</b> |
| <b>Street, Highway, Power, Water, etc., Construction—</b>   |                    |  |                    |
| Streets, highways, and parks.....   | 39,497,176         | 22,422,428                             | 61,919,604         |
| Bridges, culverts, subways, etc.....  | 8,260,589          | 1,803,713                              | 10,064,302         |
| Water, sewage and drainage systems.....   | 5,297,756          | 3,329,880                              | 8,627,636          |
| Electric power plants, including dams, reservoirs, transmission lines, and underground conduit..... | 10,778,999         | 4,329,776                              | 15,108,775         |
| Railway construction, steam and electric.....   | 346,653            | 361,829                                | 708,482            |
| Structural steel work.....  | 915,037            | 21,593                                 | 936,630            |
| Wrecking and demolition.....  | —                  | 310,709                                | 310,709            |
| All other construction, including installation of boilers and machinery.....                        | 4,890,517          | 2,372,794                              | 7,263,311          |
| <b>Totals, Street, etc., Construction.....</b>  | <b>69,986,727</b>  | <b>34,952,732</b>                      | <b>104,939,459</b> |
| <b>Harbour and River Construction.....</b>  | <b>9,320,389</b>   | <b>4,847,559</b>                       | <b>14,167,948</b>  |
| <b>Trade Construction.....</b>  | <b>15,901,276</b>  | <b>22,332,894</b>                      | <b>38,234,170</b>  |
| <b>Grand Totals.....</b>  | <b>170,645,824</b> | <b>87,394,576</b>                      | <b>258,040,400</b> |

Table 5 shows the employment and wage-earnings for the construction industry, by provinces. The employment figures, shown on a monthly basis, reflect the fact that the industry is not so decidedly seasonal as is sometimes thought. The month of highest employment in the industry as a whole, in 1936, was August with 163,758 wage-earners and the lowest was January with 71,807.

5.—Average Monthly Employment of Wage-Earners and their Remuneration by Groups and Provinces, 1936.

ANALYSIS BY GROUPS AND MONTHS.

| Item.  | General and Trade Contractors and Sub-contractors. | Municipalities. | Harbour Com-missions. | Provincial Government Departments. | Dominion Government Departments. | Total.     |
|--|--|-----------------|-----------------------|------------------------------------|----------------------------------|------------|
|  | No.  | No.             | No.                   | No.                                | No.                              | No.        |
| EMPLOYMENT.                                    |  |                 |                       |                                    |                                  |            |
| January.....                                   | 39,162   | 18,208          | 790                   | 10,406                             | 3,243                            | 71,807     |
| February.....                                  | 37,850   | 21,074          | 953                   | 10,344                             | 2,928                            | 73,149     |
| March.....                                     | 40,731   | 21,624          | 918                   | 13,511                             | 3,278                            | 80,062     |
| April.....                                     | 46,771   | 21,231          | 1,160                 | 22,614                             | 10,088                           | 107,864    |
| May.....                                       | 59,262   | 20,770          | 1,060                 | 32,885                             | 9,103                            | 123,080    |
| June.....                                      | 68,759   | 22,367          | 1,082                 | 39,468                             | 7,463                            | 139,139    |
| July.....                                      | 76,517   | 23,440          | 1,063                 | 40,522                             | 7,762                            | 158,304    |
| August.....                                    | 84,117   | 22,244          | 1,106                 | 46,794                             | 9,497                            | 163,758    |
| September.....                                 | 84,789   | 21,265          | 1,053                 | 41,251                             | 10,308                           | 158,726    |
| October.....                                   | 84,626   | 21,499          | 1,069                 | 43,568                             | 9,628                            | 160,420    |
| November.....                                  | 70,239   | 19,210          | 843                   | 30,821                             | 7,209                            | 128,322    |
| December.....                                  | 52,161   | 17,738          | 800                   | 15,609                             | 4,461                            | 90,814     |
| Monthly Averages of Wage-Earners Employed..... | 62,082   | 20,893          | 994                   | 29,737                             | 7,581                            | 121,287    |
|  | \$   | \$              | \$                    | \$                                 | \$                               | \$         |
| Totals, Wages Paid during Year.....            | 55,883,188   | 10,898,557      | 924,184               | 14,800,940                         | 5,068,660                        | 87,575,536 |
| Averages, Wages per Man per annum.....         | 900  | 522             | 930                   | 498                                | 669                              | 722        |

ANALYSIS BY PROVINCES.

| Item.  | Prince Edward Island. | Nova Scotia. | New Brunswick. | Quebec.    | Ontario.   |
|--|-----------------------|--------------|----------------|------------|------------|
|  | No.                   | No.          | No.            | No.        | No.        |
| Monthly Averages of Wage-Earners Employed..... | 448                   | 9,953        | 7,708          | 33,983     | 45,112     |
|  | \$                    | \$           | \$             | \$         | \$         |
| Totals, Wages Paid during Year.....            | 308,330               | 6,624,120    | 5,160,893      | 22,523,191 | 34,776,770 |
| Averages, Wages per Man per annum.....         | 688                   | 666          | 670            | 663        | 771        |

| Item.  | Manitoba. | Saskatchewan. | Alberta.  | British Columbia and Yukon. |
|--|-----------|---------------|-----------|-----------------------------|
|  | No.       | No.           | No.       | No.                         |
| Monthly Averages of Wage-Earners Employed..... | 5,216     | 5,626         | 4,054     | 9,187                       |
|  | \$        | \$            | \$        | \$                          |
| Totals, Wages Paid during Year.....            | 4,392,097 | 3,191,144     | 3,424,386 | 7,174,607                   |
| Averages, Wages per Man per annum.....         | 842       | 567           | 845       | 781                         |

**Contracts Awarded.**—A record of contracts awarded during the years 1911-37, as compiled by MacLean Building Reports, Ltd., is given in Table 6. The aggregate for 1937 was greater than in any year since 1931, and showed an increase of 37.8 p.c. over 1936. It amounted, however, to only 38.9 p.c. of the record year, 1929.

Engineering contracts accounted for 35.1 p.c. of the total value of the contracts awarded in 1937, residential buildings for 25.1 p.c., industrial buildings for 15.1 p.c., and business buildings for 24.7 p.c. As compared with 1936, residential building showed an increase of 31.1 p.c. in value, engineering projects of 17.6 p.c., business construction of 46.3 p.c., while industrial construction increased to the extent of 125.6 p.c. Table 7 shows in some detail the value of the construction contracts awarded in the latest six years.

**6.—Summary of the Value of Construction Contracts Awarded in Canada, 1911-37, as Compiled by MacLean Building Reports, Ltd.**

| Year.     | Value of<br>Construction<br>Contracts. | Year.     | Value of<br>Construction<br>Contracts. |
|-----------|--|-----------|--|
|           | \$                                     |           | \$                                     |
| 1911..... | 345,425,000                            | 1925..... | 297,973,000                            |
| 1912..... | 463,083,000                            | 1926..... | 372,947,900                            |
| 1913..... | 334,157,000                            | 1927..... | 418,651,600                            |
| 1914..... | 241,952,000                            | 1928..... | 472,032,600                            |
| 1915..... | 53,916,000                             | 1929..... | 578,651,800                            |
| 1916..... | 99,311,000                             | 1930..... | 456,999,600                            |
| 1917..... | 84,841,000                             | 1931..... | 315,482,000                            |
| 1918..... | 99,842,000                             | 1932..... | 132,872,400                            |
| 1919..... | 190,028,000                            | 1933..... | 97,289,800                             |
| 1920..... | 255,605,000                            | 1934..... | 125,811,500                            |
| 1921..... | 240,133,300                            | 1935..... | 160,305,000                            |
| 1922..... | 331,843,800                            | 1936..... | 162,588,000                            |
| 1923..... | 314,254,300                            | 1937..... | 224,056,700                            |
| 1924..... | 276,261,100                            |           |  |

**7.—Construction Contracts Awarded in Canada, 1932-37, by Provinces and Types of Construction, as Compiled by MacLean Building Reports, Ltd.**

| Province.                 | 1932.              | 1933.             | 1934.              | 1935.              | 1936.              | 1937.              |
|---------------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
|                           | \$                 | \$                | \$                 | \$                 | \$                 | \$                 |
| Prince Edward Island..... | 1,071,500          | 386,900           | 384,600            | 414,800            | 339,900            | 450,000            |
| Nova Scotia.....          | 4,009,500          | 2,880,800         | 4,993,700          | 7,903,400          | 8,073,800          | 11,220,000         |
| New Brunswick.....        | 4,258,500          | 3,951,000         | 4,590,300          | 6,055,300          | 9,495,100          | 9,878,200          |
| Quebec.....               | 52,525,300         | 32,539,200        | 34,135,500         | 44,471,900         | 45,749,500         | 71,940,600         |
| Ontario.....              | 49,291,800         | 42,573,400        | 63,358,300         | 70,872,800         | 72,393,300         | 97,777,400         |
| Manitoba.....             | 4,503,500          | 2,138,000         | 3,905,000          | 8,744,400          | 6,994,400          | 7,945,100          |
| Saskatchewan.....         | 2,705,200          | 775,200           | 1,563,200          | 3,841,300          | 2,200,600          | 6,704,900          |
| Alberta.....              | 5,848,200          | 2,825,900         | 3,489,400          | 5,893,000          | 6,297,400          | 4,901,000          |
| British Columbia.....     | 8,558,000          | 9,219,400         | 9,391,500          | 12,108,100         | 11,044,000         | 13,230,300         |
| <b>Grand Totals.....</b>  | <b>132,872,400</b> | <b>97,289,800</b> | <b>125,811,500</b> | <b>169,305,000</b> | <b>162,588,000</b> | <b>224,056,700</b> |

7.—Construction Contracts Awarded in Canada, 1932-37, by Provinces and Types of Construction, as Compiled by MacLean Building Reports, Ltd.—concluded.

| Type of Construction.          | 1932.              | 1933.             | 1934.              | 1935.              | 1936.              | 1937.              |
|--------------------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
|                                | \$                 | \$                | \$                 | \$                 | \$                 | \$                 |
| Apartments.....                | 1,536,000          | 903,900           | 1,641,900          | 3,249,600          | 3,921,100          | 5,815,100          |
| Residences.....                | 27,356,600         | 23,025,900        | 28,946,200         | 33,158,900         | 38,936,800         | 50,391,900         |
| <b>Totals, Residential....</b> | <b>28,892,600</b>  | <b>23,929,800</b> | <b>30,588,100</b>  | <b>36,408,500</b>  | <b>42,857,900</b>  | <b>56,207,000</b>  |
| Churches.....                  | 2,736,800          | 2,052,100         | 1,827,900          | 1,698,400          | 2,625,300          | 2,662,100          |
| Public garages.....            | 2,945,400          | 1,881,400         | 2,280,300          | 2,267,600          | 2,746,100          | 4,429,800          |
| Hospitals.....                 | 3,985,900          | 1,879,100         | 4,977,900          | 2,979,900          | 2,127,800          | 7,425,100          |
| Hotels and clubs.....          | 1,436,600          | 1,294,900         | 1,756,000          | 2,312,000          | 2,031,500          | 2,715,100          |
| Office buildings.....          | 3,192,600          | 1,066,100         | 3,989,300          | 1,687,900          | 3,149,000          | 5,911,600          |
| Public buildings.....          | 8,174,300          | 2,764,500         | 7,012,800          | 20,243,500         | 7,126,200          | 8,066,200          |
| Schools.....                   | 6,749,900          | 5,391,100         | 6,161,900          | 5,429,200          | 4,133,600          | 6,378,000          |
| Stores.....                    | 4,742,100          | 3,629,900         | 4,127,000          | 4,374,300          | 6,625,400          | 7,315,100          |
| Theatres.....                  | 663,100            | 453,000           | 633,600            | 1,429,600          | 2,516,000          | 2,397,600          |
| Warehouses.....                | 4,772,500          | 5,784,400         | 4,713,600          | 6,019,800          | 4,690,100          | 7,987,600          |
| <b>Totals, Business.....</b>   | <b>39,399,200</b>  | <b>26,276,500</b> | <b>37,430,300</b>  | <b>48,412,200</b>  | <b>37,771,000</b>  | <b>55,298,800</b>  |
| <b>Totals, Industrial.....</b> | <b>7,820,400</b>   | <b>9,101,900</b>  | <b>8,637,900</b>   | <b>10,292,200</b>  | <b>14,973,700</b>  | <b>33,779,800</b>  |
| Bridges.....                   | 7,675,500          | 6,315,900         | 5,329,800          | 3,362,200          | 7,751,200          | 7,584,800          |
| Dams and wharves.....          | 2,777,600          | 627,500           | 2,932,800          | 8,557,800          | 3,119,400          | 4,374,800          |
| Sewers and water-mains.....    | 10,638,000         | 5,577,400         | 3,873,000          | 3,715,000          | 2,515,800          | 2,940,000          |
| Roads and streets.....         | 20,019,500         | 16,509,700        | 24,432,400         | 27,421,300         | 23,649,200         | 35,840,100         |
| General engineering.....       | 15,649,600         | 8,951,100         | 13,137,200         | 22,105,800         | 29,949,800         | 28,035,300         |
| <b>Totals, Engineering....</b> | <b>56,760,200</b>  | <b>37,981,600</b> | <b>49,705,200</b>  | <b>65,162,100</b>  | <b>66,983,400</b>  | <b>78,781,100</b>  |
| <b>Grand Totals.....</b>       | <b>132,872,400</b> | <b>97,289,800</b> | <b>125,811,500</b> | <b>160,305,000</b> | <b>162,588,000</b> | <b>224,056,700</b> |

**Building Permits.**—The estimated value of construction in 58 cities of Canada, as indicated by their building permits, is shown for the years 1932 to 1937, inclusive, in Table 8. These cities had in 1931 about 36 p.c. of the population of Canada, while their 1937 building permits aggregated \$55,844,999 or 25 p.c. of the total contracts awarded, as shown in Table 6. In Table 8, the 35 cities for which statistics of building permits are available since 1910 are indicated by an asterisk (\*), and the totals for these cities are given beneath the totals for the wider group.

Owing to the increasing use of the automobile and other means of rapid transportation, a growing percentage of those who work in the cities reside outside the municipal boundaries. Hence arises, in part, the necessity for an extension of the record of building permits to include such suburban areas as the York Townships in the case of Toronto, and North Vancouver in the case of Vancouver. South Vancouver and Point Grey were annexed to Vancouver as from Jan. 1, 1929.

The construction contracts in 1937 as shown in Table 7 increased by 37.8 p.c. compared with 1936 and the building permits of 58 cities in Table 8 increased by 35.1 p.c.

## 8.—Values of Building Permits Taken Out in 58 Cities for the calendar years 1932-37.

NOTE.—Asterisks indicate the 35 original cities, statistics for which are available since 1910.

| Province and City.               | 1932.             | 1933.            | 1934.             | 1935.             | 1936.             | 1937.             |
|----------------------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|
|                                  | \$                | \$               | \$                | \$                | \$                | \$                |
| <b>Prince Edward Island.....</b> | <b>587,000</b>    | <b>115,200</b>   | <b>87,310</b>     | <b>168,395</b>    | <b>154,455</b>    | <b>140,170</b>    |
| Charlottetown.....               | 587,000           | 115,200          | 87,310            | 168,395           | 154,455           | 140,170           |
| <b>Nova Scotia.....</b>          | <b>1,109,753</b>  | <b>655,294</b>   | <b>835,672</b>    | <b>1,619,097</b>  | <b>1,320,202</b>  | <b>1,929,025</b>  |
| *Halifax.....                    | 933,519           | 598,909          | 749,428           | 1,545,824         | 1,103,938         | 1,488,326         |
| New Glasgow.....                 | 35,890            | 23,060           | 11,252            | 18,555            | 36,818            | 36,135            |
| *Sydney.....                     | 140,344           | 33,325           | 74,992            | 54,418            | 179,306           | 354,564           |
| <b>New Brunswick.....</b>        | <b>648,434</b>    | <b>394,514</b>   | <b>1,277,333</b>  | <b>265,115</b>    | <b>453,756</b>    | <b>602,163</b>    |
| Fredericton.....                 | 18,500            | 85,115           | 42,775            | 19,325            | 142,220           | 126,400           |
| *Moncton.....                    | 184,395           | 143,093          | 978,228           | 106,261           | 100,292           | 214,608           |
| *Saint John.....                 | 445,539           | 166,306          | 256,330           | 139,529           | 211,244           | 261,155           |
| <b>Quebec.....</b>               | <b>12,167,878</b> | <b>7,005,774</b> | <b>5,991,676</b>  | <b>10,267,353</b> | <b>10,011,608</b> | <b>11,271,918</b> |
| *Maisonveuve.....                | 10,557,438        | 5,648,862        | 4,098,025         | 7,455,436         | 6,905,323         | 8,217,344         |
| *Montreal.....                   |                   |                  |                   |                   |                   |                   |
| *Quebec.....                     | 1,179,465         | 724,548          | 415,308           | 2,141,095         | 816,835           | 915,110           |
| Shawinigan Falls.....            | 107,230           | 58,260           | 184,535           | 52,137            | 126,175           | 414,080           |
| *Sherbrooke.....                 | 229,300           | 186,400          | 130,060           | 314,450           | 278,700           | 792,240           |
| *Three Rivers.....               | 108,075           | 28,588           | 465,765           | 55,555            | 1,528,107         | 383,417           |
| *Westmount.....                  | 286,370           | 359,116          | 700,953           | 188,110           | 350,378           | 549,718           |
| <b>Ontario.....</b>              | <b>16,887,761</b> | <b>9,116,743</b> | <b>11,351,350</b> | <b>23,317,536</b> | <b>19,256,177</b> | <b>23,156,707</b> |
| Belleville.....                  | 100,705           | 29,700           | 76,455            | 145,602           | 85,065            | 150,395           |
| *Brantford.....                  | 170,844           | 171,783          | 283,586           | 272,648           | 161,602           | 270,093           |
| Chatham.....                     | 56,215            | 88,720           | 55,200            | 108,931           | 156,345           | 192,050           |
| *Fort William.....               | 294,100           | 213,400          | 621,700           | 152,450           | 207,500           | 495,880           |
| Galt.....                        | 88,768            | 101,256          | 135,006           | 388,688           | 141,226           | 369,458           |
| *Guelph.....                     | 152,885           | 108,665          | 110,078           | 273,608           | 100,200           | 138,287           |
| *Hamilton.....                   | 1,424,300         | 510,200          | 772,535           | 1,887,622         | 1,466,906         | 1,694,189         |
| *Kingston.....                   | 349,039           | 179,667          | 141,393           | 213,929           | 253,398           | 360,629           |
| *Kitchener.....                  | 363,048           | 140,233          | 234,449           | 589,325           | 449,123           | 891,247           |
| *London.....                     | 567,690           | 551,485          | 671,840           | 1,835,110         | 672,745           | 949,790           |
| Niagara Falls.....               | 168,266           | 43,445           | 73,540            | 92,057            | 141,258           | 246,436           |
| Oshawa.....                      | 41,314            | 49,035           | 50,970            | 125,300           | 108,022           | 218,760           |
| *Ottawa.....                     | 1,549,515         | 916,065          | 1,257,000         | 4,085,140         | 1,781,565         | 2,325,445         |
| Owen Sound.....                  | 22,415            | 38,875           | 23,885            | 48,727            | 173,410           | 56,847            |
| *Peterborough.....               | 192,919           | 133,900          | 149,238           | 195,588           | 269,104           | 199,686           |
| *Port Arthur.....                | 284,437           | 114,315          | 101,807           | 163,971           | 212,671           | 708,143           |
| Riverside.....                   | 2,525             | 6,000            | 3,100             | 11,475            | 29,810            | 109,605           |
| *Stratford.....                  | 50,068            | 71,662           | 53,095            | 50,227            | 53,105            | 145,047           |
| *St. Catharines.....             | 221,566           | 115,356          | 151,648           | 238,694           | 823,398           | 793,227           |
| *St. Thomas.....                 | 44,955            | 64,863           | 42,261            | 128,350           | 79,545            | 52,106            |
| Sarnia.....                      | 62,404            | 63,847           | 127,203           | 137,052           | 123,229           | 192,830           |
| Sault Ste. Marie.....            | 142,680           | 93,377           | 237,340           | 131,320           | 226,340           | 355,950           |
| *Toronto.....                    | 7,862,693         | 4,415,510        | 7,496,933         | 10,005,455        | 8,182,799         | 11,258,900        |
| Welland.....                     | 67,650            | 46,286           | 108,326           | 74,606            | 107,645           | 231,429           |
| *Windsor.....                    | 921,470           | 76,842           | 385,352           | 709,304           | 708,970           | 3,524,699         |
| Woodstock.....                   | 86,933            | 72,915           | 67,593            | 102,223           | 206,321           | 214,065           |
| York Townships.....              | 1,598,387         | 698,541          | 899,792           | 1,680,131         | 2,339,825         | 2,011,624         |

8.—Values of Building Permits Taken Out in 58 Cities for the calendar years 1932-37  
—concluded.

| Province and City.            | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             | 1937.             |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                               | \$                | \$                | \$                | \$                | \$                | \$                |
| <b>Manitoba.....</b>          | <b>2,381,433</b>  | <b>851,681</b>    | <b>833,048</b>    | <b>2,945,175</b>  | <b>1,559,940</b>  | <b>2,543,559</b>  |
| *Brandon.....                 | 33,088            | 46,821            | 44,758            | 111,235           | 55,211            | 57,810            |
| St. Boniface.....             | 218,945           | 62,060            | 80,640            | 110,540           | 97,279            | 334,149           |
| *Winnipeg.....                | 2,129,400         | 742,200           | 707,650           | 2,723,400         | 1,407,450         | 2,152,100         |
| <b>Saskatchewan.....</b>      | <b>2,374,440</b>  | <b>529,497</b>    | <b>722,108</b>    | <b>1,029,854</b>  | <b>640,739</b>    | <b>965,029</b>    |
| *Moose Jaw.....               | 392,542           | 44,845            | 350,687           | 252,260           | 57,818            | 191,087           |
| *Regina.....                  | 277,069           | 376,742           | 291,696           | 632,944           | 358,966           | 464,041           |
| *Saskatoon.....               | 1,704,829         | 107,910           | 79,725            | 144,650           | 228,955           | 249,901           |
| <b>Alberta.....</b>           | <b>2,243,718</b>  | <b>947,240</b>    | <b>1,262,407</b>  | <b>1,686,457</b>  | <b>1,966,556</b>  | <b>1,828,377</b>  |
| *Calgary.....                 | 917,868           | 449,917           | 687,094           | 874,286           | 845,287           | 667,809           |
| *Edmonton.....                | 1,098,045         | 428,565           | 479,108           | 676,535           | 895,440           | 865,560           |
| Lethbridge.....               | 192,150           | 54,398            | 70,110            | 118,442           | 200,414           | 232,298           |
| Medicine Hat.....             | 40,655            | 14,860            | 26,095            | 17,194            | 25,415            | 62,710            |
| <b>British Columbia.....</b>  | <b>3,618,980</b>  | <b>2,160,553</b>  | <b>2,093,590</b>  | <b>4,791,611</b>  | <b>5,962,260</b>  | <b>8,468,051</b>  |
| Kamloops.....                 | 49,435            | 50,517            | 34,201            | 99,652            | 73,735            | 58,277            |
| Nanaimo.....                  | 56,269            | 33,356            | 49,841            | 36,856            | 166,373           | 281,002           |
| *New Westminster.....         | 137,712           | 114,880           | 77,695            | 210,490           | 369,215           | 541,715           |
| North Vancouver.....          | 77,455            | 27,796            | 14,505            | 20,250            | 57,029            | 63,188            |
| Prince Rupert.....            | 54,230            | 29,327            | 66,420            | 43,235            | 63,940            | 46,694            |
| *Vancouver.....               | 2,854,206         | 1,664,541         | 1,418,816         | 3,892,665         | 4,641,845         | 6,760,880         |
| *Victoria.....                | 389,673           | 340,136           | 432,112           | 518,463           | 584,513           | 760,095           |
| <b>Totals—58 Cities.....</b>  | <b>42,319,397</b> | <b>21,776,496</b> | <b>27,457,524</b> | <b>46,560,623</b> | <b>41,325,693</b> | <b>55,844,999</b> |
| <b>*Totals—35 Cities.....</b> | <b>38,443,406</b> | <b>19,390,150</b> | <b>24,911,430</b> | <b>42,839,627</b> | <b>36,337,439</b> | <b>49,694,847</b> |

Table 9 shows the values of the building permits issued by 35 cities in the years 1910-37. The average weighted index numbers of wholesale prices of building materials since 1912 are given, together with index numbers of employment in the construction industries as reported by employers since 1920, both these indexes having been compiled by the Dominion Bureau of Statistics. The average index numbers of wages in the building trades since 1910, as compiled by the Department of Labour, are also given. These indexes show as far as possible the fluctuations in building costs with their effect upon construction work and employment. At various times attempts have been made to determine the relative proportions of material and wage costs in general building; such proportions vary with the type of building and the centres studied, and accurate and representative data are difficult to obtain. However, the results of a survey made in 1934 and published in "Building in Canada" (June, 1934) showed that in fifteen cities the average proportions in all types of construction were 63.6 p.c. for materials and 36.4 p.c. for labour. The reduction in the cost of building operations in the depression years has probably been much more than is indicated by the declines in the indexes of wholesale prices and wages from the relatively high averages shown since the Great War.

9.—Values of Building Permits Issued by 35 Cities in the calendar years 1910-37 and Index Numbers of the Building Construction Industries.

| Year.     | Value of Building Permits. | Average Index Numbers of—               |                               |   |
|-----------|----------------------------|---|-------------------------------|---|
|           |                            | Wholesale Prices of Building Materials. | Wages in the Building Trades. | Employment in Building Construction. <sup>1</sup> |
|           | \$                         | (1913=100.)                             |                               | (1926=100.)                                       |
| 1910..... | 100,357,540                | 2                                       | 88-9                          | 2   |
| 1911..... | 138,170,390                | 2                                       | 90-2                          | 2   |
| 1912..... | 185,233,449                | 2                                       | 96-0                          | 2   |
| 1913..... | 153,662,842                | 100-0                                   | 100-0                         | 2   |
| 1914..... | 96,780,981                 | 93-8                                    | 100-8                         | 2   |
| 1915..... | 33,566,749                 | 90-3                                    | 101-5                         | 2   |
| 1916..... | 39,724,466                 | 103-8                                   | 102-4                         | 2   |
| 1917..... | 33,936,426                 | 130-7                                   | 109-6                         | 2   |
| 1918..... | 36,838,270                 | 180-5                                   | 125-0                         | 2   |
| 1919..... | 77,113,413                 | 175-0                                   | 148-2                         | 2   |
| 1920..... | 106,054,379                | 214-9                                   | 180-9                         | 2   |
| 1921..... | 109,797,355                | 183-2                                   | 170-5                         | 62-1  |
| 1922..... | 129,338,017                | 162-2                                   | 162-5                         | 60-0  |
| 1923..... | 117,243,806                | 167-0                                   | 166-4                         | 66-4  |
| 1924..... | 113,329,707                | 159-1                                   | 160-1                         | 71-2  |
| 1925..... | 110,314,698                | 153-5                                   | 170-4                         | 75-8  |
| 1926..... | 143,052,699                | 149-2                                   | 173-1                         | 100-0   |
| 1927..... | 164,791,231                | 143-4                                   | 179-3                         | 108-7   |
| 1928..... | 197,566,322                | 145-3                                   | 183-6                         | 112-0   |
| 1929..... | 214,277,386                | 147-7                                   | 197-5                         | 135-3   |
| 1930..... | 152,404,222                | 135-5                                   | 203-2                         | 134-3   |
| 1931..... | 101,821,221                | 123-2                                   | 195-7                         | 104-3   |
| 1932..... | 38,443,406                 | 115-2                                   | 178-2                         | 54-1  |
| 1933..... | 19,890,150                 | 116-8                                   | 158-0                         | 38-5  |
| 1934..... | 24,911,430                 | 123-1                                   | 154-8                         | 47-8  |
| 1935..... | 42,839,627                 | 121-2                                   | 150-8                         | 55-4  |
| 1936..... | 36,337,439                 | 127-3                                   | 160-8                         | 55-4  |
| 1937..... | 46,694,847                 | 140-8                                   | 165-3                         | 60-1  |

<sup>1</sup> As reported by employers.<sup>2</sup> Not available.

The Dominion Bureau of Statistics makes current surveys of the employment afforded by industrial establishments normally employing 15 persons or over. The index of employment in building construction, calculated upon the 1926 average as 100, from data furnished by some 750 employers, averaged 60-1 in 1937, as compared with 55-4 in 1936. The 1937 figure was higher than in any other year since 1931.

Over the period 1911-36, inclusive, or since the beginning of MacLean's record of construction contracts awarded as shown in Table 6, p. 479, there has been an average annual per capita expenditure on construction of about \$30. The period covered includes, of course, the war years and the depression since 1930, as well as the booms of 1911-13 and 1926-30. This average, consequently, is not unreasonably high. For the present population, the annual total of construction, on the basis of this average, should amount to over \$330,000,000. Furthermore, there is undoubtedly an accumulated deficiency in construction from the recent years of sub-normal activity. Some idea may be gained, therefore, of the part which the normal functioning of the construction industry might play in the reduction of unemployment.



## CHAPTER XVI.—EXTERNAL TRADE.

This chapter commences with a historical sketch of Canadian external trade, the Canadian tariff, and recent developments in external trade, followed by a brief account of the Commercial Intelligence Service. Thereafter is to be found a treatment of statistics of external trade under ten subordinate headings: value and quantum\* of world trade (including Canada's position in world trade); historical statistics of Canadian trade; general analysis of current import and export trade; trade with the United Kingdom and the British Empire; trade with the United States and other foreign countries; geographical distribution of Canadian trade by continents and countries; principal commodities imported and exported; trade in raw and manufactured products; main historical tables and tables showing current trends (Tables 1 to 21); and comparison of the volumes of imports and exports (Table 22). The chapter is finally brought to a close with sections on the tourist trade of Canada, and on Canada's balance of international payments in recent years.

### Section 1.—The Development of Tariffs.

The development of tariffs as affecting Canada is here outlined under two divisions: first, a historical sketch showing phases in the growth of Canadian trade which have influenced tariff development; and second, the present tariff relationships with other countries. Owing to the limitations of space in the Year Book, it is impossible to go into detail with such an intricate matter as tariffs. It has therefore been necessary to adopt the policy of confining any detail regarding commodities and countries to tariff relationships at present in force, and to summarize as much as possible historical data and details of preceding tariffs, giving references where possible to those editions of the Year Book where extended treatments can be found.

#### Subsection 1.—Historical Sketch of External Trade and Tariffs.

In the early history of the American continent each of the European nations establishing settlements in the New World endeavoured to monopolize the commerce of its colonies, prohibited the ships of other nations from resorting to them and prohibited its colonials from importing European goods from other countries, generally granting them, however, preferential treatment in its own market. In these circumstances the colonial wars in America were carried on, by Governments permeated by the mercantile spirit, for "ships, colonies and commerce". Owing to this fact, wars resulting in the transfer of colonies from one European power to another involved great economic as well as political changes in the community so transferred. The traders who had previously controlled the trade between the mother country and its colony found their occupations gone, while new traders from the conquering State arrived to take over the import and export trade, which thereafter flowed in new channels, perhaps no more artificial than those which had previously existed.

Throughout the earlier part of the French *régime* in Canada, the foreign trade of the colony was in the hands of the monopolistic chartered companies, of which the Company of One Hundred Associates was the most notable. When its monopoly was cancelled in 1663, the external trade of Canada still remained a preserve of the

\* The term "quantum" is commonly used in international discussions of trade. For this reason it is retained in the analyses of international trade made here, although in line with the common practice in Canada, "volume" is used in the discussion of Canadian trade in Subsection 10.

merchants of Old France. Upon the conquest of the country by the British, the French merchants, who had their offices in Quebec and Montreal, for the most part returned to France, and the trade of the Colony fell into the hands of the traders from England, Scotland, and New England, who had flocked into the country on the heels of the invading armies. Some of their descendants are still among the leading figures in Canadian import and export trade.

For the first sixty years of British rule, Canadian commerce was carried on almost exclusively with or through the United Kingdom, the merchants of New England complaining, after the American Revolution, of being shut out from the Canadian trade. The geographical juxtaposition of the United States to British North America was, however, a factor which could not permanently be ignored, and smuggling became more and more prevalent as settlement extended westward along the International Boundary. In 1822 the United Kingdom made large concessions to United States traders in respect of the Canadian trade. In 1846 she abolished the preferential treatment which she had given to Canadian wheat, and in 1860 all vestige of preference to colonial products disappeared from the British tariff. As a consequence, the colonies which, like Canada, Nova Scotia, and New Brunswick, were by this time enjoying responsible government, could not any longer be refused the right to control their own commercial policy—a fact which was emphasized in an important report prepared in 1859 by the then Minister of Finance, (Sir) A. T. Galt, and forwarded to the British Government. This report declared that the responsibility of the Canadian Government must be to the Canadian people, more especially in matters of taxation (the greater part of the revenue being raised by customs duties), and that the Canadian Government must affirm the right of the Canadian Parliament to adjust the taxation of the people in the way it deemed best, even if this should happen to meet with the disapproval of the British Ministry. This doctrine remained unchallenged by the British Government and, coming at a time when all important parties in the United Kingdom had accepted free trade as a *fait accompli*, it facilitated the setting up in Canada of a protective tariff, designed to secure the establishment in Canada of manufacturing industries, at a time when British opinion desired that the colonies should concentrate their attention on the production of food and raw materials and import from the United Kingdom the manufactured commodities which they required.

**The Abolition of Preference and the Reciprocity Treaty of 1854.**—The abolition of the British preference on Canadian wheat in 1846 brought about a depression in the flour-milling industry of Montreal and an ephemeral agitation for union with the United States. The effects of the repeal of the preference were, however, mitigated in 1849 by the repeal of the Navigation Acts and the consequent opening of the carrying trade between Canada and the United Kingdom to the shipping of the world. Meanwhile, the abandonment of protection in the Mother Country led to the initiation of negotiations for a reciprocity treaty with the United States. A treaty for the free exchange of natural products between them and the British North American colonies was negotiated in 1854, and became effective on Mar. 16, 1855. From its operation the Canadian farmer and fisherman derived considerable benefit, more especially during the period of the Civil War, when prices in the United States were particularly high. Partly as a consequence of the friction between the United Kingdom and the United States during the Civil War period, and partly because the new Canadian tariff of 1859 shut out the manufactured goods of the United States, the treaty was denounced by the United States at the end of the ten-year period for which it had been negotiated and ceased to operate 12 months

later on Mar. 17, 1866. The denunciation of the treaty had a considerable effect in bringing about the confederation of the British North American colonies, which it was hoped would to a great extent consume each other's products.

**Tariff Policy since Confederation.**—The immediate effect of Confederation was to abolish the tariff barriers which existed between the provinces entering the Dominion. As the area of Canada increased until, except for Newfoundland and Labrador, it became coterminous with British North America, the area of internal free trade was thereby extended, while protection against outside competition was generally maintained. However, the protective tariff of the old Province of Canada, adopted in 1859 with a prevailing rate of 20 p.c., was replaced in 1866 by a tariff assimilated to the revenue tariffs of the Maritime Provinces, with the rates of duties on the great bulk of manufactured commodities reduced from 20 and 25 p.c. to 15 p.c. Later on, the world-wide depression which commenced in 1873, and the consequent falling-off in a revenue based upon trade, necessitated an increase of the general rate to 17½ p.c., with a 20 p.c. rate on certain luxuries. Even this increase failed to fill the treasury.

In 1879, after the people had declared for a protective policy in the general election of 1878, the duties on imported manufactured goods were considerably increased, the rate on goods "not otherwise provided" being raised from 17½ p.c. to 20 p.c., the rates on cotton goods from 17½ p.c. to rates, specific and *ad valorem* equivalent, on the importations of 1881, to 30 p.c., while the duties on woollens were practically doubled. The rate on furniture and clocks was increased to 35 p.c.; on carriages, glassware, wall-paper and silks, to 30 p.c.; on boots and shoes, buttons, rubber goods and woodenware, to 25 p.c. Pig iron, previously free, now paid \$2 a ton, and the duty on iron billets, bars and rods was increased from 5 p.c. to 10 and 17½ p.c., while manufactured iron and steel products and machinery were given 25 to 35 p.c. protection. Throughout the '80's the general trend of the minor revisions made in the tariff was still upwards, but in the '90's a downward tendency became manifest. In 1891 the duty on raw sugar was repealed, and in 1894 material reductions were made on agricultural implements and minor readjustments on cottons and woollens. This period was also marked by the thorough-going extension of protection to the iron and steel industry, both by customs duties and bounties.

In the tariff revision of 1897, the duties on Indian corn, hinder twine, barbed wire, pig iron, flour, and refined sugar were reduced or abolished, while the bounties on domestic pig iron were not reduced but in certain cases increased. But the most distinctive feature of the tariff revision of 1897 was the adoption of what was called a "reciprocal" tariff, one-eighth lower than the general. This reciprocal tariff was at once applied to the United Kingdom, and afterwards to New South Wales and to British India. Belgium and Germany, in virtue of their trade treaties with the United Kingdom, were also admitted to the benefits of the reciprocal tariff, together with Argentina, Austria-Hungary, Bolivia, Colombia, Denmark, Persia, Russia, Sweden, Switzerland, Tunis, and Venezuela, on account of most-favoured-nation treaties between these countries and the United Kingdom, also France and her colonies, in consequence of the Franco-Canadian treaty of 1893. A little later the reciprocal tariff was also extended to the Netherlands, Japan, Siberia, Morocco, Salvador, South African Republic, Tonga, and Spain, under most-favoured-nation treaties between these countries and the United Kingdom.

The numerous concessions mentioned above were, however, of a merely temporary character, ceasing to exist in 1898 as a consequence of the denunciation by the United Kingdom of her most-favoured-nation treaties with Germany and

Belgium. This left Canada free to confine her lower tariff rates to the United Kingdom and to sister Dominions and colonies. A British preferential tariff, consisting at first of a remission of 25 p.c. of the duty ordinarily paid (Aug. 1, 1898), and later of a remission of 33½ p.c. of the ordinary rate of duty (July 1, 1900), was established. This method of preference was abandoned in 1904 for a specially low rate of duty on almost all imported dutiable commodities.

### Subsection 2.—Tariff Relationships with Other Countries.\*

Tariff relations between Canada and other countries are governed by: (1) application to Canada of some old commercial treaties of Great Britain; (2) participation in commercial treaties of Great Britain by Canadian Acts of Parliament; (3) Canadian Conventions of Commerce or Trade Agreements; (4) Exchange of Notes respecting reciprocal tariff concessions; (5) British preferential rates granted by the Tariff Act; (6) power of extending, by Orders in Council, British preferential or lower rates, intermediate rates, or other reduced duties as compensation for concessions received; (7) authority to impose a surtax on goods from a foreign country whose tariff discriminates against Canadian goods.

### EMPIRE COUNTRIES.

**Empire Preferences.**—The Tariff Act assented to June 13, 1898, by which Canada replaced the Reciprocal Tariff of the year before by a purely British Preferential Tariff, specifically granted the benefit of the new preferential duties to the United Kingdom, Bermuda, British West Indies, and British Guiana. A provision whereby the benefit could be extended to any British possession whose tariff was equally favourable to Canada was at once invoked to give the preferences to British India, Ceylon, Straits Settlements, and New South Wales. In 1904 these preferences were extended to New Zealand, to the colonies now comprising the Union of South Africa, and to Southern Rhodesia, all of which, about that time, had granted newly introduced preferences to Canada. All these countries, except New South Wales, which had ceased to be a separate customs area, were named in the Tariff Act of Apr. 12, 1907 (still in force, in amended form), as being entitled to British preferential rates. The British preference margin, which had been increased in 1900 from one-quarter to one-third, remained at approximately one-third in the 1907 revision, but has since been much varied and enlarged. The 1907 Tariff contains three columns—British Preferential, Intermediate, and General. Sec. 4 of the Tariff Act empowers the Governor in Council to extend British preferential rates, intermediate rates in whole or in part, or most-favoured-foreign-nation treatment to any part of the Empire or British mandated territories.

British preference has been extended to many new areas under Sec. 4. (See p. 520 of the 1934-35 Year Book.) The past year witnessed its further extension (Order in Council Sept. 29, 1937) to Malta, Gilbert and Ellice Islands, British Solomon Islands Protectorate, Nauru, Papua, and Norfolk Island. The Intermediate Tariff was extended to Hong Kong as from Feb. 4, 1933. Orders in Council were passed which accorded most-favoured-foreign-nation treatment to the United Kingdom and the Union of South Africa on July 19, 1935; to Australia and New Zealand on Aug. 21, 1935; to the British West Indies on Oct. 20, 1936; to all the non-self-governing British colonies and protectorates, Palestine, Tanganyika territory, and the territories of Togoland and Cameroons under British Mandate on

\* Revised by W. Gilchrist, Chief, Foreign Tariffs Division, Department of Trade and Commerce.

Sept. 29, 1937. Ireland is similarly favoured due to the fact that her Trade Agreement with Canada guarantees to her duties as low as apply to the United Kingdom.

Either by means of the Tariff Act or Trade Agreements with the United Kingdom, Ireland, Australia, New Zealand, Union of South Africa, and British West Indies, Canada now accords her British Preferential Tariff, or lower rates, to almost the whole Empire, including British protectorates and mandated territories. In addition, the products of the Newfoundland fisheries are declared by Sec. 8 of the Tariff Act to be free of customs duty until otherwise determined by Order in Council.

Reciprocal concessions in Empire markets are widespread. Nearly all Canadian products are given tariff preferences when entering Great Britain and Northern Ireland, Australia, New Zealand, British West Indies, Bermuda, British Guiana, British Honduras, Fiji, Southern Rhodesia, Northern Rhodesia (Zambesi Basin), Gambia, Sierra Leone, Seychelles, British Somaliland, St. Helena, Western Samoa, British Protectorate of Tonga, British Solomon Islands, Gilbert and Ellice Islands, Cyprus, Channel Islands, and Isle of Man. To a considerable extent tariff preference is granted to Canadian goods in Ireland, Union of South Africa, Ceylon, Mauritius, and Malta; also, on some goods, in the Federated and Unfederated Malay States, British North Borneo, Sarawak, Brunei, and Cayman Islands. Empire motor cars enjoy preference in Hong Kong and the Straits Settlements; spirits, wines, malt liquors, and tobaccos in Gibraltar; and wines in the Falkland Islands.

**United Kingdom.**—Canada has granted to the United Kingdom her British Preferential Tariff since its inception in 1897. The United Kingdom, in 1919, introduced preferences for Canada and the rest of the Empire on the limited number of products then comprising her tariff. In subsequent years, with expansion of the tariff, Empire preferences in the United Kingdom extended to more commodities. (See pp. 521-522 of the 1934-35 Year Book.) The Import Duties Act, effective Mar. 1, 1932, imposed a duty of 10 p.c. *ad valorem* on all non-Empire goods not already dutiable or specifically exempted. On the report of an Advisory Committee created by the Act the general rate was increased within two months on many manufactured articles to 15, 20, 25, 30 or 33½ p.c. Less comprehensive Orders issued from time to time have made further increases or changes. The Act exempted products of the Colonial Empire altogether and exempted products of the Dominions, India, and Southern Rhodesia until Nov. 15, 1932. A Trade Agreement between Canada and the United Kingdom signed on Aug. 20, 1932, extended the period of exemption of Canadian goods (see p. 486 of the 1936 Year Book) for five years. The 1932 Agreement has been superseded by one signed Feb. 23, 1937, which renews exemption of Canadian goods from the Import Duties Act, or any other duties not already applicable, with the qualification, as in the previous Agreement, that the United Kingdom, after notification, may impose duty (preferential) on Canadian eggs, poultry, butter, cheese, and other milk products, or in consultation with the Canadian Government may regulate supplies. The United Kingdom grants specified preferences on Canadian wheat, copper, lead, zinc (conditional on Empire producers supplying the demand at world prices); butter, cheese, raw or canned apples, pears, eggs, processed milk, honey, fish, timber, asbestos, and patent leather. The preference margin on Canadian natural silk hosiery was increased, the rate on motor cars and parts stabilized, the duty on reed organs removed, and a fixed preference on tobacco assured until Aug. 19, 1942. Canada obtains the benefit of all British Preferential Tariffs in the Colonial Empire and also exchanges specific preferences with certain colonies. Canada concedes to the United Kingdom reduced duties under 179 tariff items, gives assurance of no upward revision of existing pref-

erential rates under 246 items, and, in the case of 91 items (mainly products of a class not made in Canada), undertakes that margins of preference will not be reduced. If any duty-free Canadian article is exported to the United Kingdom below fair market value in Canada, and the situation, after notification, not corrected, Canadian anti-dumping provisions are to be waived as regards similar United Kingdom goods. The Canadian Government, which is given a quota of 2,500,000 cwt. per annum of bacon and hams, undertakes to assist in the promotion of orderly marketing of these and other meats in the United Kingdom. Either country may suspend or modify scheduled concessions if it is established that, by means of the preference, any organization of exporters controls trade to the prejudice of consumers. Each Government agrees not to increase beyond 50 p.c. the Empire content required for preference in manufactured goods. The 1937 Agreement was approved by the Canadian Parliament on Mar. 31, 1937, implemented by the United Kingdom Budget of Apr. 20, 1937, and formally proclaimed in force from Sept. 1, 1937. It is to remain in force until Aug. 20, 1940, and afterwards until terminated on six months' notice.

**Ireland.**—Ireland at its inception in 1923 as the Irish Free State, granted Canada any preferential rates in force, and in return received the benefit of the British Preferential Tariff. A formal Trade Agreement between Canada and Ireland, signed Aug. 20, 1932, secured for all goods the produce and manufacture of Canada, the benefits of the lowest rates of duty accorded to similar products of any country. In return, goods the produce or manufacture of Ireland, when imported into Canada, were to be accorded the same tariff treatment as similar goods imported from the United Kingdom.

**Australia.**—A Trade Agreement between Canada and Australia (superseding a 1925 arrangement of limited scope) was brought into force on Aug. 3, 1931. British Preferential Tariffs were exchanged, with some reservations by Australia, and some additional concessions by Canada. Enlarged margins of preference were also granted by each country on certain products of importance to the other. (See p. 484 of the 1936 Year Book.) The Agreement, which was obligatory for one year, has remained in force subject to six months' notice of denunciation by either Government. During the calendar year 1937 Canada's exports to Australia reached \$30,-500,000. Imports from Australia were \$12,000,000. In view of trade balances being so much in Canada's favour, the Australian Government intimated last year that if the Agreement was to continue, further Canadian concessions should be accorded Australian products. After negotiations, the Canadian duties on certain Australian goods were reduced by Order in Council effective Oct. 1, 1937, and the Trade Agreement was kept in force, subject, as before, to denunciation on six months' notice by either Government.

**New Zealand.**—Canada was granted the British preferential rates of the New Zealand Tariff established in 1903. Canada has extended her British Preferential Tariff to New Zealand since 1904. On Oct. 1, 1925, Canadian special rates then granted Australia were also extended to New Zealand, but withdrawn on Oct. 12, 1930. As from June 2, 1931, New Zealand cancelled nearly all her British preferential rates to Canada. On May 24, 1932, a new Trade Agreement was brought into force for one year (applicable also to Western Samoa and Cook Islands), whereby Canada granted New Zealand some rates lower than British preferential, and otherwise the British Preferential Tariff. New Zealand restored the British preferential rates to Canada except for 6 items upon which intermediate rates were conceded. A New Zealand surtax of 22½ p.c. of duty (in a few instances 5 p.c.) insti-

tuted on Aug. 18, 1930, was cancelled by a New Zealand tariff amendment of Nov. 19, 1932, as regards all Empire goods except those from Canada, Union of South Africa, Irish Free State, Newfoundland, and India. The 1932 Trade Agreement was made for one year, but has been kept in force by various renewals. It would have expired on Sept. 30, 1937, and, in order to secure a further renewal, New Zealand was granted certain reductions in Canadian duty including some being accorded to Australia. The Agreement was then renewed to Sept. 30, 1938, by Order in Council of Oct. 1, 1937. New Zealand, as from Mar. 1, 1938, increased some rates against Canada, Australia, and foreign countries on the ground that her manufacturing costs had increased.

**Union of South Africa.**—In addition to the British Preferential Tariff which Canada accords to the Union of South Africa under the Tariff Act of 1907, commerce with the Union of South Africa is governed by a Trade Agreement signed Aug. 20, 1932. It provides for exchange of preferential treatment on selected commodities. (See p. 487 of the 1936 Year Book.) By an Exchange of Notes (Union of South Africa dated Aug. 2, 1935; Canada dated Aug. 31, 1935) effective July 1, 1935, each Dominion assures the other of as low rates as apply to the goods of any foreign country.

**Southern Rhodesia.**—A Trade Agreement signed Aug. 20, 1932, exchanging preferences on a few selected commodities and each country's British Preferential Tariffs on nearly all other commodities, was terminated as from Jan. 2, 1938, on notice by Southern Rhodesia. Canadian goods are now accorded an Intermediate Tariff in Southern Rhodesia, and Canada, under the Tariff Act of 1907, applies her British Preferential Tariff to Southern Rhodesian goods.

**British West Indies.**—Under the Canadian Customs Tariff Act, 1907, the British Preferential Tariff applies to the British West Indies, Bermuda, and British Guiana, and by Order in Council effective Feb. 1, 1913, to British Honduras. Special tariff concessions were made to the British West Indies in a reciprocal Trade Agreement of 1912, enlarged in 1920. The latter was replaced on July 6, 1925, by an Agreement still more extensive and brought formally into force by proclamation as from April 30, 1927. It is binding for a 12-year period and thereafter until terminated, on a year's notice. It includes: Jamaica, Trinidad, Barbados, Bahamas, Leeward Islands, Windward Islands, Bermuda, British Guiana, and British Honduras. (For further details see p. 484 of the 1936 Year Book.)

#### FOREIGN COUNTRIES.

The power given under Sec. 4 of the Tariff Act to extend the Intermediate Tariff, in whole or in part, by Order in Council, to British countries, applies equally to foreign countries. Another important means of arranging for reciprocal concessions from foreign countries is afforded by Sec. 11 of the Customs Tariff which authorizes the making by Order in Council of such reductions of duties on goods imported into Canada from any other country as may be deemed reasonable by way of compensation for concessions granted by any such country. On the other hand, power is given under Sec. 7 to impose a surtax of 33½ p.c. *ad valorem* on goods from any foreign country which treats imports from Canada less favourably than those from other countries.

**Most-Favoured-Nation Treatment.**—Mutual guarantee of most-favoured-foreign-nation treatment, or, as it is commonly called, most-favoured-nation treatment, enters into many of the tariff arrangements between Canada and foreign

countries. Usually, this means that Canada and the other contracting State agree that each party will accord to the goods of the other the benefit of the lowest duties applied to similar goods of any other foreign origin. There may be reservations. These reservations are likely to be tariff advantages, not relatively of far-reaching importance, such as one State may grant to another on historical, political, or geographical grounds, or some other special relationship. The concessions arising out of most-favoured-nation treatment under the Canadian tariff now consist of the rates of the Intermediate Tariff, and lower rates on some goods provided in Trade Agreements with France, the United States, and Poland. It will be seen that the guarantee by Canada of most-favoured-nation treatment to a foreign country does not entitle the foreign country to preferences existing only under the British Preferential Tariff or an Empire Trade Agreement. In other words, Empire preferences are confined within the Empire.

The benefit to Canadian exports of most-favoured-nation treatment in any country depends on the customs and treaty system of the particular importing country concerned. Several foreign nations have maximum and minimum schedules, meaning that there are two scales of duties for practically all goods imported. There may be also an intermediate scale of duties. Some countries maintain reduced duties only on specified items of their tariffs, which they have conceded in one or more commercial treaties. A country, too, may adhere strictly to a single-column tariff. Even when it makes concessions in a commercial treaty it may incorporate these in the normal tariff, thus discriminating against no country. The number of countries maintaining uniform tariffs regardless of the origin of goods, however, is becoming smaller from year to year. The benefit of most-favoured-nation treatment would, of course, depend also on the extent to which tariff favours apply to countries competing in the market in question. It has been the practice to include import restrictions when bargaining for most-favoured-nation treatment but the significance of this is greatly lessened in recent years by countries administering import quotas independently of most-favoured-nation commitments.

**Argentina.**—A Treaty of Amity, Commerce and Navigation between Great Britain and Argentina, signed Feb. 2, 1825, exchanging most-favoured-nation treatment is still applicable to the tariff relations between Canada and Argentina. Argentine customs duties, with minor exceptions, apply equally to imports from all countries. Extensive tariff reductions made in an Agreement of Sept. 26, 1933, with the United Kingdom, have been extended to imports from all countries.

**Austria.**—An Exchange of Notes, July 6-8, 1933, and Canadian Orders in Council of July 5, 1933, Dec. 29, 1933, and Jan. 14, 1935, the latter for an indefinite period, granted the Canadian Intermediate Tariff in return for most-favoured-nation treatment in Austria. Many important items of the Austrian Tariff were subject to conventional or reduced rates of duty which applied to countries having such treaty relationship with Austria.

**Belgium.**—A Convention of Commerce between Canada and Belgium, signed July 3, 1924, provided for exchange of most-favoured-nation treatment of each other's goods. The Belgian Tariff consists of a Minimum Tariff and a Maximum Tariff (three times the minimum). The Minimum Tariff, however, is in practice applied equally to imports from all countries.

**Bolivia.**—Article 15 of the Treaty of Commerce of Aug. 1, 1911, between the United Kingdom and Bolivia, was accepted by Canadian Order in Council of July 20, 1935, the effect being an arrangement between Canada and Bolivia for exchange



of most-favoured-nation treatment of each other's goods. Customs duties in Bolivia are applied equally to imports from all countries.

**Brazil.**—On account of Brazilian policy to cancel old Trade Agreements, an arrangement was made between Canada and Brazil by Exchange of Notes, July 25-30, 1936, granting the Canadian Intermediate Tariff for the Brazilian Minimum or lowest tariff. This arrangement continued the former reciprocal relationship between the two countries. It was superseded by an Exchange of Notes of June 12, 1937, providing for the mutual concession of most-favoured-nation treatment in tariff matters. The Tariff of Brazil consists mainly of a Minimum Tariff and a General Tariff, approximately one-quarter higher. Some rates lower than the minimum, established by an Agreement of Feb. 2, 1935, with the United States, apply to imports from countries enjoying most-favoured-nation treatment.

**Colombia.**—A Treaty of Friendship, Commerce and Navigation between the United Kingdom and Colombia, signed Feb. 16, 1866, requires Colombia and Canada to give each other most-favoured-nation treatment in tariff matters. An Agreement between Colombia and the United States, signed Sept. 13, 1935, created many reduced Colombian duties, to which treaty countries became entitled. Otherwise Colombian duties apply equally to imports from all countries.

**Costa Rica.**—A Costa Rican law of Feb. 16, 1933, established a surcharge of 30 p.c. of the duty on imports from countries not granting most-favoured-nation treatment to Costa Rica. Reduced duties appeared in an Agreement with the United States signed Nov. 28, 1936. An Exchange of Notes of Mar. 1-2, 1933, with the United Kingdom, set forth that Costa Rica would extend most-favoured-nation rates to any part of the British Empire on a reciprocal basis. A Canadian Order in Council of July 20, 1935, extended most-favoured-nation treatment to Costa Rica, thus entitling Canadian goods to a reciprocal concession in Costa Rica.

**Czechoslovakia.**—A Convention of Commerce between Canada and Czechoslovakia of Mar. 15, 1928, exchanged most-favoured-nation treatment in tariff matters. Czechoslovakia has conventional or reduced duties on many goods.

**Denmark.**—Danish Treaties of Peace and Commerce with Great Britain of Feb. 13, 1660-1, and July 11, 1670, establishing reciprocal most-favoured-nation treatment of each other's goods, still apply to the tariff relations between Canada and Denmark. Although Denmark has a single-tariff schedule, which is applicable to all countries, provision is made for penalty duties against countries which discriminate against her.

**Estonia.**—Article 28 of the United Kingdom-Estonia Treaty of Commerce and Navigation of Jan. 18, 1926, providing means for a most-favoured-nation arrangement between Canada and Estonia, was accepted by the Canadian Trade Agreements Act of June 11, 1928. The duties of the Estonian Minimum Tariff are half those of the General Tariff, while on some goods conventional rates lower than the Minimum Tariff exist.

**Finland.**—Article 23 of the United Kingdom-Finland Treaty of Commerce and Navigation of Dec. 14, 1923, providing means for exchange of most-favoured-nation treatment between Canada and Finland, was accepted by the Finland Trade Agreement Act of June 12, 1925. Finland has in force some conventional rates lower than her General Tariff.

**France.**—The Franco-Canadian Trade Agreement of 1922 having lapsed on June 16, 1932, negotiations for a new Agreement ensued and were concluded by the signing of a Trade Agreement on May 12, 1933. This Agreement was brought into

force as from June 10, 1933. Under its terms Canada was accorded the rates of the French Minimum Tariff and most-favoured-nation treatment on 185 items or parts of items and reductions varying from 17 p.e. to 73 p.e. of the General Tariff on 24 items or parts. The French General Tariff is, for most goods, four times the Minimum Tariff. Intermediate rates are expressed as varying percentage reductions from the General Tariff. In return Canada conceded to France a rate as low as British preferential on 7 items, reductions from the Intermediate Tariff of from 10 p.e. to 25 p.e. on 95 items and Intermediate Tariff rates on an extensive list of items. The French colonies are included within the scope of the Agreement. The Agreement was supplemented by a Protocol of Feb. 26, 1935, and Notes exchanged Mar. 20, 1936, and July 30, 1937, under which Canada secured the Minimum Tariff on 25 more items of the French Tariff, in return for adjustments of duty on some French products. These supplementary arrangements also made provision for quotas on many Canadian articles of which the import into France is subject to quantitative restrictions.

**Germany.**—In the absence of a commercial agreement, a 'Super Tariff' (*Obertariff*) created by a German law of Jan. 18, 1932, two to four times as high as the General Tariff, on goods affected, was invoked against Canada on Apr. 1, 1932. On account of negotiations that ensued, the Super Tariff was suspended on July 1, 1932, for six months. By Exchange of Notes effective Jan. 1, 1933, an Agreement, for the duration of three months, was entered into, giving Germany the Canadian Intermediate Tariff in return for its ordinary General Tariff and any existing conventional duties. This arrangement was renewed, first for nine months, and on Jan. 1, 1934, for an indefinite period, subject to termination on six months' notice. A Provisional Trade Agreement, including exchange of most-favoured-nation treatment, was signed on Oct. 22, 1936, to become effective fourteen days after exchange of ratifications, and to remain in force until Nov. 14, 1937, and thereafter until terminated on two months' notice. A Canadian Act ratifying the Agreement was assented to on Apr. 10, 1937. On account of the control exercised by Germany over exchange for payment of goods, a Payments Agreement was also entered into on Oct. 22, 1936. It authorized utilization of definite percentages of exchange accruing from German exports to Canada for purchase of Canadian wheat, apples, cheese, honey, fish, fox skins, asbestos, lumber, wood-pulp, sausage casings, and some other goods. Unallocated exchange is available for miscellaneous purchases. By Exchange of Notes on the day the Trade Agreement was signed, Canada agreed, on a basis of reciprocity, to give effect to the Trade Agreement as from Nov. 15, 1936, the Payments Agreement having gone into force on that day. The Exchange of Notes is to remain operative until replaced by the Provisional Trade Agreement or until terminated on six weeks' notice.

**Guatemala.**—A Guatemalan law of Jan. 25, 1936 (renewing with slight changes a surtax law of Jan. 26, 1935), provided for increasing by 100 p.e. the customs duties on goods from countries whose trade balances are adverse to Guatemala and who had increased their exports to Guatemala by 100 p.e. or more in 1935 as compared with 1934. A Trade Agreement between Canada and Guatemala signed Sept. 28, 1937, by exchange of most-favoured-nation treatment, exempted Canadian goods from the customs surcharge and entitled Canada to reduced duties provided for some items in a Guatemalan Agreement of Apr. 24, 1936, with the United States. Pending ratification of the Agreement, an Exchange of Notes on the same date established most-favoured-nation treatment reciprocally as from Oct. 14, 1937. An Act approving the Agreement was given third reading in the Canadian House of Commons on Apr. 26, 1938.

**Haiti.**—Haiti reduced duties on some United States products in a Trade Agreement of Mar. 28, 1935, and on Apr. 9, 1935, adopted a new Maximum Tariff (double the Minimum) which would have applied to Canada, only that by Exchange of Notes of June 10, 1935, renewed Apr. 6, 1936, and Apr. 15, 1937, Canada and Haiti exchanged most-favoured-nation treatment in tariff matters. A Canadian-Haiti Trade Agreement signed Apr. 23, 1937, includes this tariff arrangement and now (May, 1938) awaits exchange of ratifications. An Act approving the Agreement was given third reading in the Canadian House of Commons on Apr. 26, 1938.

**Hungary.**—Article 20 of the United Kingdom-Hungary Treaty of Commerce and Navigation of July 23, 1926, affording means for exchange of most-favoured-nation treatment in tariff matters between Canada and Hungary, was accepted by the Canadian Trade Agreements Act of June 11, 1928. Hungary has in force various conventional rates lower than her General Tariff, resulting from treaties with other countries.

**Italy.**—A Convention of Commerce between Canada and Italy of Jan. 4, 1923, provided for exchange of most-favoured-nation treatment in tariff matters. The General Tariff of Italy is applicable to imports from all countries except where reduced rates for many goods have been established by commercial treaties.

**Japan.**—A Treaty of Commerce and Navigation between the United Kingdom and Japan on a most-favoured-nation basis signed April 3, 1911, was accepted by Canada (with minor provisos) in an Act of April 10, 1913. Certain surtaxes were imposed by Japan on July 20, 1935, and by Canada on Aug. 5, 1935, against each other's goods. An Exchange of Notes on Dec. 26, 1935, effected the removal of the surtaxes by both countries and stated the basis for Canadian customs valuations on Japanese goods. (See p. 489 of the 1936 Year Book.)

**Latvia.**—Article 26 of the United Kingdom-Latvia Treaty of Commerce and Navigation of June 22, 1923, providing means for exchange of most-favoured-nation treatment in tariff matters between Canada and Latvia, was accepted by the Canadian Trade Agreements Act of June 11, 1928. Latvia has a minimum schedule of duties and a maximum schedule twice as high, as well as some rates of duty fixed by conventions with other countries.

**Lithuania.**—Article 4 of the United Kingdom-Lithuania Agreement of May 6, 1922, providing means for exchange of most-favoured-nation treatment in tariff matters between Canada and Lithuania, was accepted by the Canadian Trade Agreements Act of June 11, 1928. Lithuania has in force a Maximum Tariff on certain specified items double the ordinary Tariff. Resulting from treaties on a few items there are rates lower than the ordinary Tariff.

**Netherlands.**—A Canadian-Netherlands Convention of Commerce of July 11, 1924, provided for exchange of most-favoured-nation treatment in tariff matters between Canada, Netherlands, Netherlands India, Surinam, and Curaçao. The Netherlands Tariff consists of a single schedule of duties, without tariff preference to any country.

**Norway.**—A Convention of Commerce and Navigation between the United Kingdom and Norway (and Sweden) of Mar. 18, 1826, is applicable to British territories to the extent of still providing exchange of most-favoured-nation treatment in tariff matters between Canada and Norway. Norway has a single-tariff schedule but there exist provisions for imposing penalty duties on non-reciprocating countries.

**Panama.**—Article 12 of a United Kingdom-Panama Treaty of Commerce and Navigation, signed Sept. 25, 1928, affording means for reciprocal most-favoured-

nation relations with Panama, was accepted by Canadian Order in Council of July 20, 1935. A Canadian Order in Council of Dec. 29, 1936, conceded the Canadian Intermediate Tariff to the Panama Canal Zone. Duties in Panama apply equally to imports from all countries.

**Poland.**—A Convention of Commerce between Canada and Poland, signed July 3, 1935, effective Aug. 15, 1936, exchanged most-favoured-nation treatment and, as regards scheduled goods, granted reductions from the Canadian Intermediate Tariff and from the lowest Polish tariff. The Polish Tariff comprises two columns of rates for all goods, the rates of Column I being about 25 p.c. higher than the rates of Column II. On some goods there are conventional rates resulting from trade treaties which Poland has concluded with other countries and which are lower even than the rates of Column II. The Free City of Danzig was declared party to the Convention from Jan. 1, 1937.

**Portugal.**—Article 21 of the Treaty of Commerce and Navigation between the United Kingdom and Portugal, signed Aug. 12, 1914, providing for exchange of most-favoured-nation treatment in tariff matters, was accepted in the Canadian Trade Agreements Act of June 11, 1928. The Portuguese Tariff has maximum and minimum scales, the treaty arrangement securing the minimum for Canada.

**Roumania.**—Article 36 of the Treaty of Commerce and Navigation between the United Kingdom and Roumania of Aug. 6, 1930, affording means for exchange of most-favoured-nation treatment between Canada and Roumania, was utilized in an Exchange of Notes of Sept. 30, 1930. Roumania has a Minimum Tariff on some commodities, one-third lower than her General Tariff, also, as a result of treaties, reductions from the Minimum Tariff on certain goods.

**Russia.**—A Canadian Order in Council of Feb. 27, 1931, prohibiting importation from the Union of Soviet Socialist Republics of coal, wood-pulp, pulpwood, lumber, asbestos, and dressed furs, was cancelled, by an Order in Council of Sept. 10, 1936, in consequence of which the Soviet Union repealed an Order of Apr. 20, 1931, which had prevented her importing organizations and trade representatives from purchasing Canadian goods or chartering Canadian vessels.

**Salvador.**—By Exchange of Notes of Nov. 2, 1937, Canada and El Salvador granted each other most-favoured-nation treatment in tariff matters. The Tariff of El Salvador consists of a Maximum Tariff, a Minimum Tariff (one-third the maximum) and some conventional rates lower than the minimum.

**Spain.**—A Treaty of Commerce and Navigation between the United Kingdom and Spain, signed Oct. 31, 1922 (revised Apr. 5, 1927), providing for exchange of most-favoured-nation treatment in tariff matters, was accepted on behalf of Canada by the Spanish Treaty Act of June 11, 1928. The Tariff of Spain consists of a First (the highest) Tariff, a Second Tariff (usually one-third of the first) and some conventional rates lower than the Second.

**Sweden.**—A Convention of Commerce and Navigation between the United Kingdom and Sweden (and Norway) of Mar. 18, 1826, had the effect of establishing most-favoured-nation tariff relationship between Canada and Sweden. Sweden, in commercial treaties with various countries, has granted conventional rates of duty which, however, have been incorporated into the ordinary tariff and made applicable to all countries.

**Switzerland.**—Under the Treaty of Friendship, Commerce and Reciprocal Establishment between the United Kingdom and Switzerland of Sept. 6, 1855,

Canada and Switzerland exchanged most-favoured-nation treatment of each other's goods. Switzerland has reduced some of her rates in treaties, but reductions are incorporated in a single-column tariff which applies to all countries.

**United States.**—A Trade Agreement between Canada and the United States was signed on Nov. 15, 1935. It exchanged unconditional most-favoured-nation treatment with reservation of Canada's Empire preferences and the United States preferences granted to Cuba, Philippine Islands, and the Panama Canal Zone. Further Canadian concessions to the United States included reductions in duty on 88 tariff items, modification of customs valuation, and reciprocating United States action in exempting from duty purchases up to \$100 made by returning Canadian residents. The United States schedule of reduced rates to Canada included: cattle (quota), cream (quota), seed potatoes (quota), clover and grass seeds, hay, turnips, maple sugar; certain classes of fish; lumber and timber (quota) previously subject to duty and excise; feldspar, talc, lime, various ferro-alloys, acetic acid, certain pulpboard, whisky, and patent and harness leather. Reductions on these goods are, with regard to 27 tariff items, 50 p.c.; 32 items, 25 to 49 p.c.; 8 items, reduction under 25 p.c. or existing rate confirmed. Among 21 items which were guaranteed continuance of duty-free entry were newsprint, wood-pulp and pulpwood, shingles (quota), and lobsters. Tariff reductions became operative on Jan. 1, 1936. The Agreement was approved by the Canadian Parliament on Apr. 8, 1936. Upon exchange of ratifications on May 14, 1936, the whole Agreement went into force. It continues subject to certain contingencies to Dec. 31, 1938, and thereafter until terminated on six months' notice. This Agreement was the seventh entered into by the President of the United States under an amendment to the Tariff Act of 1930, known as the Reciprocal Trade Agreements Act of June 12, 1934. Up to Mar. 7, 1938, ten others were signed, the reduced duties in each, except the one with Cuba, being accorded to Canada. The Trade Agreements Act was passed for only three years but on Mar. 1, 1937, was extended for a further three years.

**Uruguay.**—Canada signed an Agreement, on a most-favoured-nation basis, with Uruguay on Aug. 12, 1936, as regards customs duties, quotas, and allocation of exchange for commercial transactions, to come into force 30 days after exchange of ratifications, and to remain in force for three years and thereafter until termination on six months' notice. A Canadian Act ratifying the Agreement was assented to on Apr. 10, 1937. The Agreement awaits ratification by Uruguay. Notes were exchanged at the same time, effective at once, granting the Canadian Intermediate Tariff in return for Uruguayan trading facilities for Canadian exports, pending the coming into force of the formal Agreement. Provision exists under the tariff of Uruguay whereby duties may be increased by 50 p.c. on imports from countries which do not offer reciprocity, or do not accord most-favoured-nation treatment to Uruguayan goods.

**Venezuela.**—A Treaty of Amity, Commerce and Navigation between the United Kingdom and Colombia (of which Venezuela was then part) of Apr. 18, 1825, applies to Canada and provides for exchange of most-favoured-nation treatment. The Venezuelan Executive Power is authorized to increase duties up to 100 p.c. on certain goods originating in a specified country, but it has not been learned that this power has been used. A limited number of reduced Venezuelan duties are provided in a Trade Agreement of Aug. 6, 1936, between France and Venezuela. Otherwise no preferences exist under the Venezuelan Tariff.

**Yugoslavia.**—Article 30 of the United Kingdom-Serb-Croat-Slovene Kingdom Treaty of Commerce and Navigation of May 12, 1927, (affording means for exchange

of most-favoured-nation treatment of each other's goods between Canada and Yugoslavia) was accepted by means of the Canadian Trade Agreements Act of June 11, 1928. The Yugoslavian Tariff comprises maximum, minimum, and conventional duties (usually incorporated in the minimum duties).

## Section 2.—The Commercial Intelligence Service.\*

The Commercial Intelligence Service, maintained by the Department of Trade and Commerce, is designed to further the interests of Canadian trade in other parts of the Empire and in foreign countries. To this end there are established throughout the world offices administered by Trade Commissioners. These Trade Commissioners make periodical reports upon trade and financial conditions, variations in markets, and the current demand or opportunities for Canadian products. They also secure and forward to the Department in Ottawa specific inquiries for Canadian goods and in general exert their best efforts for the development and expansion of overseas markets.

**Organization at Ottawa.**—Besides the overseas organization of the Commercial Intelligence Service, there is a headquarters staff at Ottawa. This is presided over by a Director, who is the head of the Service and administers and unifies the work assigned to the various Trade Commissioners. Assisting the Director are the following divisions: Directories—where inquiries for Canadian products, forwarded by the Trade Commissioners, are prepared for publication and distribution, and the Exporters Directory listing Canadian exporters with their agents abroad, commodities handled, ratings, cables and codes used, etc., and the Foreign Importers Directory are kept up to date; Editorial—where the Commercial Intelligence Journal is compiled; Commodity Records—where information regarding markets for Canadian export commodities is indexed; Economics; Animal and Fish Products; Vegetable Products; Metals and Chemical Products; Forest Products; and Miscellaneous Manufactures. These last five divisions handle correspondence falling within their respective classifications.

Also, in order to keep abreast of Canadian industrial development, each Trade Commissioner makes a periodic tour of Canada and while in this country gives first-hand information to the Canadian manufacturer regarding opportunities and conditions of trade in his territory.

**Organization Abroad.**—A list of the countries in which Canadian Trade Commissioners are located, showing territory covered, name, post office, and cable address of the Trade Commissioner in each case is given below:—

### CANADIAN GOVERNMENT TRADE COMMISSIONERS.

NOTE.—This list was revised as at Jan. 1, 1938. Cable address of Trade Commissioners is "Canada" unless otherwise stated.

|   |   |
|---|---|
| <i>Argentine Republic</i> (Territory includes Uruguay).   | J. A. Strong, B. Mitre 430, Buenos Aires (1).   |
| <i>Australia</i> —<br>Sydney (Territory covers Federal District of<br>Cunberra, New South Wales, Queensland,<br>Northern Territory and Dependencies.) | L. M. Casgrave. Address for letters—P.O. Box No.<br>3952V. Office—City Mutual Life Building, Hunter<br>and Bligh Streets. |
| Melbourne (Territory covers States of Victoria,<br>South Australia, Western Australia, and Tas-<br>mania.)  | Frederick Palmer. Address for letters—Box 196C,<br>G.P.O. Office—Safe Deposit Office Building,<br>Melbourne.              |
| <i>Belgium</i> .....  | Yves Lamontagne, Shell Building, 60 Ravenstein<br>Street, Brussels.   |
| <i>Brazil</i> .....   | L. S. Glass. Address for letters—Caixa Postal 2164,<br>Rio de Janeiro. Office—Ed. Da "A Noite",<br>Sala 802, Praça Maua.  |

\* Revised by I. D. Wilgrees, Director, Commercial Intelligence Service, Department of Trade and Commerce.

## CANADIAN GOVERNMENT TRADE COMMISSIONERS—continued.

- British Malaya* (Territory includes the Straits Settlements, the Federated and Unfederated Malay States, British Borneo, Northern Sumatra, Siam, and Netherlands Indies.)
- British West Indies*—  
*Trinidad* (Territory includes Barbados, Windward and Leeward Islands and British Guiana.)  
*Jamaica* (Territory covers Jamaica, Haiti, the Bahamas, and British Honduras.)
- China*—  
*Shanghai* (Territory includes North and Central China and Manchuria.)
- Cuba* (Territory includes Dominican Republic and Puerto Rico.)
- Egypt* (Territory includes the Sudan, Palestine, Cyprus, Iraq, Syria, Persia, Greece, Turkey, Bulgaria, and Roumania.)
- France* (Territory includes French Colonies in North Africa.)
- Germany* (Territory covers Germany—except the Rhine Valley—Czechoslovakia, Austria, Hungary, Poland, Lithuania, Latvia, and Estonia.)
- Hong Kong* (Territory includes South China, the Philippines, and Indo-China.)
- India and Ceylon*.....
- Irish Free State and Northern Ireland*.....
- Italy* (Territory includes Spain, Portugal, Gibraltar, Malta, Albania, and Jugoslavia.)
- Japan*—  
*Tokyo*.....
- Kobe*.....
- Mexico* (Territory includes Guatemala, Honduras, and Salvador.)
- Netherlands* (Territory includes the Rhine Valley and Switzerland.)
- New Zealand* (Territory includes Fiji and Western Samoa.)
- Norway* (Territory includes Scandinavian countries and Finland.)
- Panama* (Territory includes the Canal Zone, Venezuela, Colombia, Nicaragua, and Costa Rica.)
- Peru* (Territory includes Bolivia, Chile, and Ecuador.)
- South Africa*—  
*Cape Town* (Territory includes Cape Province and Southwest Africa, Natal, Transvaal, Kenya, Uganda, Mauritius, and Madagascar.)
- Johannesburg* (Territory includes Transvaal, Orange Free State, Bechuanaland, Somaliland, the Rhodesias, Portuguese East Africa, Mozambique, and Nyasaland.)
- United Kingdom*—  
*London*.....
- London* (Territory covers Home Counties, South-eastern Counties, and East Anglia.)
- B. C. Butler*, Union Building, Singapore, Straits Settlements.
- M. B. Palmer*, Address for letters—P.O. Box 125, Port of Spain. Office—Colonial Bank Building.
- F. W. Fraser*, P.O. Box 225. Office—Canadian Bank of Commerce Chambers, Kingston.
- H. A. Scott*, P.O. Box 264, Shanghai. Office—Euro Building, 27 The Bund, Shanghai.
- C. S. Bissett*, Address for letters—Apartado 1945, Havana. Office address—Royal Bank of Canada Building, Calle Aguilar 75, Havana.
- Henri Turcot*, Address for letters—P.O. Box 1770, Cairo. Office—22 Shari Kasr el Nil, Cairo.
- Heracle Barré*, Commercial Attaché, 3 rue Scribe, Paris (9). Cable address—Caneconne.
- J. C. McGillivray*, Mönckebergstrasse 31, Hamburg.
- V. E. Ducloux*, Address for letters—P.O. Box 89, Hong Kong. Office—Hong Kong and Shanghai Bank Building, Hong Kong.
- Paul Sykes*, Address for letters—P.O. Box 2065, Calcutta. Office—23 Esplanade Maitland, Government Place East, Calcutta.
- James Cornuek*, 66 Upper O'Connell Street, Dublin, Irish Free State; and 44 Ann Street, Belfast, Northern Ireland. Cable address—Adman.
- A. B. Muddiman*, Via Manzoni Nr. 5, Milan (102).
- C. M. Croft*, Commercial Secretary. Address for letters—P.O. Box 401, Tokyo Central. Office—Canadian Legation, 16 Omotecho, 3-chome, Akasaka, Tokyo.
- P. V. McLane*, Address for letters—P.O. Box 230, Kobe. Office—309 Crescent Building, 72 Miyamachi.
- R. T. Young*, Address for letters—Apartado Num. 126-bis, Mexico City. Office—Edificio Banco de Londres y Mexico, Num. 30, Mexico City. Cable address—Caneconne.
- James Langley*, Coolingsel IIIb, Rotterdam.
- W. F. Ball*, Address for letters—P.O. Box 33, Auckland. Office—Yorkshire House, Shortland Street, Auckland.
- Richard Grow*, Address for letters—Stortingsgaten 29, Oslo.
- W. J. Riddiford*, Address for letters—P.O. Box 222, Panama City. Office—Royal Bank of Canada Building, Santa Ana Plaza, Panama City.
- M. J. Vesbier*, Address for letters—Casilla 1212, Lima. Office—Portal de Belca No. 166, Plaza, San Martin, Lima.
- G. R. Heasman*, Address for letters—P.O. Box 553, Cape Town. Office—Cleghorn and Harris Building, Adderley Street, Cape Town. Cable address—Caneconne.
- J. L. Mutter*, Address for letters—P.O. Box 715. Office—Prudential Assurance Building, 92 Fox St., Johannesburg. Cable Address—Caneconne.
- Frederic Hudd*, Chief Trade Commissioner in the United Kingdom, Canada House, Trafalgar Square, S.W. 1. Cable Address—Sleighting, London.
- J. H. English*, Canada House, Trafalgar Square, S.W. 1.

## CANADIAN GOVERNMENT TRADE COMMISSIONERS—concluded.

*United Kingdom—concluded.*

London (Territory—for fresh fruit only—covers United Kingdom, Norway, Denmark, Sweden, France, Holland, Belgium, and Germany.)

London.....

W. B. Gornall, Fruit Trade Commissioner, Aldine House, Bedford Street, Strand, W.C. 2. Cable address—Canfruecom.

W. A. Wilson, Animal Products Trade Commissioner, Canada House, Trafalgar Square, S.W. 1. Cable address—Agrilcom.

Liverpool (Territory covers North of England, Lincolnshire, North Midlands, and North Wales.)

H. R. Poussette, Martins Bank Building, 31 North John Street.

Bristol (Territory covers West of England, South Wales, and South Midlands.)

E. L. McColl, Northcliffe House, Colston Ave.

Glasgow.....

G. B. Johnson, 200 St. Vincent Street. Cable address—Cantraecom.

*United States—*

New York City. (Territory includes Bermuda.)

D. S. Cole, British Empire Building, Rockefeller Centre, New York City. Cable address—Cantraecom.

Under an arrangement made by the Minister of Trade and Commerce with the British Foreign Office, Canadian manufacturers, exporters, and others interested in trade matters may secure information and advice from British commercial diplomatic officers and British consuls in all countries in which Canada is not represented by her own Commercial Intelligence Service.

**Commercial Intelligence Journal.**—The Commercial Intelligence Journal, containing the reports of the Trade Commissioners and other pertinent material relating to export trade, is published weekly by the Department of Trade and Commerce in both English and French editions. The subscription price for either edition is \$1 per annum in Canada and \$3.50 outside of the Dominion. Special reports dealing with various phases of Canada's export trade are also issued from time to time, as supplements to the Commercial Intelligence Journal.

## Section 3.—Statistics of External Trade.\*

For the correct interpretation of the statistics of external trade, it is necessary that the following definitions and explanations of the terms used should be carefully kept in mind, as well as certain inaccuracies, only briefly mentioned below, which necessitate corresponding adjustments to external trade statistics if the true position of trade in relation to the total of Canada's international transactions is to be shown. These adjustments are treated more fully in the publications of the Dominion Bureau of Statistics dealing with Canada's Balance of International Payments.

**Fiscal Years.**—The Canadian fiscal year ended on June 30 of the years from 1868 to 1906, and on Mar. 31 of 1907 and subsequent years.

**Quantities and Values.**—In all tables of imports and exports, the quantities and values are based upon the declarations of importers (import entries) and exporters (export entries), as subsequently checked by customs officials.

**Imports: Valuation.**—"Imports" means "Imports entered for consumption". "Entered for consumption" does not necessarily imply that the goods have been actually consumed in Canada, but that they have passed into the possession of the importer and that duty has been paid on that portion liable for duty.

Under the main provisions of the law, the value of merchandise imported into Canada is the fair market value or price thereof when sold for home consumption

\* Revised by A. L. Neal, B.A., B.Sc. (Econ.), Chief, External Trade Branch, Dominion Bureau of Statistics. This Branch publishes the Annual Report on the Trade of Canada, the Condensed Preliminary Report on the Trade of Canada (annual), the Quarterly Report on the Trade of Canada, the Calendar Year Report on the Trade of Canada, the Summary of the Trade of Canada (monthly), etc. For complete list of the publications of this Branch, see Chapter XXIX, Section 1, under "External Trade".



in the principal markets of the country from which, and at the same time when, said merchandise was exported directly to Canada; but the value shall not be less than the price to jobbers and wholesalers generally, nor less than the actual cost of production at the time of shipment plus a reasonable advance for cost of selling and profit. (See Secs. 35 to 45 of the Customs Act.) Under these provisions and amendments thereto, some imports are given arbitrary valuations differing from those upon which actual payments for the imports are made.

For Customs entry purposes, the value of the currency of the country of export is converted to Canadian currency at exchange ratios as authorized by law and Orders in Council. (See Sec. 55 of the Customs Act and Orders in Council respecting currency valuations.) Inaccuracies arising from fluctuations in the exchange rates of foreign currencies are treated more fully below under the heading "Discrepancies in Trade Statistics between Canada and Other Countries".

*Canadian Exports: Valuation.*—"Canadian produce" exported includes Canadian products or manufactures, also exports of commodities of foreign origin which have been changed in form or enhanced in value by further manufacture in Canada, such as sugar refined in Canada from imported raw sugar, aluminium extracted from imported ore, and articles constructed or manufactured from imported materials. The value of exports of Canadian merchandise is the actual cost or the value at the time of exportation at the points in Canada whence consigned for export.

*Foreign Exports: Valuation.*—"Foreign produce" exported consists of foreign merchandise which had previously been imported (entered for home consumption). The value of such commodities is the actual cost.

*Countries to which Trade is Credited.*—Imports are classified as received from the countries whence they were consigned to Canada. The countries of consignment are the countries from which the goods have come, without interruption of transit, save in the course of transshipment or transfer from one conveyance to another. The countries whence goods are consigned are not necessarily the countries of actual origin, since goods produced in one country may be purchased by a firm in another country and thence dispatched, after a longer or shorter interval, to Canada. In such cases the second country would be the country of consignment, to which the goods would be credited. An example is the case of tea grown in the Orient but purchased in the bonded market in London, England; Canadian statistics record such imports as coming from the United Kingdom.

Exports are credited to the country of final destination, *i.e.*, the country to which they are consigned, whether that country possesses a seaboard or not. The country of final destination is the country to which goods exported from Canada are intended to pass, without interruption of transit save in the course of transshipment or transfer from one means of conveyance to another.

*Discrepancies in Trade Statistics between Canada and Other Countries.*—Canadian statistics of exports are rarely in exact agreement with the import figures of her customers and similar differences occur with Canadian imports. Many factors contribute to these discrepancies; among these are the following:—

(1) Differences in the basis of the Canadian valuations and those of the valuations of other countries.

The recent period of disturbed currency relations between countries has introduced an additional element of difference in valuations. Thus imports from the United Kingdom have been valued all along at \$4.86½ to the £, although for two years after Sept. 21, 1931, the actual value of the £ was below that figure, dropping

as low as \$3.70, and the actual value of imports from the United Kingdom was thereby greatly exaggerated. More recently, when the exchange value of the £ has been above par, imports from the United Kingdom have been undervalued. Similar inaccuracies have resulted from disturbances in exchange levels with other countries, and the placing of arbitrary valuations upon their currencies, as in the case of imports from Japan.

A further discrepancy in valuation of imports from the United Kingdom existed from 1920 to Mar. 31, 1935, in connection with distilled spirits, an important item in our imports from that country. The valuation of Canadian imports of spirits from the United Kingdom included, during this period, the excise duty in addition to the British export valuation, an excess valuation aggregating over \$200,000,000 for the period 1920-34. The excise duty has been excluded from the valuation of such imports since April 1, 1935.

(2) Even where the statistics cover the same period of time, there are quantities of goods on their way from the exporting to the importing country at the beginning and end of the period.

(3) By far the greatest discrepancies occur from the impossibility of determining the country of final destination for exports or the actual country of origin for imports. A considerable proportion of Canada's exports to overseas countries (16.5 p.c. in 1937) is shipped *via* the United States. Some of this is credited by importing countries to the United States. Canadian grain exports, for example, are frequently routed through the United States in bond. Most of this grain leaves Canada with the United Kingdom as the stated destination, but large quantities are later diverted to other European or overseas countries and some is taken out of bond for consumption in the United States. Thus the Canadian record of exports to the United Kingdom may be \$100,000,000 or more in excess of Canadian products actually received by the United Kingdom, while stated exports to other overseas countries are short this amount. Again, United States grain is routed through Canada and shipped from Montreal and is therefore frequently shown by other countries as imported from Canada, while it is included in United States statistics as an export to Canada. As mentioned above, purchases in bonded markets in England, Germany, Belgium, and France are included in Canadian imports from those countries but are not included by those countries in exports to Canada.

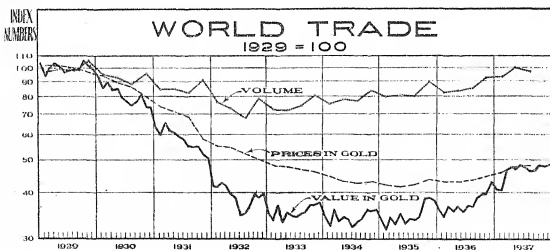
For more detailed discussion of this subject see the article and tables on "Discrepancies in Trade Statistics" on pp. 778-781 of the Annual Report on the Trade of Canada, 1928, and pp. 21 and 24 of the Condensed Preliminary Report on the Trade of Canada, 1937, both published by the Dominion Bureau of Statistics.

*Exports of Gold in Trade Statistics.*—Beginning in the tables of the 1937 Year Book, gold bullion exported from Canada as merchandise was included as a part of the total commodity exports and the statistics were revised accordingly back to 1926. Refined gold exported is considered merchandise when the export does not reduce domestic monetary reserves. When the Royal Mint in Ottawa began to refine gold, exports formerly shipped as gold-bearing quartz, dust, etc., began to be exported in the form of bullion and until 1935 were recorded under coin and bullion as distinct from merchandise. In order to maintain comparability with the statistics of previous years, and also since Canada is a large gold-producing country and exports of gold are as much a part of national production as any other item, it was considered expedient to make the change indicated above. The gold exports have been valued since June 1, 1931, at the monthly average current market price. Since February, 1936, the Bank of Canada has been holding gold under

earmark for clients abroad and exports of Canadian gold are diminished by the amounts so held. Such earmarked holdings on Mar. 31, 1936, were 262,039.79 fine oz. and on Mar. 31, 1937, 1,555,836.579 fine oz.

### Subsection 1.—Value and Quantum of World Trade.\*

World imports and exports, on which the figures in Statement IV, p. 508, are based, are taken as the sum of the recorded imports and exports of individual countries reduced to the common monetary unit of United States old gold dollars (*i.e.*, gold valued at \$20.67 per fine ounce). On this basis the value of world trade increased by nearly 8 p.c. in 1936. The average prices in gold for goods entering into world trade rose (for the first time since 1925) by between 2 and 3 p.c. and the quantum of trade rose by about 5 p.c. (roughly as much as in 1935 and as the average for the years 1925-29) and reached a level 14 or 15 p.c. below that of 1929. The quantum of trade declined annually from 1929 to 1932 when it had reached a level about 25 p.c. below that of 1929. Since 1932, quantum has increased each year from only slightly in 1933 to probably the largest increase in 1936. As indicated above, average gold prices of goods comprising world trade had been declining since 1925. The annual declines were comparatively small until the end of 1929, became quite precipitous to 1932, and then tapered off to 1935, in which year they were only 42.5 p.c. of their level in 1929 or about 41 p.c. of that of 1927. The trend of gold prices turned upward in 1936. Later monthly reports of the League of Nations indicate that the trend in both quantum and prices was even more strongly upward during the early part of 1937 but levelled off in the latter part of year.



**Trade by Groups of Commodities.**—The commodities that enter into world trade may be roughly divided into three groups, namely, foodstuffs, raw materials, and manufactured goods. The gold prices of foodstuffs and of raw materials rose about 5 p.c. for each group in 1936, largely due to increases during the second half of the year; the prices of manufactured goods, on the other hand, appear not to have shared in the increase in prices, partly because of the devaluation of the currencies of several industrial countries in the autumn. The improvement, developing since 1932 in the barter terms of trade of agricultural and mineral-producing countries, therefore continued, although the terms of trade of these

\* Abbreviated from "Review of World Trade, 1936", published by the League of Nations.

countries had deteriorated so rapidly during the early years of the depression that they still remained lower than in the years 1925-29. The quantum of foodstuffs entering into trade appears to have remained stable, so that the increase in the quantum of world trade in 1933 resulted entirely from increases in industrial raw materials and in manufactured goods.

The estimated movement since 1929 of average gold prices and quantum of commodities belonging to the three groups is shown in Statement I below. The estimates are based on information concerning the four principal trading countries representing about 40 p.c. of world trade. The average prices of raw materials fell further and more rapidly than either of the other groups. Prices of foodstuffs declined more slowly, but the decline continued longer and carried the price level almost as low as that of raw materials. Prices of both of these groups rose in 1936. Prices of manufactured goods declined still more slowly and not so far as for the other groups, but the average prices of manufactured goods for the year 1936 were still at the lowest level. The quantum movements of these groups were almost the reverse of their price movements. The quantum of trade in manufactured goods declined more rapidly and to a lower point than that of either of the other groups and, although it has been rising relatively more rapidly since 1932, it was still low in 1936. The quantum of raw materials did not decline so far and in 1936 was approaching the 1929 level again. The quantum of foodstuffs did not drop so far as either of the other groups, but the decline continued until 1934 and the rise since then has been small.

I.—PRICE AND QUANTUM MOVEMENTS OF GROUPS OF COMMODITIES IN WORLD TRADE, 1929 AND 1932-36.  
(1929=100.)

| Item.  | 1929. | 1932. | 1933. | 1934. | 1935. | 1936. |
|--|-------|-------|-------|-------|-------|-------|
| PRICE MOVEMENT (In U.S.A. old gold dollars). |       |       |       |       |       |       |
| Foodstuffs.....                              | 100.0 | 52.0  | 45.5  | 41.5  | 40.5  | 42.5  |
| Materials, raw or partly manufactured....    | 100.0 | 44.0  | 40.0  | 39.5  | 39.5  | 41.5  |
| Manufactured goods.....                      | 100.0 | 64.0  | 56.0  | 50.0  | 48.0  | 48.0  |
| All Commodities.....                         | 100.0 | 52.5  | 46.5  | 43.5  | 42.5  | 43.5  |
| QUANTUM MOVEMENT (1929=100).                 |       |       |       |       |       |       |
| Foodstuffs.....                              | 100.0 | 89.0  | 83.0  | 82.0  | 85.5  | 85.5  |
| Materials, raw or partly manufactured....    | 100.0 | 81.5  | 87.5  | 83.0  | 91.5  | 95.5  |
| Manufactured goods.....                      | 100.0 | 69.0  | 60.5  | 66.5  | 69.5  | 75.5  |
| All Commodities.....                         | 100.0 | 74.5  | 75.5  | 78.0  | 82.0  | 85.5  |

Another significant analysis of world trade is derived from a rough division of commodities into capital goods and consumption goods. The former group includes wood and timber, ores, iron, steel, base metals, metal manufactures, machinery, instruments, and vehicles. The second group includes, besides ordinary articles of consumption and their raw materials, such goods as chemicals and coal. Capital goods represented 21.5 p.c. of the total gold value of world trade in 1929, 17.5 p.c. in 1932, and 22 p.c. in 1935, the remainder being consumption goods.

Gold prices of capital goods in 1935 were 46.5 p.c. of those in 1929, while prices of consumption goods in 1935 were only 40 p.c. of those in 1929. The quantum of capital goods in 1932 was 53 p.c. and in 1935, 74.5 p.c. of 1929, while the quantum of consumption goods were 79.5 p.c. and 85 p.c., respectively, of 1929. Thus

from 1932 to 1935 the rise in the quantum of capital goods amounted to about 40 p.c. as against only 7 p.c. for the latter. Yet, owing to the heavy contraction of trade in capital goods during the early depression years, the quantum of trade in such goods, calculated on a 1929 basis, still lagged behind that in other goods. Indications are that the trade in capital goods continued to increase more rapidly than that of other goods in 1936. The foregoing division between capital and other goods is, at best, a rough one. It is obvious that many goods of wood and metal, though semi-durable, are distinctly consumption goods. It is likely that the diverse tendencies indicated above would be even more pronounced if the division between the two categories could be made more accurately. The recent expansion in armaments throughout the world should be borne in mind in connection with trade in capital goods.

**Geographic Distribution of World Trade.**—In Statement II below, showing the percentage distribution of world trade by continents for the period 1929-36, the figures for each continental group are the sums of those of the individual countries comprising such group and therefore include trade between the members of the group. The United Kingdom and the United States have been separated from the remainder of their respective continental groups because trade tendencies in these two principal trading countries show movements differing from those of the remainder of their continental groups. Thus while the total trade of the United Kingdom has become an increased percentage of total world trade, that of the remainder of Europe has become considerably less. The trade of the United States has declined materially as a percentage of world trade, but that of the remainder of North America (chiefly Canada), after declining during the depression, was about the same percentage in 1936 as in 1929.

## II.—PERCENTAGE DISTRIBUTION OF WORLD TRADE BY CONTINENTS, 1929, 1932, 1935, AND 1936.

(Basis: Recorded values in U.S.A. old gold dollars.)

| Continental Group.         | Imports. |       |       |       | Exports. |       |       |       | Total Trade. |       |       |       |
|----------------------------|----------|-------|-------|-------|----------|-------|-------|-------|--------------|-------|-------|-------|
|                            | 1929.    | 1932. | 1935. | 1936. | 1929.    | 1932. | 1935. | 1936. | 1929.        | 1932. | 1935. | 1936. |
|                            | p.c.     | p.c.  | p.c.  | p.c.  | p.c.     | p.c.  | p.c.  | p.c.  | p.c.         | p.c.  | p.c.  | p.c.  |
| Europe (incl. U.S.S.R.).   | 55.5     | 60.6  | 57.4  | 56.6  | 48.8     | 51.1  | 48.1  | 46.5  | 52.4         | 56.2  | 52.9  | 51.7  |
| United Kingdom.....        | 15.2     | 16.3  | 16.7  | 17.7  | 10.8     | 9.9   | 10.7  | 10.3  | 13.1         | 13.2  | 13.8  | 14.1  |
| Other Europe.....          | 40.3     | 44.3  | 40.7  | 38.9  | 38.0     | 41.2  | 37.4  | 36.2  | 39.3         | 43.0  | 39.1  | 37.6  |
| North America.....         | 16.1     | 12.5  | 12.6  | 13.9  | 19.5     | 16.3  | 15.9  | 16.4  | 17.7         | 14.2  | 14.2  | 15.1  |
| United States.....         | 12.2     | 9.5   | 9.9   | 10.9  | 15.6     | 12.2  | 11.5  | 11.4  | 13.8         | 10.8  | 10.6  | 11.2  |
| Other North America        | 3.9      | 3.0   | 2.7   | 3.0   | 3.9      | 4.1   | 4.4   | 5.0   | 3.9          | 3.4   | 3.6   | 3.9   |
| Latin America.....         | 7.7      | 5.4   | 6.6   | 6.6   | 9.6      | 9.1   | 9.9   | 10.0  | 8.6          | 7.2   | 8.2   | 8.3   |
| Africa.....                | 4.8      | 5.8   | 6.4   | 6.3   | 4.5      | 6.7   | 7.2   | 7.2   | 4.6          | 6.2   | 6.8   | 6.7   |
| Asia (excl. U.S.S.R.)..... | 13.2     | 13.7  | 14.4  | 13.7  | 14.9     | 13.7  | 15.6  | 16.3  | 14.0         | 13.7  | 14.9  | 15.0  |
| Oceania.....               | 2.7      | 2.0   | 2.6   | 2.9   | 2.7      | 3.1   | 3.3   | 3.6   | 2.7          | 2.5   | 3.0   | 3.2   |
| World.....                 | 100.0    | 100.0 | 100.0 | 100.0 | 100.0    | 100.0 | 100.0 | 100.0 | 100.0        | 100.0 | 100.0 | 100.0 |

The above analysis of trade by continental groups may be supplemented by analysing the trade of the principal political groups or empires, as in Statement III. As in the case of the preceding statement, the figures for each group are the sums of those of the individual countries comprising the group.

The share of the British Commonwealth (including colonies, protectorates, etc., as well as the Dominions) in world trade fell from 27.9 p.c. in 1929 to 26.7 p.c. in 1931, but has since increased to 29.8 p.c. in 1935 and 30.9 p.c. in 1936. The increase between 1935 and 1936 was due to the expansion in imports as well as exports, but, while the United Kingdom herself accounts for the bulk of the rise in the share of world imports, her share in world exports declined. The rise from 1932 to 1936 in

the share of the British Commonwealth in world trade contrasts sharply with the fall in that of the French and Netherlands Empires.

### III.—PERCENTAGE DISTRIBUTION OF WORLD TRADE BY POLITICAL GROUPS, 1929, 1932, 1935, and 1936.

(Basis: Recorded values in U.S.A. old gold dollars.)

| Group.                  | Imports. |       |       |       | Exports. |       |       |       | Total Trade. |       |       |       |
|-------------------------|----------|-------|-------|-------|----------|-------|-------|-------|--------------|-------|-------|-------|
|                         | 1929.    | 1932. | 1935. | 1936. | 1929.    | 1932. | 1935. | 1936. | 1929.        | 1932. | 1935. | 1936. |
|                         | p.c.     | p.c.  | p.c.  | p.c.  | p.c.     | p.c.  | p.c.  | p.c.  | p.c.         | p.c.  | p.c.  | p.c.  |
| British Commonwealth    | 29.4     | 28.9  | 30.9  | 32.2  | 26.3     | 26.0  | 28.6  | 29.6  | 27.9         | 27.5  | 29.8  | 30.9  |
| French Empire.....      | 8.5      | 11.6  | 9.5   | 9.4   | 7.0      | 8.6   | 7.9   | 6.8   | 8.0          | 10.2  | 8.7   | 8.1   |
| Netherlands Empire..... | 4.8      | 5.3   | 4.5   | 4.3   | 4.0      | 4.9   | 4.6   | 4.7   | 4.7          | 5.1   | 4.6   | 4.5   |
| Totals.....             | 42.7     | 45.8  | 44.9  | 45.9  | 38.5     | 39.5  | 41.1  | 41.1  | 40.6         | 42.8  | 43.1  | 43.5  |
| Rest of the World—      |          |       |       |       |          |       |       |       |              |       |       |       |
| United States.....      | 13.2     | 9.5   | 9.9   | 10.9  | 15.6     | 12.2  | 11.5  | 11.4  | 13.8         | 10.8  | 10.6  | 11.2  |
| Other countries.....    | 45.1     | 44.7  | 45.2  | 43.2  | 45.9     | 48.3  | 47.4  | 47.5  | 45.6         | 46.4  | 46.3  | 45.3  |
| Totals.....             | 57.3     | 54.2  | 55.1  | 54.1  | 61.5     | 60.5  | 58.9  | 58.9  | 59.4         | 57.2  | 56.9  | 56.5  |
| Grand Totals.....       | 100.0    | 100.0 | 100.0 | 100.0 | 100.0    | 100.0 | 100.0 | 100.0 | 100.0        | 100.0 | 100.0 | 100.0 |

*Rise of Discriminatory Measures in the Period 1928-32.*—Changes in the geographical distribution of trade in the past decade have, to a great extent, been the result of commercial policy. Some ten years ago, there were relatively few exceptions to the rule that each country endeavoured to sell its products in the dearest market and buy the goods it required in the cheapest market; at present, price is in many countries no longer the only factor governing the direction of trade.

The change in commercial policy was due largely to the disturbances in the international accounts of numerous countries during the past decade and particularly to the heavy reduction in the supply of capital available to the principal debtor countries from the middle of 1928. The discontinuation of French capital exports on any considerable scale and the withdrawal of French short-term assets abroad, from the time when the franc was legally stabilized in June of that year, was an important and early factor in bringing about a change in the relationship between creditor and debtor countries. The decline in United States capital exports followed almost immediately upon that of the French, while British capital exports fell off in 1930.

The consequences of this change in capital movements can be only briefly outlined here. The redistribution of capital resources and the accompanying change in relative prices at first gave rise to a boom in certain creditor countries, while the chief debtor countries suffered from an inadequate supply of foreign means of payments; after the breakdown of the boom in 1929-30, the economic situation of these countries rapidly grew worse, their gold and currency resources were reduced as well as the prices of primary products, their terms of trade deteriorated, while their charges in the form of interest and amortization remained fixed. The terms of trade of the industrial creditor countries, as well as of Germany, improved, but the general price fall that occurred did not spare the economy of any country.

During the early part of the depression both debtor and creditor countries endeavoured to protect their economies against disturbances in their international accounts by new import barriers, but those raised by creditor countries were of particular importance as they directly impeded the adjustment of trade balances to the balances of capital transactions. A particularly disturbing example was the

reduction in the outlet for foreign goods in the United States after the adoption in 1930 of the Hawley-Smoot Tariff, by which nearly nine hundred duties were raised.

The connection between commercial policy and international capital movements became more pronounced during the financial crisis of 1931. The withdrawal of a portion of the large amounts of short-term capital invested in Central Europe, particularly in Germany, by various creditor countries, transferred by means of merchandise imports into the United Kingdom, where most goods could still be imported without hindrance and whence the transfer (for example, in the form of gold) did not meet with any difficulties, appeared to have been one of the principal causes of the depreciation of sterling, which was followed by the introduction in the United Kingdom of customs duties for various industrial products under the "Abnormal Importations Act" later in the year.

The contraction of British imports from industrial countries played an outstanding part in the events that followed, because it was by means of these imports that the transfer to the United Kingdom was effected of the bulk of the British income from abroad on account of the interest and dividends earned for services performed. With the smaller scope for such transfer, the financial position of various debtor countries deteriorated and several of them defaulted on their debts; in addition, a considerable scarcity of foreign currency occurred in various countries of Central Europe that had been accustomed to dispose of a large share of their exports in the United Kingdom or in other countries specializing in the British market, and had financed their purchases of primary products by their excess of exports in this trade.

The discriminatory treatment which before 1931 existed in international trade was limited by recognition of the fact that, in the long run, a country preventing its importers from buying in the cheapest market injured its own economy. Such considerations were to a large extent put aside after the financial crisis, when each country felt the economic strain to which it was exposed as a temporary disturbance originating abroad. The changes in prices were too rapid and too great to permit of a smooth adaptation of the domestic economy to the new competitive position, and the protection of that economy against breakdown appeared more important than the exchange of goods with foreign countries. The reinforcement of protective policies that followed had, in practice, always a discriminatory effect, as it chiefly affected trade with industrial or food-producing countries; but measures which were even in form discriminatory were also adopted on a scale that would have been unthinkable a few years earlier. Within a short time, a partially new technique for regulating merchandise trade as well as other international transactions developed. Its main instruments were, in creditor countries, quantitative restrictions of imports and, in debtor countries, exchange control; the latter, which was frequently combined with debt *moratoria*, gave rise to clearing for payments agreements and variable export subventions, and contributed to the tendency towards the balancing of bilateral transactions. All these measures are clearly discriminatory in substance, if not in form. In the case of clearing agreements, the discriminatory effect lies in the inducement they afford to the country whose balance in clearing is active to prevent the formation of frozen assets abroad by increasing imports from the partner, even if the additional imports have to be paid for at higher prices than those prevailing elsewhere.

It is not possible to indicate in detail how these measures have affected the distribution of trade, but attention may be drawn to the tendency for an increased proportion of trade to develop within certain more or less well-defined groups of

countries. The world empires are an example of such groupings and especially in the case of the British Commonwealth, trade between members of the group represents an increased proportion of the total trade of the group. Another grouping consists of debtor countries with weak currencies and, among such countries, mutual clearing agreements have resulted in the trade between them becoming a much greater proportion of their total trade. This change in distribution was determined, not by prices prevailing in the import and export markets concerned, but by discrimination rendered possible by commercial policy.

**Recent Factors.**—In spite of the restraints upon trade outlined above, the increase in prices of primary products since 1935 and the readiness with which such products were absorbed by free currency countries were of distinct benefit even to those raw-material-producing countries exercising exchange control and there were some signs of a return of trade into more normal channels.

If comparison is made between the import figures for 1935 and 1936, it is found that the greatest increases are recorded by industrial countries. The United Kingdom and the United States alone account for almost half of the total world increase in imports and other industrial countries for another fourth. The remaining countries, which mainly export foodstuffs and raw materials and represent one-half of world imports, thus account for only one-fourth of the increase in world imports. Of the increase in the value of world exports, however, industrial countries account for only about one-third and agricultural or mining countries for the remaining two-thirds. Germany was an exception to this general trend of industrial countries, for her exports increased more than her imports, but Germany, unlike the other principal industrial countries, is a debtor country.

The principal creditor countries—the United Kingdom, the United States, and France—increased their shares in world imports but their shares in world exports were reduced. The shares of debtor countries—Germany, and the majority of non-industrial countries—in world imports and exports moved in the opposite direction.

The circumstances determining trade movements differ from country to country. The progress of internal recovery from the depression in a number of countries, especially the United Kingdom and United States, with the consequent increase of imports of these countries, was a potent factor in the further recovery of world trade. Drought in the United States and labour disputes in that country and France tended to cut down the exports of those countries. The trade of several countries around the Mediterranean was adversely affected by unfavourable climatic conditions and political disturbances. The trade of countries of the former gold bloc—especially France, Netherlands, and Switzerland—was adversely affected by the depressed conditions within these countries before they readjusted their currencies in the autumn of 1936.

**Canada's Position in World Trade.**—The foregoing brief outline of the course of world trade in the period since 1929, taken from the League of Nations' reports, is presented as a background against which Canada's position in world trade may be viewed. According to these figures, Canada, in 1936, stood eighth in imports, fourth in exports, and fifth in total trade, whereas in 1929 she was fifth in each category. The position of fourth in exports in 1936 was largely due to the decline in exports of France, a decline which may be temporary. During the declining phase of the depression from 1929 to 1932, Canada's share in total world trade declined from 3.68 p.c. to 3.24 p.c. due to a great decline in the share of imports more than offsetting a slight increase in the share of exports. In the



recovery phase of the depression since 1932, Canada's share in total world trade has increased to 3.8 in 1936. The share of imports was still very low although it has recovered considerably since a low point of 2.3 p.c. in 1933. Canada's share of exports has been well maintained and, with increases since 1932, is now considerably larger than in 1929. The position is shown in the first section of Statement IV below.

The section of Statement IV showing the index of gold prices is significant as an indication of changes in the barter terms of trade for the countries shown. Generally speaking, terms of trade improved for industrial countries and deteriorated for raw-material countries from 1929 to 1932. Japan and the Union of South Africa were notable exceptions in each class. Since 1932 the movement of prices has been somewhat the reverse, although the maladjustments of 1932 were still not entirely compensated in 1936. Canada, as a country whose imports are chiefly manufactured goods and whose exports are chiefly primary materials, experienced a greater decline from 1927 to 1932 in the average price of exports which dropped to 45.1 p.c. of the 1927 level, than of imports which were 50.8 p.c. Since 1932, although the further decline in import prices has been a little larger than that of export prices, the import prices still averaged higher in 1936 at 41.4 p.c. compared to 39.6 p.c. for exports. In this comparison it should be borne in mind that Canadian exports in the statement include domestic gold, so that the remainder of Canadian exports are under still poorer barter terms than the figures indicate.

The quantum of Canadian imports has been recovering since 1932, but in 1936 it was still only 86.6 p.c. of that of 1927, was still more below that of 1929, and was below the estimated average for the world which stood at 92.4 p.c. of 1927. The quantum of Canadian exports has likewise been recovering since 1932 and made a remarkable gain in 1936 reaching a level above those of 1927 and 1929, and above the world average in 1936.

IV.—PERCENTAGE, PRICE, AND QUANTUM OF TRADE OF TWENTY-TWO LEADING COUNTRIES OF THE WORLD, CALENDAR YEARS 1929, 1932, 1935, AND 1936.

NOTE.—Basis: Recorded values of merchandise trade converted to U.S.A. old gold dollars. Price indexes are on the basis of U.S.A. old gold dollars. The year 1927 is taken as the base for both price and quantum indexes.

| Item and Country.                        | Imports. |       |       |       | Exports. |       |       |       | Total Trade. |       |
|--|----------|-------|-------|-------|----------|-------|-------|-------|--------------|-------|
|  | 1929.    | 1932. | 1935. | 1936. | 1929.    | 1932. | 1935. | 1936. | 1929.        | 1936. |
| <b>PERCENTAGES OF THE TOTAL.</b>         |          |       |       |       |          |       |       |       |              |       |
| United Kingdom.....                      | 15.2     | 16.3  | 16.7  | 17.7  | 10.8     | 9.9   | 10.7  | 10.3  | 13.1         | 14.1  |
| United States.....                       | 12.2     | 9.5   | 9.9   | 10.9  | 15.6     | 12.2  | 11.5  | 11.4  | 13.8         | 11.2  |
| Germany.....                             | 9.0      | 8.0   | 8.1   | 7.7   | 9.7      | 10.6  | 8.8   | 9.1   | 9.4          | 8.4   |
| France.....                              | 6.4      | 8.4   | 6.7   | 6.9   | 6.0      | 6.0   | 5.3   | 4.4   | 6.2          | 5.7   |
| Canada <sup>1</sup> .....                | 3.7      | 2.7   | 2.7   | 2.9   | 3.7      | 3.3   | 4.3   | 4.8   | 3.7          | 3.8   |
| Japan.....                               | 2.8      | 2.8   | 3.4   | 3.5   | 2.9      | 2.8   | 3.6   | 3.6   | 2.9          | 3.6   |
| Belgium.....                             | 2.8      | 3.2   | 3.0   | 3.2   | 2.7      | 3.2   | 3.0   | 3.2   | 2.7          | 3.2   |
| India.....                               | 2.6      | 2.5   | 2.4   | 2.1   | 3.6      | 2.8   | 3.0   | 3.2   | 3.0          | 2.6   |
| Netherlands.....                         | 3.1      | 3.8   | 3.1   | 2.9   | 2.4      | 2.6   | 2.3   | 2.2   | 2.8          | 2.6   |
| Union of South Africa <sup>2</sup> ..... | 1.2      | 1.2   | 1.3   | 2.0   | 1.4      | 2.5   | 2.5   | 2.6   | 1.3          | 2.3   |
| Australia.....                           | 2.0      | 1.3   | 1.3   | 2.0   | 1.3      | 2.1   | 2.3   | 2.4   | 1.9          | 2.2   |
| Argentina.....                           | 2.3      | 1.5   | 1.7   | 1.5   | 3.8      | 2.6   | 2.4   | 2.4   | 2.5          | 1.9   |
| China (incl. Manchuria).....             | 2.3      | 2.7   | 2.5   | 2.1   | 2.0      | 1.6   | 1.6   | 1.6   | 2.1          | 1.9   |
| Italy.....                               | 3.2      | 3.0   | 3.1   | 1.9   | 2.4      | 2.7   | 2.2   | 1.8   | 2.8          | 1.9   |
| Sweden.....                              | 1.3      | 1.5   | 1.8   | 1.9   | 1.5      | 1.4   | 1.7   | 1.8   | 1.4          | 1.9   |
| British Malaya.....                      | 1.4      | 1.1   | 1.3   | 1.3   | 1.6      | 1.0   | 1.7   | 1.7   | 1.5          | 1.5   |
| Switzerland <sup>3</sup> .....           | 1.4      | 2.4   | 2.0   | 1.7   | 1.2      | 1.1   | 1.3   | 1.2   | 1.3          | 1.5   |
| Czechoslovakia.....                      | 1.7      | 1.6   | 1.4   | 1.4   | 1.8      | 1.7   | 1.6   | 1.5   | 1.7          | 1.5   |
| Denmark.....                             | 1.3      | 1.5   | 1.4   | 1.4   | 1.3      | 1.6   | 1.4   | 1.4   | 1.3          | 1.4   |
| Netherlands Indies.....                  | 1.3      | 1.1   | 0.9   | 0.8   | 1.8      | 1.7   | 1.6   | 1.8   | 1.5          | 1.3   |
| Brazil.....                              | 1.2      | 0.8   | 1.1   | 1.1   | 1.4      | 1.4   | 1.4   | 1.5   | 1.3          | 1.3   |
| U.S.S.R. (Russia).....                   | 1.3      | 2.6   | 1.0   | 1.2   | 1.4      | 2.3   | 1.6   | 1.3   | 1.4          | 1.2   |
| Totals for World <sup>4</sup> .....      | 100.0    | 100.0 | 100.0 | 100.0 | 100.0    | 100.0 | 100.0 | 100.0 | 100.0        | 100.0 |

For footnotes, see end of table, p. 509.

## IV.—PERCENTAGE, PRICE, AND QUANTUM OF TRADE OF TWENTY-TWO LEADING COUNTRIES OF THE WORLD, CALENDAR YEARS 1929, 1932, 1935, AND 1936—concluded.

| Item and Country.                           | Imports. |       |       |       | Exports. |       |       |       | Total Trade. |       |
|---|----------|-------|-------|-------|----------|-------|-------|-------|--------------|-------|
|   | 1929.    | 1932. | 1935. | 1936. | 1929.    | 1932. | 1935. | 1936. | 1929.        | 1936. |
| <b>INDEX OF GOLD PRICES,</b><br>(1927=100). |          |       |       |       |          |       |       |       |              |       |
| United Kingdom.....                         | 98.9     | 46.6  | 38.9  | 41.3  | 97.0     | 52.8  | 44.0  | 45.6  |              |       |
| United States.....                          | 91.6     | 45.3  | 31.1  | 33.6  | 101.2    | 50.3  | 44.6  | 45.3  |              |       |
| Germany.....                                | 101.3    | 50.2  | 47.3  | 49.8  | 98.7     | 70.7  | 53.2  | 58.0  |              |       |
| France.....                                 | 94.0     | 55.2  | 46.2  | 47.0  | 95.8     | 64.9  | 55.9  | 53.4  |              |       |
| Canada <sup>1</sup> .....                   | 95.3     | 50.8  | 40.2  | 41.4  | 94.6     | 45.1  | 37.3  | 39.6  |              |       |
| Japan <sup>2</sup> .....                    | 95.1     | 39.7  | 35.3  | 36.2  | 93.3     | 33.0  | 25.1  | 24.9  |              |       |
| Belgium.....                                |          |       |       |       |          |       |       |       |              |       |
| India.....                                  | 93.2     | 46.8  | 37.5  |       | 90.2     | 30.5  | 34.4  |       |              |       |
| Netherlands.....                            |          |       |       |       |          |       |       |       |              |       |
| Union of South Africa <sup>3</sup> .....    | 94.4     | 58.1  | 41.4  | 41.0  | 97.9     | 68.2  | 61.8  |       |              |       |
| Australia.....                              | 89.1     |       |       |       | 96.3     | 31.8  | 25.6  |       |              |       |
| Argentina.....                              | 83.0     | 50.4  | 36.8  | 34.6  | 103.0    | 41.2  | 33.2  |       |              |       |
| China <sup>4</sup> .....                    | 90.7     | 53.1  | 41.9  |       | 105.8    | 44.4  | 36.1  |       |              |       |
| Italy.....                                  | 92.0     | 48.0  | 41.6  | 43.6  | 86.8     | 47.8  | 36.9  | 34.5  |              |       |
| Sweden.....                                 | 98.9     | 55.8  | 43.5  |       | 96.6     | 51.4  | 40.0  |       |              |       |
| British Malaya.....                         | 93.9     | 49.6  | 36.2  |       | 94.8     | 29.0  | 38.3  | 43.3  |              |       |
| Switzerland <sup>5</sup> .....              | 96.6     | 63.5  | 51.0  |       | 102.0    | 75.7  | 64.4  |       |              |       |
| Czechoslovakia.....                         | 94.8     | 59.3  | 53.6  | 52.7  | 97.7     | 70.0  |       |       |              |       |
| Denmark.....                                | 101.0    | 57.3  | 46.4  | 50.2  | 109.0    | 46.9  | 46.1  |       |              |       |
| Netherlands Indies.....                     | 96.9     | 59.2  | 44.9  | 43.7  | 73.2     | 29.4  | 25.0  | 25.0  |              |       |
| Brazil.....                                 |          |       |       |       |          |       |       |       |              |       |
| U.S.S.R. (Russia).....                      | 101.1    |       |       |       | 89.6     | 40.2  | 29.4  | 30.5  |              |       |
| Averages for World <sup>1</sup> .....       | 96.1     | 50.9  | 40.8  | 41.8  | 96.5     | 50.2  | 41.0  | 42.0  | 96.3         | 41.9  |
| <b>INDEX OF QUANTUM,</b><br>(1927=100).     |          |       |       |       |          |       |       |       |              |       |
| United Kingdom.....                         | 101.4    | 88.9  | 95.4  | 102.0 | 104.0    | 68.1  | 78.6  | 79.7  |              |       |
| United States.....                          | 114.8    | 69.8  | 93.0  | 101.7 | 107.1    | 55.9  | 62.4  | 65.2  |              |       |
| Germany.....                                | 93.3     | 65.4  | 61.9  | 59.5  | 126.5    | 75.2  | 67.9  | 74.9  |              |       |
| France.....                                 | 132.0    | 108.3 | 90.8  | 98.0  | 110.7    | 58.9  | 54.2  | 51.2  |              |       |
| Canada <sup>1</sup> .....                   | 118.2    | 62.7  | 74.8  | 80.6  | 96.4     | 74.9  | 98.6  | 115.9 |              |       |
| Japan <sup>2</sup> .....                    | 104.9    | 100.9 | 116.9 | 128.3 | 116.2    | 125.0 | 185.4 | 202.4 |              |       |
| Belgium.....                                |          |       |       |       |          |       |       |       |              |       |
| India.....                                  | 103.4    | 81.4  | 86.6  |       | 108.0    | 74.9  | 88.4  |       |              |       |
| Netherlands.....                            |          |       |       |       |          |       |       |       |              |       |
| Union of South Africa <sup>3</sup> .....    | 120.5    | 75.7  |       |       | 101.9    | 104.9 | 105.5 |       |              |       |
| Australia.....                              | 97.7     |       |       |       | 107.4    | 139.5 | 143.0 |       |              |       |
| Argentina.....                              | 119.6    | 51.8  | 67.8  | 70.6  | 90.2     | 82.7  | 85.2  |       |              |       |
| China <sup>4</sup> .....                    | 127.8    | 93.0  | 68.2  |       | 97.0     | 67.1  | 53.3  |       |              |       |
| Italy.....                                  | 116.6    | 83.2  | 86.2  | 54.8  | 114.3    | 90.6  | 86.1  | 80.0  |              |       |
| Sweden.....                                 | 113.7    | 89.9  | 120.0 |       | 116.1    | 78.1  | 112.4 |       |              |       |
| British Malaya.....                         |          |       |       |       |          |       |       |       |              |       |
| Switzerland <sup>5</sup> .....              | 110.4    | 107.5 | 91.7  |       | 91.8     | 75.4  | 85.0  | 84.1  |              |       |
| Czechoslovakia.....                         |          |       |       |       |          |       |       |       |              |       |
| Denmark.....                                |          |       |       |       |          |       |       |       |              |       |
| Netherlands Indies.....                     | 126.8    | 71.9  | 68.3  | 67.8  | 120.1    | 112.3 | 108.8 | 140.1 |              |       |
| Brazil.....                                 |          |       |       |       |          |       |       |       |              |       |
| U.S.S.R. (Russia).....                      | 116.0    |       |       |       | 125.6    | 183.5 | 160.0 | 130.4 |              |       |
| Averages for World <sup>1</sup> .....       | 109.3    | 80.9  | 88.5  | 92.4  | 108.3    | 81.8  | 89.4  | 94.3  | 108.8        | 93.0  |

<sup>1</sup> Includes exports of gold produced within the country.<sup>2</sup> Imports are adjusted for over- or under-valuation (see p. 500).<sup>3</sup> Including improvement and repair trade beginning 1933.<sup>4</sup> Totals include other countries not specified.<sup>5</sup> Indexes were not published in the Review of World Trade.<sup>6</sup> Estimated from preliminary Canadian sources.<sup>7</sup> Indexes based on year 1923.<sup>8</sup> Excluding Manchuria since July 1, 1933.

## Subsection 2.—Historical Statistics of Canadian Trade.

The most important features of Canadian trade are reviewed historically since Confederation, in most cases, in the first nine main tables of this chapter (pp. 528-535).

A general view of the trade of Canada in the fiscal years from 1868 to 1937 is furnished in Table 1 (p. 528), giving the imports of merchandise for home consumption, dutiable and free, and the exports of Canadian and foreign produce, the total trade as here given being the aggregate of the two. Necessarily, some

difficulties have been met in maintaining comparable statistics through such a length of time, one of the most serious of these arising from the different methods adopted in dealing with exports of foreign produce. For example, the shrinkage in the exports of foreign produce since 1920 has been due to change of statistical method rather than to actual diminution in value or volume of such goods exported. For the past 17 years, re-exports of foreign products from bonded warehouses have not been included in Canadian trade statistics either as imports or as exports, while the exports of foreign produce during this period have been composed of goods which had previously been entered as imports for home consumption. Such goods are debited to Canada when entering this country, and should be credited to Canada when re-exported.

From Table 2 it will be observed that, in most of the years from Confederation to the outbreak of the Great War, imports entered for consumption exceeded total exports, especially during the great growing period from 1904 to 1914. Since that time, however, there has been an annual excess of exports except in the fiscal years ended 1921, 1930, and 1931, when there were heavy return movements of funds to Canada in the form of an excess of imports.

The values of coin and bullion imported and exported are shown in Table 3 (p. 530). Exports of non-monetary gold bullion are not included in this table (see p. 501).

The figures of Tables 5 and 6 (pp. 532-533) show the overwhelming predominance of the two English-speaking countries in Canada's foreign trade; in the year ended Mar. 31, 1937, for example, 79.4 p.c. of the Dominion's exports of domestic produce was shipped to these two countries, which, in the same year, together provided 77.9 p.c. of our imports for home consumption. Tables 7 and 8 show, respectively, by years, the percentage proportions of imports from the United Kingdom and the United States to totals of dutiable and free imports since 1911, and the *ad valorem* rates of duty collected on imports from these and from all countries from 1868 to 1937. The higher rates collected on imports from the United Kingdom than on those from the United States in spite of the preferential tariff accorded British goods since 1897 is largely due to the following factors: (1) imports of alcoholic beverages, which are subject to high duties, bulk largely in imports from the United Kingdom but are negligible from the United States; (2) imports of raw materials for processing in Canada, which are free of duty, form an important part of imports from the United States; and (3) dutiable imports from the United Kingdom are largely highly manufactured goods which are subject to relatively higher rates than semi-manufactured goods for further manufacture in Canada, which form another large element of imports from the United States. This subject is treated in more detail at pp. 58-59 of the Condensed Preliminary Report on the Trade of Canada, 1936, and at pp. 509-510 of the 1937 Year Book.

### Subsection 3.—General Analysis of Current Import and Export Trade.

The figures of Statement V, p. 511, indicate the seriousness of the decline in trade during the depression shown by the figures for the fiscal year 1933, and the extent of the recovery since then. That the decline in the quantum or volume of trade was not so great as that of the values here shown is evident from the analyses in Subsections 1 and 10 of this chapter. The recovery from the low point of the depression has been greater in exports than in imports.

Imports are an indication of purchasing power in Canada and are especially influenced by the expansion or contraction of capital expenditures within Canada.

The increase, therefore, of 16.9 p.c. in the volume and 19.5 p.c. in the value of imports reflects a recovery in purchasing power in Canada and probably some slight expansion in capital expenditures which were almost completely suspended during the worst years of the depression. It may be noted in Statement V that imports of iron and non-ferrous metal products, the groups chiefly influenced by capital expenditures, were much higher in 1937 than in 1933, though still much below those of the fiscal year 1927, chosen because it approximates to the calendar year 1926 taken as a representative year of the post-war prosperity period. Similarly in 1936 and 1937 imports have increased from the United States which is the chief external source for machinery and other durable goods and materials.

Exports represent the sale in world markets of surplus products of Canadian farms, mines, forests, fisheries, and factories and, when there is a ready sale for such products at prices profitable to the producer, large exports result in prosperity in Canada. In the year 1937 exports increased in volume by 16.8 p.c., while higher prices accounted for an increase of about 8.2 p.c. in the value of exports, so that Canadian goods were sold abroad not only in larger volume but also at more profitable prices. (See Subsection 10, pp. 582-585, for a comparison of volume and value.) The figures of exports shown in Statement V indicate that a shift is taking place in the importance of groups in the composition of our exports. In the prosperity period, 1925-29, Canadian exports were predominantly agricultural. Indeed, in that period it was largely because bountiful harvests coincided with an active world demand at good prices that prosperity was widespread in Canada. In 1927 the two groups, vegetable and animal products, made up 59 p.c. of our exports, while non-ferrous metals constituted only 6.4 p.c. In 1937, on the other hand, vegetable and animal products made up only 45 p.c. of exports, but non-ferrous metals (including gold) increased to 22 p.c. This is very suggestive of the part which the mining and exporting of non-ferrous metals (including gold) are playing in the current economic recovery of Canada.

V.—SUMMARY OF THE TRADE OF CANADA BY MAIN GROUPS, FISCAL YEARS ENDED MAR. 31, 1914, 1927, 1933, 1936, AND 1937.

| Group.                                   | Values of Imports<br>(Million \$). |         |       |       |       | Values of Domestic Exports<br>(Million \$). |         |       |       |        |
|--|------------------------------------|---------|-------|-------|-------|---|---------|-------|-------|--------|
|  | 1914.                              | 1927.   | 1933. | 1936. | 1937. | 1914.                                       | 1927.   | 1933. | 1936. | 1937.  |
| ALL COUNTRIES.                           |                                    |         |       |       |       |   |         |       |       |        |
| Agricultural and Vegetable Products..... | 97.6                               | 213.1   | 88.3  | 110.3 | 131.4 | 201.2                                       | 575.0   | 203.4 | 242.9 | 346.5  |
| Animals and Products                     | 41.1                               | 53.2    | 15.4  | 24.3  | 27.9  | 76.6  | 167.3   | 54.3  | 100.9 | 133.9  |
| Fibres and Textiles...                   | 100.2                              | 183.6   | 61.2  | 89.8  | 104.8 | 1.9   | 7.7     | 4.7   | 10.3  | 12.8   |
| Wood and Paper.....                      | 37.4                               | 48.0    | 20.5  | 23.3  | 28.9  | 63.2  | 284.1   | 120.9 | 181.8 | 223.9  |
| Iron and Its Products                    | 143.8                              | 229.4   | 58.9  | 114.3 | 150.2 | 15.5  | 74.3    | 17.3  | 52.4  | 53.2   |
| Non-Ferrous Metals..                     | 35.6                               | 52.7    | 18.1  | 33.7  | 37.0  | 53.3  | 82.6    | 96.9  | 212.5 | 230.2  |
| Non-Metallic Minerals.....               | 85.3                               | 156.8   | 87.7  | 105.4 | 117.0 | 9.3   | 28.9    | 9.2   | 19.1  | 26.1   |
| Chemicals and Allied Products.....       | 17.1                               | 31.8    | 25.5  | 29.9  | 33.1  | 4.9   | 16.2    | 11.1  | 16.0  | 19.2   |
| Miscellaneous Commodities.....           | 52.1                               | 62.2    | 30.6  | 31.7  | 41.6  | 5.7   | 18.1    | 10.3  | 13.1  | 15.4   |
| Totals.....                              | 619.2                              | 1,030.0 | 406.4 | 562.7 | 671.8 | 431.0                                       | 1,254.2 | 528.1 | 849.0 | 1061.2 |

V.—SUMMARY OF THE TRADE OF CANADA BY MAIN GROUPS, FISCAL YEARS ENDED MAR. 31, 1914, 1927, 1933, 1936, AND 1937—concluded.

| Group.                                  | Values of Imports<br>(Million \$.) |       |       |       |       | Values of Domestic Exports<br>(Million \$.) |       |       |       |       |
|---|------------------------------------|-------|-------|-------|-------|---|-------|-------|-------|-------|
|   | 1914.                              | 1927. | 1933. | 1936. | 1937. | 1914.                                       | 1927. | 1933. | 1936. | 1937. |
| <b>UNITED KINGDOM.</b>                  |                                    |       |       |       |       |   |       |       |       |       |
| Agricultural and Vegetable Products.... | 16.2                               | 38.3  | 17.4  | 18.0  | 17.9  | 146.8                                       | 330.1 | 114.2 | 154.3 | 197.1 |
| Animals and Products                    | 5.7                                | 5.4   | 2.4   | 3.8   | 5.1   | 35.4  | 67.8  | 29.9  | 54.6  | 73.4  |
| Fibres and Textiles....                 | 60.6                               | 72.8  | 25.6  | 40.6  | 46.6  | 0.2   | 0.9   | 1.3   | 2.3   | 2.5   |
| Wood and Paper.....                     | 3.7                                | 3.9   | 3.4   | 3.5   | 3.8   | 12.8  | 15.8  | 11.3  | 28.8  | 36.1  |
| Iron and Its Products                   | 17.3                               | 15.0  | 12.0  | 20.6  | 23.0  | 1.4   | 8.1   | 5.6   | 11.2  | 13.0  |
| Non-Ferrous Metals.                     | 4.8                                | 5.6   | 3.3   | 5.8   | 6.1   | 16.6  | 14.2  | 14.6  | 61.8  | 75.8  |
| Non-Metallic Minerals.....              | 6.3                                | 9.3   | 12.6  | 12.9  | 13.1  | 0.4   | 2.3   | 1.3   | 2.2   | 2.7   |
| Chemicals and Allied Products.....      | 4.3                                | 4.0   | 4.6   | 6.4   | 6.9   | 0.6   | 3.6   | 2.9   | 3.2   | 4.2   |
| Miscellaneous Commodities.....          | 13.2                               | 8.8   | 5.2   | 6.3   | 7.0   | 1.0   | 4.1   | 3.3   | 3.2   | 3.2   |
| Totals.....                             | 132.1                              | 163.0 | 86.5  | 117.9 | 129.5 | 215.2                                       | 446.9 | 184.4 | 321.6 | 408.0 |
| <b>UNITED STATES.</b>                   |                                    |       |       |       |       |   |       |       |       |       |
| Agricultural and Vegetable Products.... | 44.1                               | 97.1  | 30.2  | 30.9  | 38.3  | 34.1  | 60.0  | 3.9   | 44.7  | 73.6  |
| Animals and Products                    | 23.3                               | 35.4  | 8.0   | 11.0  | 12.0  | 32.3  | 75.3  | 13.9  | 34.1  | 40.4  |
| Fibres and Textiles....                 | 22.6                               | 66.9  | 22.5  | 32.1  | 37.2  | 1.2   | 3.5   | 0.9   | 2.6   | 3.0   |
| Wood and Paper.....                     | 21.7                               | 41.1  | 15.1  | 17.9  | 23.1  | 45.2  | 242.0 | 93.9  | 125.2 | 153.7 |
| Iron and Its Products                   | 121.4                              | 206.7 | 43.0  | 38.4  | 121.7 | 3.0   | 16.7  | 3.0   | 5.4   | 6.1   |
| Non-Ferrous Metals.                     | 27.7                               | 42.2  | 12.9  | 23.3  | 25.4  | 34.2  | 41.0  | 68.1  | 121.8 | 117.3 |
| Non-Metallic Minerals.....              | 74.2                               | 132.0 | 62.9  | 78.1  | 86.8  | 7.2   | 17.6  | 4.9   | 11.6  | 17.1  |
| Chemicals and Allied Products.....      | 9.6                                | 20.6  | 15.5  | 17.5  | 19.4  | 3.2   | 7.7   | 4.7   | 7.4   | 8.7   |
| Miscellaneous Commodities.....          | 31.8                               | 45.0  | 20.0  | 20.3  | 29.2  | 4.0   | 10.6  | 5.1   | 7.5   | 9.1   |
| Totals.....                             | 306.3                              | 687.0 | 232.5 | 319.5 | 393.7 | 163.4                                       | 468.4 | 197.4 | 369.3 | 435.0 |

**Statistical Tables of Current Trade.**—Tables 10 to 18 (pp. 536-577) deal with the current trade statistics of the Dominion. Tables 10 and 11 are summary tables, showing by groups our trade with the United Kingdom, the United States, and all countries, by values and percentages, for the latest four fiscal years. Table 12 shows the same in detail for exports and Table 13 for imports of all important commodities. Table 14 shows by main classes imports as dutiable or free and exports as of Canadian or foreign produce for the five fiscal years 1933-37. Table 15 shows imports and exports for the fiscal year ended 1937 by degree of manufacture and by origin, and Table 16 gives similar information on a classification according to purpose. Table 17 gives our imports and exports for the two latest years by ports and provinces, and Table 18 shows the values imported from different countries dutiable or free under the general, preferential, and treaty rate tariffs in 1937.

#### Subsection 4.—Trade with the United Kingdom and the British Empire.

Ever since Confederation the external trade of Canada has been carried on predominantly with one or other of the two great English-speaking countries, the United Kingdom and the United States. In the early years of the Dominion, the United Kingdom, which was then lending Canada capital on a considerable scale for those times, supplied more than half her imports, though as a customer she came second to the United States. Later on, however, partly as the result of the free trade policy of the United Kingdom and the protectionist policy of the United States, the United Kingdom became the chief market for Canada's exports, holding

that position steadily from 1890 to 1920, while in certain of the more recent years the United States again has been Canada's largest customer.

As regards imports, on the other hand, the United States, though in the beginning ranking second in supplying Canada's wants, took first place as early as 1876 and has maintained that position steadily since about 1883, the proximity of the two countries and the increasing population on both sides of the line being largely responsible. During the Great War, when the resources of the United Kingdom were absorbed in the struggle, the percentage of Canada's imports coming from the United States rose as high as 82.3 p.c. in 1918. From 1921 to 1930 it remained fairly constant at about two-thirds, while in recent years it has declined and was 58.6 p.c. in 1937. Imports from the United Kingdom, which fell as low as 8.0 p.c. of the total in 1919, fluctuated between 15.2 p.c. and 19.0 p.c. between 1921 and 1930, but have been somewhat higher since then and stood at 19.3 p.c. in 1937. (See Tables 5 and 6 of this chapter.)

Statement V, p. 512, shows Canada's trade with the United Kingdom in three recent years compared with that in 1927 and 1914. It may be noted that in the latest years there has been a very great decline in imports of textiles, partially compensated by some increase in imports of iron, non-metallic mineral, and chemical products. Vegetable and animal products continue to make up the major part of exports to the United Kingdom, but there has been an actual and a great proportional increase in exports of wood and paper products and non-ferrous metals.

The commodities making up Canada's export and import trade with the United Kingdom in recent years are dealt with in summary form in Tables 10 and 11, and in detail in Tables 12 and 13 of this chapter.

**Trade of Canada with the British Empire.**—Canada was the first of the British Dominions to grant a preference on goods the produce and manufacture of the United Kingdom and reciprocating British Dominions and possessions. This preference was extended from time to time to other portions of the British Empire until now it is applicable to practically every British Dominion and possession. In the case of Newfoundland, in addition to the preference, Canada grants free admission to fish and fish products. The British West Indies receives special concessions under the Agreement of 1925 referred to on p. 490.

*Average Rates of Duty under the British Preference.*—Table 18 on p. 577 shows for the latest fiscal year the imports from countries of the British Empire entering Canada either at lower rates of duty or free under the preferential tariff. An analysis of the extent of the preference on British goods was given on p. 509 of the 1937 Year Book. To make a fair comparison between the United Kingdom and the United States of the average rates of duty collected on ordinary dutiable imports, imports of alcoholic beverages and manufactured tobaccos should be eliminated, while imports free of duty under the British preference but dutiable when imported from the United States should be added to the dutiable imports from the United Kingdom. After these logical adjustments the average rate of duty on imports from the United Kingdom has been lower in every year since 1922 while the difference in favour of the United Kingdom has become 50 p.c. or more in recent years.

The British preferential tariff enacted in 1897 has had the effect of stimulating Canada's Empire trade. When the British preference became effective in 1897, Canada's total imports from the United Kingdom amounted to only \$29,401,000, compared with imports in 1887 valued at \$44,741,000 and in 1873 at \$67,997,000, so that from 1873 to 1897 imports from the United Kingdom declined by \$38,596,000 or 56.7 p.c. After the introduction of the British preferential tariff, the downward

trend in the value of imports from the United Kingdom was reversed, although the proportion of our total imports coming from the United Kingdom continued to decline. Imports from other Empire countries which were insignificant before the beginning of the century have increased both in actual value and proportion of total imports. However, during the latest four years and especially since the Ottawa Agreements, the proportion of trade with both the United Kingdom and the total British Empire has shown an upward trend, although both the volume and direction of Canada's exports vary widely with the vicissitudes of crops here and in other parts of the world. Canada's exports to Empire countries other than the United Kingdom consist very largely of manufactured products, while imports from those Empire countries are chiefly raw materials.

In the interpretation of statistics covering a long period, such as those in Statement VI following, the wide fluctuations in price levels should be borne in mind. Thus the fiscal year 1896, just prior to the introduction of the British preference, marked about the close of a long period of declining prices which began in the '70's. Prices followed a rising trend from then to the last pre-war fiscal year 1914, and rose very steeply throughout the War to a peak in the fiscal year ended 1921. In the following year, prices suffered a sudden drop and then remained fairly steady until 1929, after which came the serious decline which accompanied the depression. (See Chapter XX.) The trade of Canada with the British Empire in certain fiscal years since 1886 was as follows:—

## VI.—CANADA'S TRADE WITH THE BRITISH EMPIRE.

| Item and Fiscal Year.      | Canadian Trade with— |                       |                       | Percentage of Total Trade with— |                       |                       |
|----------------------------|----------------------|-----------------------|-----------------------|---------------------------------|-----------------------|-----------------------|
|                            | United Kingdom.      | Other British Empire. | Total British Empire. | United Kingdom.                 | Other British Empire. | Total British Empire. |
|                            | \$                   | \$                    | \$                    | p.c.                            | p.c.                  | p.c.                  |
| <b>Imports.</b>            |                      |                       |                       |                                 |                       |                       |
| 1886.....                  | 39,033,006           | 2,383,560             | 41,416,566            | 40.7                            | 2.5                   | 43.2                  |
| 1896.....                  | 32,824,505           | 2,388,647             | 35,213,152            | 31.2                            | 2.2                   | 33.4                  |
| 1906.....                  | 69,183,915           | 14,605,519            | 83,789,434            | 24.4                            | 5.1                   | 29.5                  |
| 1914.....                  | 132,070,406          | 22,456,440            | 154,526,846           | 21.4                            | 3.6                   | 25.0                  |
| 1921.....                  | 213,973,562          | 52,029,126            | 266,002,688           | 17.3                            | 4.2                   | 21.5                  |
| 1922.....                  | 117,135,343          | 31,973,910            | 149,109,253           | 15.7                            | 4.3                   | 20.0                  |
| 1926.....                  | 163,731,210          | 45,088,918            | 208,820,128           | 17.6                            | 4.9                   | 22.5                  |
| 1929.....                  | 194,041,351          | 63,340,829            | 257,382,180           | 15.3                            | 6.0                   | 20.3                  |
| 1930.....                  | 189,179,738          | 63,494,854            | 252,674,602           | 15.2                            | 6.1                   | 20.3                  |
| 1931.....                  | 146,487,322          | 55,401,034            | 204,888,426           | 16.5                            | 6.1                   | 22.6                  |
| 1932.....                  | 106,371,770          | 41,440,214            | 147,811,983           | 18.4                            | 7.2                   | 25.6                  |
| 1933.....                  | 86,466,055           | 33,918,260            | 120,384,324           | 21.3                            | 8.3                   | 29.6                  |
| 1934.....                  | 105,100,764          | 35,303,122            | 140,403,886           | 24.2                            | 8.2                   | 32.4                  |
| 1935.....                  | 111,682,490          | 44,503,981            | 156,186,471           | 21.4                            | 8.5                   | 29.9                  |
| 1936.....                  | 117,874,822          | 59,846,488            | 177,721,310           | 20.9 <sup>1</sup>               | 10.7 <sup>1</sup>     | 31.6                  |
| 1937.....                  | 120,507,885          | 68,667,957            | 189,165,842           | 19.3                            | 10.2                  | 29.5                  |
| <b>Exports (Canadian).</b> |                      |                       |                       |                                 |                       |                       |
| 1886.....                  | 36,694,263           | 3,262,803             | 39,957,066            | 47.2                            | 4.2                   | 51.4                  |
| 1896.....                  | 62,717,941           | 4,048,198             | 66,766,139            | 57.2                            | 3.7                   | 60.9                  |
| 1906.....                  | 127,456,465          | 10,964,757            | 138,421,222           | 54.2                            | 4.5                   | 58.7                  |
| 1914.....                  | 215,253,969          | 23,388,548            | 238,642,517           | 49.9                            | 5.4                   | 55.3                  |
| 1921.....                  | 312,844,871          | 90,607,348            | 403,452,219           | 26.3                            | 7.6                   | 33.9                  |
| 1922.....                  | 290,351,675          | 46,473,735            | 345,825,410           | 40.4                            | 6.3                   | 46.7                  |
| 1926.....                  | 508,237,560          | 90,330,435            | 598,567,995           | 38.5                            | 6.8                   | 45.3                  |
| 1929.....                  | 429,730,485          | 106,258,803           | 535,989,288           | 31.4                            | 7.8                   | 39.2                  |
| 1930.....                  | 281,745,905          | 97,826,173            | 379,571,138           | 26.2                            | 8.7                   | 33.9                  |
| 1931.....                  | 219,246,499          | 73,617,887            | 292,864,396           | 27.4                            | 9.2                   | 36.6                  |
| 1932.....                  | 174,043,725          | 46,016,886            | 220,060,611           | 29.0                            | 7.7                   | 36.7                  |
| 1933.....                  | 184,861,019          | 37,767,903            | 222,118,927           | 34.9                            | 7.2                   | 42.1                  |
| 1934.....                  | 268,552,008          | 50,422,723            | 318,974,731           | 43.3                            | 7.6                   | 50.9                  |
| 1935.....                  | 290,885,237          | 67,314,241            | 358,199,478           | 38.4                            | 8.9                   | 47.3                  |
| 1936.....                  | 321,556,798          | 77,754,621            | 399,311,419           | 37.9                            | 9.1                   | 47.0                  |
| 1937.....                  | 407,996,698          | 87,601,407            | 495,598,105           | 38.4                            | 8.3                   | 46.7                  |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

**Subsection 5.—Trade with the United States and Other Foreign Countries.**

**Trade with the United States.**—In the period immediately following Confederation, the United States was Canada's chief customer, trade still following its accustomed channels in spite of the denunciation of the Reciprocity Treaty, which had expired on Mar. 17, 1866. On the other hand, Canada bought more from the United Kingdom than from the United States. (See Tables 5 and 6 for a record of trade with the United States since 1868.)

In the '70's, however, the proportion of Canadian exports to the United States, which had been over 50 p.c. in the first few years of Confederation, declined materially, but for the most part remained at over 40 p.c. until after the enactment of the McKinley Tariff of 1890, when it fell to 35 p.c. in 1892 and as low as 27 p.c. in 1898. In the first decade of the twentieth century it averaged about 35 p.c., but fell off considerably in the war years. Since the War, the average has been about 40 p.c., although in 1934 under the influence of the depression and high tariffs in the United States the proportion dropped to 33 p.c. (See Statement VII, p. 516).

Imports from the United States exceeded half of total Canadian imports for the first time in the years from 1877 to 1879, while in the 1880's they were approximately equivalent to those from the United Kingdom, at from 40 to 45 p.c. from either country. By 1896, however, imports from the United States again reached half of the total, and subsequently have never fallen below that point, increasing both absolutely and relatively during the great period of expansion until 1913, when they were 65.0 p.c. of all imports. In the extraordinary circumstances of the Great War they rose as high as 82.3 p.c. in 1918, and throughout the 1920's stood at about two-thirds of the total. They declined to less than three-fifths of the total since 1932 as shown in Statement VII, p. 516. The reduced demand for capital goods was an important factor in the depression years.

The commodities of Canadian export and import trade with the United States are shown in summary form in Tables 10 and 11 and in detail in Tables 12 and 13 of this chapter.

Trade with the United States by main groups of commodities for three recent fiscal years compared with 1927 and 1914 is shown in Statement V, p. 512. Non-metallic minerals (chiefly coal and petroleum products) and chemicals are an increasingly important factor in imports from the United States, although iron products became again in 1935 the most important group and there are still large imports of textiles which include raw cotton, and of vegetable products largely comprised of tropical or out-of-season fruits and vegetables. Aside from the effects of the Ottawa Agreements with their purpose of increasing intra-Empire trade and of the at-times heavy discount against Canadian funds in the United States, a factor in the fluctuation of the United States' share in imports into Canada which should not be overlooked is the influence of capital expenditures here. The United States is the principal external source for machinery, equipment, and structural materials. The almost complete cessation of capital expenditures in the depression therefore affected imports from the United States more than from any other country.

Another important factor influencing imports from the United States is Canadian purchasing power which is very directly affected by exports to the United States. These were seriously curtailed by the very high rates on many important Canadian products introduced by the Hawley-Smoot Tariff of June, 1930, and thereafter imports from the United States showed a greater decline than Canadian exports to that country. (See the 1936 Year Book, p. 508.)



However, this situation was relieved by the Trade Agreement with the United States which became effective on Jan. 1, 1936. The influence of the economic recovery in both Canada and the United States should not be overlooked as a factor in the recent increases of trade. The Trade Agreement has undoubtedly been of great benefit to producers of live stock and lumber in Canada and, in a less degree, to many other classes.

**Canadian Trade via the United States.**—Imports from overseas countries *via* the United States have steadily declined in recent years, especially those from the British Empire. This decrease has followed: (1) general propaganda to utilize Canadian sea and river ports; (2) additional concessions to goods imported under the preferential tariff if they come direct. Provision has been made, in trade treaties and agreements negotiated with foreign countries, that goods must be imported *via* a Canadian sea or river port in order to obtain the full benefits of special rates of duty. Between 1920 and 1937 imports *via* the United States have decreased from 9.5 p.c. to 2.8 p.c. of the total imports from overseas countries.

The proportion of exports from Canada to overseas countries going *via* the United States shows a considerable decline since 1927, the percentages by fiscal years being: 1927, 39.4; 1928, 38.7; 1929, 36.6; 1930, 33.7; 1931, 27.3; 1932, 18.7; 1933, 14.2; 1934, 14.4; 1935, 17.3; 1936, 18.4; 1937, 16.5. An important factor in the decline for recent years has been the requirement of direct shipment for goods to qualify under the Empire preferences introduced in Britain. Details by countries are given in Table 21 of this chapter.

**Trade with Other Foreign Countries.**—The relative changes in the positions occupied by the United States and other foreign countries in Canada's trade in various years from 1886 to 1937 are shown in Statement VII below. During the War and the years immediately following, when production and exports by many European countries were curtailed, imports from the United States rose to a high proportion and were 69 p.c. in 1921, while those from other foreign countries declined. With this exception the proportion of imports from other foreign countries has remained surprisingly constant over the period of nearly half a century at about one-tenth to one-eighth of total imports. Canadian exports to the United States have fluctuated between 30 p.c. and 46 p.c. of the total, while those to other foreign countries increased from 4.5 p.c. to as high as 24.0 p.c. in 1929; they declined to 12.3 p.c. in 1937.

VII.—CANADA'S TRADE WITH THE UNITED STATES AND OTHER FOREIGN COUNTRIES.

| Item and Fiscal Year. | Canadian Trade with— |                          |                        | Percentages of Total Trade with— |                          |                        |
|-----------------------|----------------------|--------------------------|------------------------|----------------------------------|--------------------------|------------------------|
|                       | United States.       | Other Foreign Countries. | All Foreign Countries. | United States.                   | Other Foreign Countries. | All Foreign Countries. |
| IMPORTS.              | \$                   | \$                       | \$                     | p.c.                             | p.c.                     | p.c.                   |
| 1886.....             | 42,818,051           | 11,756,920               | 54,575,571             | 44.6                             | 12.2                     | 56.8                   |
| 1896.....             | 53,529,390           | 16,618,019               | 70,148,009             | 50.8                             | 15.8                     | 66.6                   |
| 1906.....             | 109,256,452          | 30,694,394               | 139,950,846            | 59.6                             | 10.9                     | 70.5                   |
| 1914.....             | 395,302,138          | 68,365,014               | 464,667,152            | 64.0                             | 11.0                     | 75.0                   |
| 1921.....             | 856,176,820          | 117,979,374              | 974,156,194            | 69.0                             | 9.5                      | 78.5                   |
| 1922.....             | 515,958,196          | 82,736,833               | 598,695,070            | 69.0                             | 11.0                     | 80.0                   |
| 1926.....             | 608,518,542          | 106,890,062              | 715,508,604            | 65.6                             | 11.9                     | 77.5                   |
| 1929.....             | 868,012,229          | 140,278,652              | 1,008,290,881          | 68.6                             | 11.1                     | 79.7                   |
| 1930.....             | 847,442,037          | 148,156,943              | 995,598,980            | 67.9                             | 11.8                     | 79.7                   |
| 1931.....             | 594,407,018          | 117,307,251              | 701,714,269            | 64.5                             | 12.9                     | 77.4                   |
| 1932.....             | 351,086,775          | 79,005,136               | 430,091,911            | 60.8                             | 13.6                     | 74.4                   |
| 1933.....             | 235,548,056          | 53,451,365               | 289,999,420            | 57.2                             | 13.2                     | 70.4                   |
| 1934.....             | 235,187,681          | 55,207,058               | 290,394,739            | 54.9                             | 12.7                     | 67.6                   |
| 1935.....             | 303,639,972          | 62,604,710               | 366,244,682            | 58.1                             | 12.0                     | 70.1                   |
| 1936.....             | 319,479,594          | 65,518,159               | 384,997,753            | 56.8                             | 11.6                     | 68.4                   |
| 1937.....             | 393,720,662          | 79,939,062               | 473,709,724            | 55.6                             | 11.9                     | 70.5                   |

## VII.—CANADA'S TRADE WITH THE UNITED STATES AND OTHER FOREIGN COUNTRIES—concluded.

| Item and Fiscal Year. | Canadian Trade with— |                          |                        | Percentages of Total Trade with— |                          |                        |
|-----------------------|----------------------|--------------------------|------------------------|----------------------------------|--------------------------|------------------------|
|                       | United States.       | Other Foreign Countries. | All Foreign Countries. | United States.                   | Other Foreign Countries. | All Foreign Countries. |
|                       | \$                   | \$                       | \$                     | p.c.                             | p.c.                     | p.c.                   |
| Exports (Canadian).   |                      |                          |                        |                                  |                          |                        |
| 1886.....             | 34,234,490           | 3,515,148                | 37,709,638             | 44.1                             | 4.5                      | 48.6                   |
| 1896.....             | 37,789,481           | 5,152,165                | 42,941,646             | 54.4                             | 4.7                      | 59.1                   |
| 1906.....             | 89,546,306           | 13,516,428               | 97,062,734             | 55.5                             | 5.8                      | 61.3                   |
| 1914.....             | 163,372,825          | 29,573,097               | 192,945,922            | 37.9                             | 6.8                      | 44.7                   |
| 1921.....             | 542,322,967          | 242,935,515              | 785,258,482            | 45.6                             | 20.5                     | 66.1                   |
| 1922.....             | 292,583,643          | 101,816,627              | 394,400,270            | 39.5                             | 13.8                     | 53.3                   |
| 1926.....             | 450,199,723          | 241,900,420              | 722,000,152            | 26.4                             | 15.3                     | 54.7                   |
| 1929.....             | 504,181,004          | 333,106,239              | 837,287,243            | 23.8                             | 24.0                     | 60.8                   |
| 1930.....             | 515,049,763          | 225,637,401              | 740,687,164            | 46.0                             | 20.1                     | 66.1                   |
| 1931.....             | 349,660,563          | 157,217,708              | 506,878,271            | 43.7                             | 10.7                     | 63.4                   |
| 1932.....             | 257,770,160          | 122,201,241              | 379,971,401            | 42.0                             | 20.4                     | 63.3                   |
| 1933.....             | 197,424,723          | 108,520,623              | 305,945,351            | 37.4                             | 20.5                     | 57.9                   |
| 1934.....             | 220,072,810          | 106,874,872              | 326,947,682            | 33.0                             | 16.1                     | 49.1                   |
| 1935.....             | 304,721,354          | 93,705,093               | 398,426,447            | 40.3                             | 12.4                     | 52.7                   |
| 1936.....             | 360,302,426          | 89,416,512               | 449,718,938            | 42.4 <sup>1</sup>                | 10.6 <sup>1</sup>        | 53.0                   |
| 1937.....             | 435,014,544          | 130,569,257              | 565,583,801            | 41.0                             | 12.3                     | 53.3                   |

<sup>1</sup>Revised since the publication of the 1937 Year Book.

With further reference to the trade of Canada with countries other than the United Kingdom and the United States, attention is directed to Tables 14 to 45 (pp. 91-131) of the Condensed Preliminary Report on the Trade of Canada, 1937, published by the Dominion Bureau of Statistics. These tables show the trade of Canada in leading commodities with 96 British and foreign countries for the fiscal years 1936 and 1937.

## Subsection 6.—Geographical Distribution of Canadian Trade by Continents and Countries.

**Canadian Trade by Continents, 1937.**—A summary of the imports and exports of Canada by continents is given in Statement VIII, p. 518. The part of the table showing percentages is of particular interest as indicating trends in the distribution of trade. Africa was the only division from which imports during the latest year declined in actual value, largely due to a decline in purchases of corn from British South Africa. A great increase in imports of corn from Argentina and increased imports of crude oil from other South American countries chiefly accounted for the increased share of imports from that continent. The progress of recovery in Canada tended to increase imports of durable and capital goods and industrial materials to a greater extent than imports of finished consumption goods and foods. Thus there was a rise in the share of imports from the United States (iron and other metal goods and industrial materials), Asia (rubber and tin from the East Indies), and Oceania (wool, hides, and sugar from Australia, New Zealand, and Fiji), while imports of manufactured consumption goods from Europe and foods from "Other North America" remained relatively stable and therefore the share in imports from those divisions declined. An increased demand with higher prices for grains, timber, and non-ferrous metals, raised the share of exports going to Europe in the latest year. Over the longer term since 1932, however, the restrictive measures regarding trade adopted by many European countries has reduced the share of "Other Europe" in both the imports and exports of Canada.

## VIII.—CANADA'S TRADE BY CONTINENTS, FISCAL YEARS 1932-37.

| Item and Continent.        | Values in Millions of Dollars. |       |       |       |       |         | Percentages of Totals. |       |       |       |       |       |
|----------------------------|--------------------------------|-------|-------|-------|-------|---------|------------------------|-------|-------|-------|-------|-------|
|                            | 1932.                          | 1933. | 1934. | 1935. | 1936. | 1937.   | 1932.                  | 1933. | 1934. | 1935. | 1936. | 1937. |
| <b>IMPORTS.</b>            |                                |       |       |       |       |         |                        |       |       |       |       |       |
| Europe—                    |                                |       |       |       |       |         |                        |       |       |       |       |       |
| United Kingdom....         | 106.4                          | 86.4  | 105.1 | 111.7 | 117.9 | 129.5   | 18.4                   | 21.3  | 24.2  | 21.4  | 20.9  | 19.3  |
| Other.....                 | 50.9                           | 34.9  | 34.0  | 37.0  | 38.2  | 41.4    | 8.7                    | 8.6   | 7.9   | 7.1   | 6.8   | 6.2   |
| North America—             |                                |       |       |       |       |         |                        |       |       |       |       |       |
| United States.....         | 351.7                          | 232.5 | 238.2 | 303.6 | 319.5 | 393.7   | 60.8                   | 57.2  | 54.9  | 58.1  | 56.8  | 58.6  |
| Other.....                 | 17.6                           | 13.9  | 13.0  | 17.1  | 16.4  | 17.9    | 3.0                    | 3.4   | 3.0   | 3.3   | 2.9   | 2.6   |
| South America.....         | 17.3                           | 10.6  | 11.7  | 15.2  | 19.5  | 28.8    | 3.0                    | 2.6   | 2.7   | 2.9   | 3.5   | 4.3   |
| Asia.....                  | 18.5                           | 12.4  | 16.2  | 20.6  | 28.4  | 35.4    | 3.3                    | 3.1   | 3.7   | 3.9   | 5.0   | 5.3   |
| Oceania.....               | 9.5                            | 9.1   | 9.7   | 10.8  | 12.8  | 17.5    | 1.7                    | 2.2   | 2.3   | 2.1   | 2.3   | 2.6   |
| Africa.....                | 6.6                            | 6.4   | 5.9   | 6.4   | 10.0  | 7.7     | 1.1                    | 1.6   | 1.3   | 1.2   | 1.8   | 1.1   |
| Totals, Imports...         | 578.5                          | 406.2 | 433.8 | 522.4 | 562.7 | 671.9   | 100.0                  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| <b>EXPORTS (CANADIAN).</b> |                                |       |       |       |       |         |                        |       |       |       |       |       |
| Europe—                    |                                |       |       |       |       |         |                        |       |       |       |       |       |
| United Kingdom....         | 174.0                          | 184.4 | 288.6 | 290.8 | 321.6 | 408.0   | 29.0                   | 34.9  | 43.3  | 38.4  | 37.9  | 38.4  |
| Other.....                 | 77.2                           | 72.7  | 72.3  | 57.0  | 51.1  | 80.3    | 12.9                   | 13.8  | 10.9  | 7.5   | 6.1   | 7.6   |
| North America—             |                                |       |       |       |       |         |                        |       |       |       |       |       |
| United States.....         | 257.8                          | 197.4 | 220.1 | 304.7 | 360.3 | 435.0   | 43.0                   | 37.4  | 33.0  | 40.3  | 42.4  | 41.0  |
| Other.....                 | 32.7                           | 25.9  | 23.2  | 20.8  | 21.5  | 25.4    | 5.4                    | 4.9   | 3.6   | 2.8   | 2.5   | 2.4   |
| South America.....         | 8.9                            | 6.6   | 7.9   | 11.0  | 12.9  | 13.9    | 1.5                    | 1.2   | 1.2   | 1.4   | 1.5   | 1.3   |
| Asia.....                  | 28.3                           | 22.7  | 26.3  | 30.4  | 28.1  | 36.0    | 4.7                    | 4.3   | 3.9   | 4.0   | 3.3   | 3.4   |
| Oceania.....               | 10.2                           | 12.4  | 17.5  | 26.3  | 35.2  | 40.1    | 1.7                    | 2.4   | 2.6   | 3.5   | 4.1   | 3.8   |
| Africa.....                | 10.9                           | 6.0   | 10.0  | 15.6  | 18.3  | 22.5    | 1.8                    | 1.1   | 1.5   | 2.1   | 2.2   | 2.1   |
| Totals, Exports...         | 600.0                          | 528.1 | 665.9 | 756.6 | 846.0 | 1,061.2 | 100.0                  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

**Imports from Principal Countries.**—Statement IX which follows shows how predominant are the two great English-speaking countries as the source of supply of Canadian imports. Trade with these two leading countries is more fully covered in Subsections 4 and 5 of this chapter. During the fiscal year 1937, there were short crops of corn in the United States and British South Africa, with the result that imports of corn from Argentina were unusually heavy. Consequently, the position of third for Argentina may be only temporary, while British South Africa declined from ninth to twenty-ninth place. The percentage of imports from countries from which Canada obtains important industrial materials is tending to rise with the progress of recovery in Canada. Imports during the latest year from France were seriously affected by labour disputes and a high internal price level in that country before the franc was devalued. In Table 19 of this chapter may be found the values of imports from all important countries in recent years.

## IX.—PERCENTAGES OF TOTAL IMPORTS INTO CANADA FROM EACH OF TWELVE LEADING COUNTRIES, FISCAL YEARS ENDED MAR. 31, 1934-37.

NOTE.—Countries arranged in order of importance, 1937.

| Rank in—   |      |      |      | Country.                         | Percentages of Total Imports. |       |       |       | P.C. Inc. (+) or Dec. (—) 1937 Compared with— |        |        |
|--|------|------|------|----------------------------------|-------------------------------|-------|-------|-------|---|--------|--------|
| 1934   | 1935 | 1936 | 1937 |                                  | 1934.                         | 1935. | 1936. | 1937. | 1934.   | 1935.  | 1936.  |
| 1  | 1    | 1    | 1    | United States.....               | 54.9                          | 58.1  | 56.8  | 58.6  | + 65.6  | + 29.9 | + 23.5 |
| 2  | 2    | 2    | 2    | United Kingdom.....              | 24.2                          | 21.4  | 20.9  | 19.3  | + 23.2  | + 16.0 | + 9.9  |
| 19   | 16   | 15   | 3    | Argentina.....                   | 0.5                           | 0.5   | 0.7   | 1.7   | +471.6  | +320.1 | +213.1 |
| 3  | 3    | 3    | 4    | Germany.....                     | 2.3                           | 1.9   | 1.8   | 1.7   | + 17.7  | + 16.7 | + 17.9 |
| 29   | 15   | 6    | 5    | British Straits Settlements..... | 0.2                           | 0.6   | 1.3   | 1.6   | +552.0  | +254.9 | +46.4  |
| 6  | 6    | 5    | 6    | Australia.....                   | 1.2                           | 1.2   | 1.3   | 1.4   | + 76.8  | + 49.7 | + 30.1 |
| 5  | 5    | 4    | 7    | British India.....               | 1.4                           | 1.2   | 1.3   | 1.2   | + 40.1  | + 29.8 | + 11.6 |
| 12   | 12   | 8    | 8    | Belgium.....                     | 0.7                           | 0.7   | 0.9   | 1.0   | +109.3  | + 85.3 | + 31.6 |
| 4  | 4    | 7    | 9    | France.....                      | 1.6                           | 1.2   | 1.2   | 1.0   | + 6.4   | + 0.1  | + 3.9  |
| 17   | 18   | 17   | 10   | New Zealand.....                 | 0.6                           | 0.5   | 0.6   | 0.8   | +105.3  | +112.1 | + 38.4 |
| 16   | 11   | 11   | 11   | Jamaica.....                     | 0.6                           | 0.8   | 0.8   | 0.8   | + 95.9  | + 20.2 | + 20.0 |
| 24   | 19   | 10   | 12   | British Guiana.....              | 0.3                           | 0.5   | 0.8   | 0.8   | +203.6  | +109.2 | + 6.2  |
| Percentages of Total Imports coming from above 12 Countries..... |      |      |      |                                  | 88.5                          | 88.6  | 88.4  | 89.9  | -   | -      | -      |

Exports to Principal Countries.—Percentages in Statement X, as in the import statement, are indicative of the predominance of the United Kingdom and the United States as customers of Canada. Similarity of tastes and standards of living, as well as favourable tariff arrangements, are considerable factors in expanding exports of Canadian industrial products to the other British dominions. The industrial countries of Europe, especially those with liberal trade policies, are an important market for Canadian foodstuffs and non-ferrous metals. In the Orient, Japan has become largely industrialized and offers a growing market for Canadian foodstuffs, forest products (especially pulp and paper), non-ferrous metals, and other minerals. Table 20 of this chapter gives actual values of Canadian exports to all important British and foreign countries for the latest five fiscal years.

## X.—PERCENTAGES OF TOTAL DOMESTIC EXPORTS FROM CANADA TO EACH OF TWELVE LEADING COUNTRIES, FISCAL YEARS ENDED MAR. 31, 1934-37.

NOTE.—Countries arranged in order of importance, 1937.

| Rank in—   |      |      |      | Country.                  | Percentages of Domestic Exports. |       |       |       | P.C. Inc. (+) or Dec. (—) 1937 Compared with— |        |         |
|--|------|------|------|---------------------------|----------------------------------|-------|-------|-------|---|--------|---------|
| 1934   | 1935 | 1936 | 1937 |                           | 1934.                            | 1935. | 1936. | 1937. | 1934.   | 1935.  | 1936.   |
| 2  | 1    | 1    | 1    | United States.....        | 33.0                             | 40.3  | 42.4  | 41.0  | + 97.7  | + 42.8 | + 20.7  |
| 1  | 2    | 2    | 2    | United Kingdom.....       | 43.3                             | 33.4  | 37.0  | 38.4  | + 41.4  | + 40.3 | + 26.9  |
| 0  | 3    | 3    | 3    | Australia.....            | 1.8                              | 2.4   | 2.8   | 2.5   | +122.0  | + 49.1 | + 12.4  |
| 5  | 6    | 6    | 4    | Belgium.....              | 1.9                              | 1.5   | 1.3   | 2.2   | + 86.9  | + 95.9 | + 111.9 |
| 4  | 4    | 4    | 5    | Japan.....                | 2.1                              | 2.2   | 1.7   | 2.0   | + 56.7  | + 27.7 | + 46.7  |
| 9  | 5    | 5    | 6    | British South Africa..... | 1.1                              | 1.7   | 1.7   | 1.5   | +113.8  | + 28.4 | + 15.3  |
| 7  | 8    | 9    | 7    | France.....               | 1.8                              | 1.3   | 0.9   | 1.1   | + 1.6   | + 19.1 | + 53.2  |
| 12   | 9    | 7    | 8    | New Zealand.....          | 0.7                              | 1.0   | 1.2   | 1.1   | +149.7  | + 62.3 | + 9.5   |
| 3  | 7    | 8    | 9    | Netherlands.....          | 2.9                              | 1.3   | 1.1   | 1.0   | + 44.5  | + 8.4  | + 16.6  |
| 8  | 12   | 12   | 10   | Germany.....              | 1.6                              | 0.6   | 0.5   | 0.7   | + 26.1  | + 75.6 | + 71.7  |
| 10   | 10   | 10   | 11   | Newfoundland.....         | 0.9                              | 0.8   | 0.8   | 0.7   | + 26.0  | + 19.6 | + 12.0  |
| 14   | 11   | 11   | 12   | Norway.....               | 0.6                              | 0.6   | 0.5   | 0.7   | + 76.8  | + 44.2 | + 50.9  |
| Percentages of Total Domestic Exports going to above 12 Countries..... |      |      |      |                           | 91.7                             | 92.1  | 92.8  | 92.9  | -   | -      | -       |

### Subsection 7.—Principal Commodities Imported and Exported.

The commodities which make up Canada's external trade are shown in detail for the four latest fiscal years in Tables 12, dealing with exports, and 13, with imports, beginning on p. 538 and p. 550, respectively.

**Canada's Principal Imports.**—Statement XI, which follows, shows the long-term trend of principal commodities imported into Canada in the fiscal years 1890, 1900, 1910, 1920, 1930, and 1937. In the interpretation of the trends in imports, shown in this statement, the effects of price changes and of fluctuations of the so-called business cycle should be kept in mind. Thus the Bureau of Statistics' index number of wholesale prices on the 1926 base was 59·3 in the calendar year 1889, 52·1 in 1899, 59·5 in 1909, 134·0 in 1919, 95·6 in 1929, and 74·6 in 1936, these calendar years approximating to the fiscal years ended 1890, 1900, 1910, 1920, 1930, and 1937. In the matter of business fluctuations, the fiscal year 1910 was influenced by the general development boom in Western Canada, 1920 was affected by the feverish activity which immediately followed the War, 1930 represented the end of the security inflation period and the beginning of the downturn, while in 1937 the effects of the depression and price decline were still being felt, although there was a distinct improvement as compared with the low figures of 1933.

During the period of 47 years covered by the statement, great changes have occurred in the character of the leading imports, due to developments both in the industrial organization of the country and the goods consumed by the people. Thus in 1890, many present-day leading imports, such as crude petroleum, automobiles and parts, artificial silk, electrical apparatus, aluminium, were either non-existent or formed very insignificant items of trade. Imports of farm implements in 1890 were valued at only \$161,000 but, due to the tremendous agricultural expansion in Canada since that time, as well as to increasing mechanization of agricultural operations, imports of farm implements have grown to a large item in spite of the wide development of their manufacture within the country. On the other hand, a number of the leading imports of 1890, such as woollen goods and raw wool, sugar and products, silk goods, tea, grain products, and meats, have become relatively much less important as imports. Then again, there were certain leading imports in 1890, such as coal, rolling-mill products, machinery, and fruits, which still remain among the chief items of imports owing to the absence of coal and high-grade iron ore deposits in the central portion of Canada, where population and industry are chiefly concentrated, and to the demand for fruits which cannot be grown in Canada. Owing to the industrial development of Canada since the beginning of the century, many of the leading imports are now raw materials required by Canadian industries. The quantities of a number of these raw materials imported in each year since 1911 are shown in Table 9, p. 535.

Among the factors affecting short-term fluctuations of imports, in distinction from the long-term trends outlined above, probably the greatest is the so-called business cycle. In periods of prosperous business activity capital expenditures are high as are also expenditures upon luxuries. It is, therefore, an indication of returning prosperity in Canada to find imports of machinery, rolling-mill products, electrical apparatus, farm implements, automobiles, unmanufactured wood, etc., recovering something of the relative importance among imports which they held for a few years up to 1930.

# PRINCIPAL COMMODITIES IMPORTED

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XI.—CANADA'S LEADING IMPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930, AND 1937.

NOTE.—Commodities arranged in order of importance in 1937.

| No. | Commodity.                                | 1890.      | 1900.      | 1910.      | 1920.      | 1930.      | 1937.      |
|-----|---|------------|------------|------------|------------|------------|------------|
|     |   | \$         | \$         | \$         | \$         | \$         | \$         |
| 1   | Crude petroleum.....                      | 1          | 23,244     | 1,189,071  | 20,306,693 | 50,951,202 | 39,704,808 |
| 2   | Coal.....                                 | 8,013,156  | 11,012,223 | 27,516,078 | 60,072,029 | 59,812,418 | 34,854,726 |
| 3   | Rolling-mill products.....                | 5,645,794  | 11,005,937 | 15,602,051 | 39,985,740 | 69,943,553 | 31,351,446 |
| 4   | Machinery, except furn.....               | 1,877,551  | 5,150,952  | 14,600,373 | 36,716,701 | 70,702,213 | 31,086,519 |
| 5   | Automobile parts.....                     | 1          | 1          | 260,580    | 12,674,823 | 35,740,929 | 27,779,705 |
| 6   | Fruits.....                               | 2,400,851  | 3,133,407  | 8,316,462  | 33,463,270 | 34,277,882 | 24,706,265 |
| 7   | Sugar and products.....                   | 6,452,654  | 5,610,845  | 14,962,770 | 73,618,354 | 27,987,156 | 20,440,887 |
| 8   | Raw cotton.....                           | 3,530,249  | 4,229,108  | 9,384,801  | 33,854,457 | 21,682,403 | 19,905,776 |
| 9   | Woolen goods (incl. carpets).....         | 10,900,000 | 9,427,575  | 20,767,010 | 45,545,127 | 32,632,927 | 10,784,767 |
| 10  | Cotton goods.....                         | 3,792,534  | 6,399,705  | 17,928,093 | 40,088,000 | 27,275,170 | 14,636,551 |
| 11  | Grain and grain products.....             | 3,034,049  | 8,298,891  | 7,906,665  | 9,086,073  | 25,082,671 | 14,209,382 |
| 12  | Rubber and products.....                  | 1,512,427  | 2,942,044  | 6,151,157  | 18,059,435 | 20,025,510 | 13,284,222 |
| 13  | Vegetable oils.....                       | 612,421    | 356,881    | 1,872,265  | 15,973,417 | 13,244,151 | 12,680,809 |
| 14  | Books and printed matter.....             | 1,404,533  | 1,588,432  | 4,127,179  | 11,228,018 | 13,130,779 | 12,330,352 |
| 15  | Electrical apparatus.....                 | 317,315    | 810,900    | 3,688,538  | 15,550,254 | 37,611,263 | 11,991,088 |
| 16  | Farm implements.....                      | 161,277    | 2,148,867  | 2,661,207  | 14,578,100 | 30,075,453 | 10,803,750 |
| 17  | Automobiles.....                          | 1          | 1          | 1,732,215  | 15,035,545 | 34,404,066 | 10,410,102 |
| 18  | Flax, hemp and jute.....                  | 1,416,217  | 3,551,037  | 5,340,312  | 15,923,836 | 14,995,198 | 9,526,053  |
| 19  | Flax.....                                 | 3,073,643  | 3,604,027  | 5,347,854  | 8,336,163  | 10,694,379 | 9,348,409  |
| 20  | Engines and boilers.....                  | 188,759    | 778,364    | 2,019,558  | 12,997,757 | 15,140,436 | 8,663,282  |
| 21  | Petroleum, refined.....                   | 690,835    | 830,025    | 2,826,031  | 10,596,092 | 25,180,476 | 8,265,796  |
| 22  | Furs.....                                 | 1,053,001  | 2,106,441  | 6,708,075  | 12,877,520 | 11,923,949 | 8,208,740  |
| 23  | Alcoholic beverages.....                  | 1,695,161  | 1,338,112  | 4,450,566  | 9,135,556  | 45,023,487 | 8,094,633  |
| 24  | Clay and products.....                    | 948,876    | 1,593,255  | 3,418,844  | 6,371,567  | 12,256,799 | 7,744,156  |
| 25  | Glass and glassware.....                  | 1,268,314  | 1,658,094  | 2,932,104  | 6,926,459  | 10,453,706 | 7,583,043  |
| 26  | Naits, tops and waste wool.....           | 12,100     | 151,510    | 599,446    | 5,830,957  | 3,833,801  | 7,408,093  |
| 27  | Paper.....                                | 1,208,683  | 1,378,740  | 4,587,810  | 9,949,574  | 14,704,904 | 7,000,409  |
| 28  | Wool, raw.....                            | 1,729,058  | 1,574,834  | 1,537,175  | 2,672,211  | 4,306,945  | 6,476,705  |
| 29  | Dyeing and tanning materials.....         | 484,217    | 711,508    | 1,412,099  | 5,023,720  | 3,548,059  | 5,975,440  |
| 30  | Vegetables.....                           | 337,859    | 625,749    | 1,751,265  | 5,722,000  | 11,040,765 | 9,900,076  |
| 31  | Stone and products.....                   | 862,037    | 1,029,711  | 1,773,953  | 3,687,702  | 8,702,985  | 6,701,351  |
| 32  | Wood, unmanufactured.....                 | 1,444,727  | 3,775,240  | 8,324,555  | 14,112,301 | 15,243,150 | 8,408,387  |
| 33  | Hides and skins, raw.....                 | 1,703,093  | 4,214,012  | 8,235,819  | 22,654,061 | 8,402,075  | 3,763,091  |
| 34  | Leather.....                              | 1,173,777  | 1,879,333  | 4,202,934  | 17,102,702 | 11,537,331 | 5,045,420  |
| 35  | Aluminium.....                            | 159        | 12,543     | 794,490    | 2,747,335  | 6,068,864  | 4,751,819  |
| 36  | Silk goods.....                           | 2,654,505  | 3,880,535  | 3,590,829  | 31,341,944 | 10,606,539 | 4,533,717  |
| 37  | Paints and varnishes.....                 | 672,885    | 1,012,535  | 1,376,023  | 3,821,880  | 9,957,078  | 4,497,644  |
| 38  | Raw silk.....                             | 193,529    | 277,708    | 393,011    | 3,090,845  | 8,360,968  | 4,205,726  |
| 39  | Wood, manufactured.....                   | 1,355,230  | 824,195    | 3,085,079  | 7,893,284  | 12,711,307 | 4,128,282  |
| 40  | Nuts, edible.....                         | 231,449    | 400,441    | 1,237,292  | 5,859,573  | 5,095,109  | 3,748,241  |
| 41  | Cocoa and chocolate.....                  | 118,569    | 286,363    | 1,130,335  | 7,626,745  | 8,651,425  | 3,701,013  |
| 42  | Coffee, green.....                        | 591,158    | 491,148    | 1,194,051  | 4,711,079  | 9,924,035  | 3,630,467  |
| 43  | Scientific and educational equipment..... | 205,183    | 371,348    | 1,137,140  | 3,282,803  | 4,956,519  | 3,443,750  |
| 44  | Drugs and medicines.....                  | 513,331    | 481,359    | 962,033    | 3,402,932  | 3,808,721  | 3,274,066  |
| 45  | Artificial silk.....                      | 1          | 1          | 1          | 1          | 13,418,910 | 3,189,546  |
| 46  | Manila, sisal, istle, etc., fibre.....    | 1          | 1          | 1,548,457  | 5,105,812  | 3,822,613  | 3,099,872  |
| 47  | Woolen yarns.....                         | 117,720    | 402,328    | 1,671,765  | 4,445,270  | 5,870,353  | 2,890,090  |
| 48  | Sulphur.....                              | 44,276     | 215,433    | 430,632    | 1,296,458  | 8,223,245  | 2,874,337  |
| 49  | Brass and products.....                   | 554,545    | 851,606    | 2,238,215  | 4,581,015  | 7,000,455  | 2,855,381  |
| 50  | Cotton yarns.....                         | 17,379     | 321,848    | 757,790    | 4,078,519  | 8,827,807  | 2,079,451  |
| 51  | Fertilizers.....                          | 14,444     | 88,974     | 5,395,423  | 1,796,752  | 3,083,952  | 2,643,245  |
| 52  | Settlers' effects.....                    | 1,810,217  | 3,065,410  | 10,273,428 | 10,181,034 | 11,181,203 | 2,641,324  |
| 53  | Iron ore.....                             | 551        | 282,191    | 3,345,550  | 4,601,716  | 5,020,921  | 2,638,731  |
| 54  | Seeds.....                                | 478,397    | 1,916,994  | 1,167,321  | 4,210,752  | 5,061,255  | 2,441,743  |
| 55  | Soda and compounds.....                   | 329,084    | 624,873    | 785,524    | 2,982,371  | 4,410,621  | 2,437,412  |
| 56  | Hardware and cutlery.....                 | 1,250,369  | 1,434,209  | 1,937,647  | 4,210,142  | 4,950,119  | 2,437,225  |
| 57  | Tin in blocks.....                        | 266,463    | 580,855    | 1,005,467  | 2,662,728  | 2,438,074  | 2,408,521  |
| 58  | Coke.....                                 | 155,518    | 500,539    | 1,095,003  | 2,476,450  | 4,603,354  | 2,391,338  |
| 59  | Containers (outside coverings).....       | 42,042     | 609,171    | 2,148,076  | 2,233,205  | 6,285,755  | 2,786,065  |
| 60  | Tools.....                                | 427,305    | 825,541    | 891,329    | 2,050,286  | 3,192,449  | 2,150,538  |
| 61  | Fish.....                                 | 899,683    | 1,060,708  | 1,630,744  | 3,491,078  | 3,474,921  | 2,081,411  |
| 62  | Castings and forgings, iron.....          | 268,463    | 538,549    | 1,029,525  | 6,519,183  | 4,497,406  | 2,065,465  |
| 63  | Clocks and watches.....                   | 773,538    | 608,378    | 1,459,617  | 3,126,267  | 3,495,659  | 2,037,278  |
| 64  | Gums and resins.....                      | 159,508    | 237,276    | 2,256,307  | 4,087,716  | 3,431,591  | 2,023,107  |
| 65  | Binder twine.....                         | 4,015      | 866,892    | 1,772,585  | 3,490,524  | 1,845,305  | 2,019,374  |
| 66  | Tubes and pipe, iron.....                 | 484,008    | 1,122,987  | 2,358,848  | 4,160,378  | 5,948,182  | 1,928,523  |
| 67  | Wire, iron.....                           | 387,490    | 1,844,788  | 3,530,226  | 5,843,623  | 3,658,798  | 1,744,961  |
| 68  | Toys and dolls.....                       | 172,788    | 369,187    | 498,804    | 1,584,728  | 2,691,408  | 1,530,419  |
| 69  | Stamped and coated products.....          | 42,042     | 268,545    | 492,834    | 1,018,777  | 2,349,390  | 1,478,720  |
| 70  | Meats.....                                | 1,632,143  | 1,361,084  | 2,427,901  | 22,100,333 | 5,099,373  | 1,849,849  |
| 71  | Celluloid in lumps.....                   | 18,311     | 27,136     | 120,062    | 743,856    | 2,042,941  | 1,144,700  |
| 72  | Tobacco, raw.....                         | 1,344,865  | 1,508,595  | 3,229,239  | 13,604,757 | 6,471,626  | 1,051,510  |
| 73  | Diamonds, unset.....                      | 110,480    | 451,792    | 1,902,710  | 4,470,846  | 3,193,871  | 1,049,076  |

1 None recorded.

XI.—CANADA'S LEADING IMPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930,  
AND 1937—concluded.

| No. | Commodity.                 | 1890.     | 1900.     | 1910.     | 1920.     | 1930.      | 1937.   |
|-----|----------------------------|-----------|-----------|-----------|-----------|------------|---------|
|     |                            | \$        | \$        | \$        | \$        | \$         | \$      |
| 74  | Spices.....                | 213,677   | 242,597   | 428,075   | 1,130,902 | 1,478,575  | 936,718 |
| 75  | Hats and caps.....         | 1,258,409 | 1,637,422 | 3,420,609 | 4,216,333 | 2,908,340  | 921,230 |
| 76  | Copper and products.....   | 484,189   | 1,271,270 | 3,488,260 | 8,568,035 | 14,898,632 | 906,088 |
| 77  | Plants and trees.....      | 136,328   | 28,510    | 178,470   | 709,507   | 1,913,447  | 837,588 |
| 78  | Animals, living.....       | 837,385   | 841,168   | 1,711,728 | 2,870,377 | 2,802,754  | 812,702 |
| 79  | Musical instruments.....   | 434,514   | 390,407   | 1,207,592 | 4,329,098 | 3,130,873  | 806,985 |
| 80  | Nickel-plated ware.....    | 13,578    | 18,843    | 873,591   | 1,630,047 | 3,022,935  | 717,071 |
| 81  | Pigs and ingots, iron..... | 1,704,563 | 1,239,940 | 3,229,551 | 1,754,827 | 2,716,924  | 662,695 |
| 82  | Soap.....                  | 148,618   | 446,135   | 813,619   | 1,534,082 | 1,316,418  | 561,482 |
| 83  | Salt.....                  | 309,840   | 325,433   | 465,253   | 1,336,176 | 897,925    | 453,655 |
| 84  | Butter.....                | 62,212    | 290,220   | 92,934    | 176,994   | 14,471,688 | 407,324 |

**Canada's Principal Exports.**—Statement XII, which follows, gives Canada's leading domestic exports for the fiscal years ended 1890, 1900, 1910, 1920, 1930, and 1937, arranged in descending order of importance in 1937. In the interpretation of these figures of the main commodities exported, the same qualifications should apply regarding price changes and business fluctuations as cited above in the case of imports. Furthermore, since agriculture still constitutes the leading source of Canadian exports, variations in crop conditions here and in other parts of the world cause important fluctuations in the year to year volume and value of exports.

Over the period of 47 years covered by the statement, the changes in Canada's exports have been very great, both in volume and in the relative importance of commodities. The great agricultural expansion of the Canadian West had scarcely begun in 1890. The leading exports then were sawmill and timber products, cheese, fish, cattle, barley, coal, and furs—indicating the large dependence of Canadian production at that time upon the eastern forests, mixed-farming areas, and fisheries. The four leading exports in 1937 were very unimportant in 1890. The year 1910 is the earliest year in the statement in which wheat appears as the leading export, although this first occurred in 1906. The rise of the great pulp and paper industry to a leading position has been still more recent, and similarly with regard to the production of non-ferrous metals, automobiles, and rubber tires. The export of non-monetary gold bullion has been of sufficient importance for separate classification only since 1926. On the other hand, exports of the products of mixed-farming operations, such as cattle, hides, cheese and butter, while showing wide fluctuations, have not expanded proportionately, and in some cases were very little or no greater in 1936 than in 1890. Much of the new agricultural area developed since 1890 has been better adapted to grain growing than to mixed-farming operations, so that, owing to the growth of population, the production of the older mixed-farming districts is to a larger extent consumed within the country. The rapid progress during the past two decades of the mining and metallurgical industries producing non-ferrous metals in Canada is illustrated in this statement by the increased importance since 1910 of exports of non-monetary gold, copper, nickel, silver, zinc, lead, aluminium, and platinum. The part played by these industries in supporting Canada's export trade has increased since 1930 with the curtailment of world trade in agricultural products. Indeed, in 1937, these great mining and metallurgical industries provided exports almost equal to those of agriculture and greater than those derived from the forest resources of Canada. In this connection mention should be made of the influence of low-cost hydro-electric power. The

direct effect of Canada's resources of water power may be traced in the statement not only in the growth of exports of pulp and paper and of electric energy but also in those of the non-ferrous metals, since the economy of the mining operations is dependent in large measure upon cheap electric power and the same factor is very important in the metallurgical processes. Similarly, the exports of artificial abrasives and of certain chemicals such as fertilizers, sodium compounds, and acids are largely due to cheap hydro-electric power.

XII.—CANADA'S LEADING DOMESTIC EXPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930, AND 1937.

Notes.—Commodities arranged in order of importance, 1937.

| No. | Commodity.  | 1890.      | 1900.      | 1910.      | 1920.       | 1930.       | 1937.       |
|-----|---|------------|------------|------------|-------------|-------------|-------------|
|     |   | \$         | \$         | \$         | \$          | \$          | \$          |
| 1   | Wheat.....  | 388,861    | 11,995,488 | 52,609,351 | 185,044,800 | 215,753,475 | 223,461,009 |
| 2   | Newsprint paper.....  | 1          | 1          | 1          | 53,640,122  | 145,610,519 | 110,176,448 |
| 3   | Gold bullion, non-monetary.....   | 1          | 1          | 1          | 1           | 4,549,459   | 76,067,269  |
| 4   | Nickel.....   | 1          | 1,040,498  | 3,320,054  | 9,039,221   | 25,034,975  | 45,852,444  |
| 5   | Planks and boards.....  | 17,637,308 | 22,015,990 | 33,100,387 | 75,216,193  | 49,444,887  | 40,284,864  |
| 6   | Meats.....  | 895,767    | 13,615,621 | 8,013,680  | 90,161,234  | 15,030,071  | 36,114,497  |
| 7   | Copper in forms.....  | 1          | 1          | 1          | 541,338     | 48,181      | 34,873,145  |
| 8   | Wood-pulp.....  | 168,180    | 1,816,016  | 5,204,597  | 41,383,452  | 44,704,958  | 33,210,237  |
| 9   | Fish.....   | 8,099,674  | 10,564,638 | 15,179,015 | 40,687,172  | 34,767,739  | 25,087,602  |
| 10  | Whisky.....   | 25,383     | 396,671    | 1,010,657  | 1,504,132   | 25,856,136  | 21,777,246  |
| 11  | Wheat flour.....  | 521,383    | 2,791,885  | 14,859,854 | 94,262,022  | 45,457,195  | 21,537,038  |
| 12  | Automobiles.....  | 1          | 1          | 405,011    | 14,538,607  | 35,607,045  | 19,425,730  |
| 13  | Furs, raw.....  | 1,874,327  | 2,264,580  | 3,749,005  | 20,628,109  | 15,706,311  | 18,444,030  |
| 14  | Barley.....   | 4,600,425  | 1,107,732  | 2,107,732  | 20,206,972  | 10,338,725  | 14,601,211  |
| 15  | Cattle.....   | 6,949,417  | 8,704,523  | 10,792,156 | 46,064,681  | 12,119,462  | 14,000,022  |
| 16  | Lead.....   | 2,000      | 658,891    | 529,422    | 1,193,144   | 10,637,587  | 13,779,201  |
| 17  | Aluminium in bars, etc.....   | 1          | 1          | 1,202,723  | 5,680,871   | 13,828,010  | 12,522,047  |
| 18  | Cheese.....   | 9,372,212  | 19,856,324 | 21,607,602 | 36,336,893  | 18,278,004  | 11,236,543  |
| 19  | Asbestos, raw.....  | 444,150    | 490,909    | 1,886,613  | 8,767,856   | 12,074,065  | 10,569,302  |
| 20  | Zinc.....   | 1          | 1          | 1          | 950,082     | 8,366,712   | 9,863,937   |
| 21  | Pulpwood.....   | 80,005     | 902,772    | 6,076,638  | 8,454,803   | 13,850,206  | 8,679,198   |
| 22  | Platinum and other metals of the platinum group in concentrates or other forms..... | 1          | 1          | 61,717     | 39,058      | 357,748     | 8,135,250   |
| 23  | Fruits, chiefly apples.....   | 1,073,890  | 3,305,062  | 5,492,197  | 8,347,549   | 9,893,934   | 7,773,559   |
| 24  | Rubber tires.....   | 1          | 1          | 1          | 7,395,172   | 18,153,225  | 7,712,980   |
| 25  | Machinery, except farm.....   | 143,815    | 446,391    | 924,510    | 6,416,691   | 7,154,706   | 7,607,472   |
| 26  | Silver ore and bullion.....   | 201,615    | 1,354,053  | 15,009,937 | 14,255,601  | 11,569,855  | 7,243,750   |
| 27  | Shingles, wood.....   | 340,872    | 1,131,506  | 2,331,443  | 10,848,602  | 6,704,494   | 6,578,972   |
| 28  | Gold, raw.....  | 657,022    | 14,148,543 | 6,016,126  | 5,974,334   | 34,375,003  | 6,497,281   |
| 29  | Leather, unmanufactured.....  | 727,087    | 1,535,440  | 1,296,480  | 11,742,268  | 6,496,951   | 6,335,262   |
| 30  | Farm implements.....  | 367,198    | 1,692,155  | 4,319,385  | 11,614,490  | 18,366,688  | 6,276,608   |
| 31  | Fertilizers.....  | 4,291      | 61,410     | 371,315    | 6,694,037   | 7,960,313   | 6,088,875   |
| 32  | Vegetables.....   | 597,074    | 503,093    | 1,534,228  | 11,656,483  | 11,240,747  | 5,809,174   |
| 33  | Crabapples, artificial, crude.....  | 1          | 1          | 1          | 1,855,084   | 3,776,924   | 5,569,076   |
| 34  | Bran and shorts.....  | 86,225     | 145,206    | 1,842,690  | 2,933,843   | 2,583,484   | 6,020,834   |
| 35  | Rubber footwear.....  | 1          | 1          | 129,618    | 1,750,967   | 9,980,392   | 4,583,385   |
| 36  | Seeds.....  | 182,200    | 322,652    | 4,602,797  | 9,015,391   | 3,237,774   | 4,344,068   |
| 37  | Sodium compounds.....   | 1          | 1          | 1          | 1           | 4,208,518   | 4,221,697   |
| 38  | Cereal foods.....   | 1          | 1          | 1,689,648  | 1,087,901   | 2,431,137   | 4,160,890   |
| 39  | Pigs, ingots and blooms, iron.....  | 1          | 137,651    | 228,183    | 6,595,658   | 4,727,137   | 4,074,851   |
| 40  | Paper board.....  | 1          | 1          | 1          | 4,568,098   | 2,506,496   | 4,071,904   |
| 41  | Logs, wood.....   | 682,572    | 760,416    | 999,681    | 1,819,093   | 3,677,917   | 4,036,667   |
| 42  | Hides and skins, raw.....   | 506,492    | 1,396,807  | 5,508,185  | 19,763,640  | 7,730,914   | 3,988,888   |
| 43  | Copper ore and blister.....   | 133,251    | 1,387,388  | 6,025,925  | 11,871,039  | 37,735,413  | 3,963,762   |
| 44  | Electric energy.....  | 1          | 1          | 1          | 1           | 4,025,154   | 3,764,331   |
| 45  | Electrical apparatus.....   | 1          | 27,743     | 27,743     | 424,474     | 2,521,045   | 3,611,363   |
| 46  | Films.....  | 1          | 1          | 7,746      | 1,486,079   | 4,790,619   | 3,432,860   |
| 47  | Oats.....   | 256,156    | 2,143,179  | 1,596,612  | 9,349,456   | 4,055,855   | 3,176,469   |
| 48  | Settlers' effects.....  | 818,001    | 1,095,536  | 2,274,005  | 7,631,498   | 6,304,199   | 3,137,466   |
| 49  | Oatmeal and rolled oats.....  | 254,857    | 474,991    | 1,123,861  | 4,283,772   | 2,440,968   | 3,083,738   |
| 50  | Acids.....  | 5,545      | 67         | 1          | 901,397     | 8,096,529   | 3,078,334   |
| 51  | Automobile parts.....   | 1          | 1          | 1          | 3,097,466   | 2,298,742   | 2,092,938   |
| 52  | Tobacco, raw.....   | 234        | 3,661      | 76,564     | 130,294     | 1,504,264   | 2,818,534   |
| 53  | Socks and stockings.....  | 1          | 1          | 1          | 1           | 826,425     | 2,771,729   |
| 54  | Rye.....  | 220,761    | 279,286    | 84,658     | 3,475,834   | 1,451,640   | 2,592,959   |
| 55  | Doors, sashes, etc. (wood).....   | 60,474     | 299,354    | 29,169     | 81,654      | 37,008      | 2,462,351   |
| 56  | Wool, raw.....  | 235,669    | 418,119    | 538,077    | 5,472,236   | 1,576,342   | 2,607,462   |
| 57  | Malt.....   | 150,380    | 10,939     | 11,328     | 1,320,773   | 64,730      | 2,281,235   |

\* None recorded.

\* Fiscal year 1920. There were no exports in 1930.



## XII.—CANADA'S LEADING DOMESTIC EXPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930, AND 1937—concluded.

| No. | Commodity.                                | 1890.       | 1900.       | 1910.       | 1920.        | 1930.       | 1937.       |
|-----|---|-------------|-------------|-------------|--------------|-------------|-------------|
|     |   | \$          | \$          | \$          | \$           | \$          | \$          |
| 58  | Hardware and cutlery.....                 | 84, 109     | 278, 054    | 100, 085    | 7, 730, 826  | 1, 748, 096 | 2, 201, 921 |
| 59  | Scrap iron and steel.....                 | 26, 173     | 273, 840    | 324, 516    | 4, 300, 663  | 1, 424, 071 | 2, 189, 890 |
| 60  | Cotton products.....                      | 108, 822    | 471, 439    | 442, 493    | 6, 148, 697  | 842, 588    | 2, 114, 101 |
| 61  | Milk, processed.....                      | 1           | 1           | 541, 372    | 8, 517, 771  | 3, 262, 101 | 1, 946, 435 |
| 62  | Timber, square.....                       | 4, 353, 870 | 2, 013, 746 | 934, 723    | 2, 148, 162  | 4, 235, 309 | 1, 797, 211 |
| 63  | Coal.....                                 | 2, 447, 936 | 4, 599, 602 | 5, 013, 221 | 13, 183, 666 | 3, 998, 092 | 1, 780, 856 |
| 64  | Sugar and products.....                   | 18, 101     | 100, 108    | 153, 357    | 30, 695, 005 | 4, 798, 712 | 1, 683, 217 |
| 65  | Petroleum products.....                   | 15, 812     | 1, 653      | 1, 155      | 1, 176, 644  | 2, 527, 178 | 1, 585, 929 |
| 66  | Hay.....                                  | 1, 068, 554 | 1, 414, 109 | 1, 805, 849 | 4, 087, 670  | 2, 007, 044 | 1, 521, 953 |
| 67  | Wrapping paper.....                       | 1           | 1           | 9, 098      | 2, 917, 197  | 1, 655, 568 | 1, 295, 775 |
| 68  | Tools.....                                | 1           | 1           | 9, 301      | 651, 951     | 284, 500    | 1, 293, 200 |
| 69  | Leather, manufactured.....                | 152, 314    | 336, 190    | 33, 101     | 6, 314, 884  | 381, 424    | 1, 127, 553 |
| 70  | Butter.....                               | 340, 131    | 5, 122, 150 | 1, 010, 274 | 9, 844, 359  | 543, 351    | 1, 183, 693 |
| 71  | Brass products.....                       | 1           | 1           | 1           | 1, 644, 157  | 2, 332, 962 | 1, 141, 648 |
| 72  | Binder twine.....                         | 1           | 1           | 1           | 5, 530, 908  | 1, 502, 921 | 1, 115, 234 |
| 73  | Sausage casings.....                      | 1           | 1           | 1           | 564, 222     | 955, 933    | 1, 104, 913 |
| 74  | Laths, wood.....                          | 392, 500    | 749, 301    | 1, 882, 950 | 3, 668, 511  | 3, 095, 417 | 1, 057, 697 |
| 75  | Soap.....                                 | 3, 733      | 15, 959     | 29, 224     | 1, 000, 722  | 731, 614    | 999, 349    |
| 76  | Paints, pigments, varnishes...<br>1       | 1           | 7, 599      | 76, 807     | 1, 625, 418  | 503, 453    | 911, 049    |
| 77  | Tubes and pipe, iron.....<br>1            | 1           | 1           | 1           | 2, 325, 309  | 2, 202, 769 | 884, 497    |
| 78  | Stationery.....<br>1                      | 1           | 1           | 23, 380     | 275, 224     | 602, 170    | 883, 782    |
| 79  | Poles, telegraph and telephone<br>92, 326 | 92, 326     | 36, 891     | 56, 177     | 208, 534     | 3, 917, 536 | 812, 456    |
| 80  | Shooks.....<br>193, 503                   | 193, 503    | 251, 357    | 240, 721    | 517, 417     | 850, 989    | 735, 009    |
| 81  | Ale, beer and porter.....<br>10, 347      | 10, 347     | 6, 273      | 2, 687      | 144, 077     | 1, 999, 990 | 113, 157    |
| 82  | Milk and cream, fresh.....<br>1           | 1           | 1           | 1           | 1, 609, 090  | 5, 379, 174 | 79, 719     |

<sup>1</sup> None recorded.

## Subsection 8.—Proportions of Trade in Raw and Manufactured Products.

The stage attained in the industrial development of a country is indicated by the character of the goods it imports and exports. In the early years of Canada's development the imports were made up chiefly of manufactured products and the exports of raw and semi-manufactured products. Since the opening of the twentieth century this has been almost reversed, a large percentage of the imports consisting of raw and semi-manufactured products for use in Canadian manufacturing industries, and the exports consisting predominantly of products which have undergone some process of manufacture. In fact, the leading manufactures of Canada are for the processing of raw materials in the production of which Canada excels, and many of these processed domestic products are marketed abroad. Grains and other field crops are easily handled in the raw state and therefore enter into foreign trade largely in that form. Products of the mines and forests, on the other hand, nearly all go through some process of refinement or manufacture before being exported. With the recent relative rise in importance of exports derived from these resources the proportion of processed goods in Canadian exports has tended to increase. Furthermore, as the population of the country grows, the range of elaborated goods formerly imported, which may be manufactured on a competitive basis of mass production within the country, expands, so that there are now many industries in Canada, serving the domestic and even foreign markets, using imported raw materials such as rubber, cotton, and aluminium ore. Since 1920, the rapid decline in commodity prices, which affected raw materials more than manufactured goods, tended to increase the percentages on a value basis of both imports and exports of manufactures, but with the disappearance of this disparity of prices as recovery progresses the influence of this factor is decreasing.

Statement XIII shows how Canada's imports and exports, analysed into the three categories of raw materials, partly manufactured goods, and fully or chiefly

manufactured goods, are distributed among the continents and leading countries of the world. The close of the analysis demonstrates that the imports into Canada from the British Empire, except the United Kingdom, consist chiefly of raw and semi-manufactured products, while the exports to "Other Empire" are made up mainly of fully manufactured products (84.7 p.c. in 1937).

In trade with industrialized continents, such as Europe and Asia, Canadian imports are largely manufactured goods and exports mainly raw materials or partly manufactured goods, while in trade with South America, Oceania, Africa, and North America (if the United States be excluded) the situation is the reverse.

See also Table 15 of this chapter which shows the external trade classified by main groups according to origin and degree of manufacture.

XIII.—CANADA'S IMPORTS AND EXPORTS, BY CONTINENTS AND LEADING COUNTRIES, ACCORDING TO DEGREE OF MANUFACTURE, YEAR ENDED MAR. 31, 1937.

(Figures are preliminary.)

| Continent and Country.                   | Imports.       |                    |                      |                    |                     |                    | Exports (Domestic). |                    |                      |                    |                     |                    |
|--|----------------|--------------------|----------------------|--------------------|---------------------|--------------------|---------------------|--------------------|----------------------|--------------------|---------------------|--------------------|
|  | Raw Materials. |                    | Partly Manufactured. |                    | Fully Manufactured. |                    | Raw Materials.      |                    | Partly Manufactured. |                    | Fully Manufactured. |                    |
|  | Value.         | Per cent of Total. | Value.               | Per cent of Total. | Value.              | Per cent of Total. | Value.              | Per cent of Total. | Value.               | Per cent of Total. | Value.              | Per cent of Total. |
|  | \$'000         | p.c.               | \$'000               | p.c.               | \$'000              | p.c.               | \$'000              | p.c.               | \$'000               | p.c.               | \$'000              | p.c.               |
| <b>EUROPE.</b>                           |                |                    |                      |                    |                     |                    |                     |                    |                      |                    |                     |                    |
| Belgium.....                             | 571            | 8.5                | 1,038                | 15.5               | 5,088               | 76.0               | 21,485              | 91.7               | 921                  | 3.9                | 1,030               | 4.4                |
| Czechoslovakia.....                      | 149            | 6.3                | 31                   | 1.3                | 2,185               | 92.4               | 3                   | 1.5                | 140                  | 72.2               | 51                  | 26.3               |
| Denmark.....                             | 47             | 29.4               | 18                   | 11.2               | 95                  | 59.4               | 1,196               | 71.5               | 157                  | 9.4                | 320                 | 19.1               |
| France.....                              | 705            | 10.9               | 455                  | 7.1                | 5,294               | 82.0               | 5,117               | 43.7               | 4,963                | 42.3               | 1,638               | 14.0               |
| Germany.....                             | 1,879          | 16.1               | 327                  | 2.8                | 9,478               | 81.1               | 4,546               | 58.1               | 3,048                | 35.9               | 234                 | 3.0                |
| Greece.....                              | 11             | 16.4               | 31                   | 46.3               | 25                  | 37.3               | 3,067               | 99.5               | 2                    | 0.1                | 13                  | 0.4                |
| Irish Free State.....                    | 16             | 34.8               | 1                    | —                  | 30                  | 65.2               | 2,922               | 76.9               | 115                  | 3.0                | 763                 | 20.1               |
| Italy.....                               | 419            | 24.3               | 159                  | 9.2                | 1,144               | 66.5               | 2,649               | 56.9               | 1,893                | 40.0               | 144                 | 3.1                |
| Netherlands.....                         | 816            | 16.2               | 627                  | 14.7               | 2,810               | 66.1               | 8,290               | 76.0               | 1,598                | 14.6               | 1,027               | 9.4                |
| Norway.....                              | 48             | 6.7                | 20                   | 2.8                | 945                 | 90.6               | 5,275               | 76.4               | 177                  | 2.6                | 1,455               | 21.1               |
| Sweden.....                              | 51             | 2.8                | 12                   | 0.6                | 1,773               | 96.6               | 456                 | 14.1               | 1,606                | 49.6               | 1,175               | 36.3               |
| Switzerland.....                         | 12             | 0.5                | 3                    | 0.1                | 2,687               | 99.4               | 80                  | 11.6               | 118                  | 22.8               | 339                 | 65.6               |
| United Kingdom.....                      | 12,571         | 9.7                | 14,876               | 11.5               | 102,074             | 78.8               | 193,092             | 47.3               | 99,536               | 24.4               | 115,362             | 28.3               |
| Totals, Europe <sup>2</sup> .....        | 17,765         | 10.4               | 17,921               | 10.5               | 135,258             | 79.1               | 248,816             | 51.0               | 114,901              | 23.5               | 124,603             | 25.5               |
| <b>NORTH AMERICA.</b>                    |                |                    |                      |                    |                     |                    |                     |                    |                      |                    |                     |                    |
| Bermuda.....                             | 103            | 65.6               | 5                    | 3.2                | 49                  | 31.2               | 441                 | 32.3               | 36                   | 2.6                | 886                 | 65.1               |
| Br. W. Indies—                           |                |                    |                      |                    |                     |                    |                     |                    |                      |                    |                     |                    |
| Barbados.....                            | 1              | —                  | 2,127                | 57.3               | 1,584               | 42.7               | 86                  | 7.2                | 192                  | 16.2               | 908                 | 76.6               |
| Jamaica.....                             | 2,524          | 48.8               | 2,546                | 49.2               | 103                 | 2.0                | 120                 | 3.6                | 65                   | 2.0                | 3,142               | 94.4               |
| Trinidad.....                            |                |                    |                      |                    |                     |                    |                     |                    |                      |                    |                     |                    |
| Tobago.....                              | 459            | 16.2               | 2,153                | 77.3               | 182                 | 6.5                | 167                 | 5.5                | 187                  | 6.1                | 2,700               | 89.4               |
| Other B.W.I.....                         | 785            | 42.8               | 803                  | 44.8               | 204                 | 11.4               | 106                 | 6.7                | 61                   | 3.6                | 1,404               | 89.4               |
| Cuba.....                                | 342            | 74.8               | 61                   | 13.4               | 54                  | 11.8               | 518                 | 35.6               | 109                  | 7.5                | 828                 | 56.9               |
| Mexico.....                              | 777            | 95.6               | 1                    | —                  | 36                  | 4.4                | 56                  | 2.0                | 200                  | 7.0                | 2,598               | 91.0               |
| Newfoundland.....                        | 1,376          | 63.6               | 20                   | 0.9                | 767                 | 35.5               | 1,622               | 21.0               | 118                  | 1.5                | 5,960               | 77.5               |
| United States.....                       | 124,974        | 31.7               | 22,164               | 5.6                | 247,281             | 62.7               | 116,610             | 26.8               | 160,175              | 36.8               | 158,229             | 36.4               |
| Totals, North America <sup>2</sup> ..... | 131,901        | 32.0               | 29,885               | 7.2                | 250,460             | 60.8               | 120,166             | 26.1               | 161,260              | 35.0               | 178,956             | 38.9               |
| <b>SOUTH AMERICA.</b>                    |                |                    |                      |                    |                     |                    |                     |                    |                      |                    |                     |                    |
| Argentina.....                           | 10,830         | 92.4               | 3                    | 1                  | 891                 | 7.6                | 211                 | 5.7                | 19                   | 0.5                | 3,497               | 93.8               |
| Brazil.....                              | 787            | 86.9               | 1                    | —                  | 119                 | 13.1               | 57                  | 1.5                | 498                  | 12.8               | 3,318               | 85.7               |
| Br. Guiana.....                          | 390            | 7.7                | 4,344                | 86.0               | 317                 | 6.3                | 117                 | 9.3                | 61                   | 4.8                | 1,087               | 85.9               |
| Colombia.....                            | 4,195          | 99.6               | 1                    | —                  | 2                   | 0.1                | 195                 | 17.0               | 15                   | 1.3                | 938                 | 81.7               |
| Peru.....                                | 3,870          | 78.1               | 5                    | 0.1                | 1,083               | 21.8               | 24                  | 2.2                | 281                  | 25.7               | 787                 | 72.1               |
| Venezuela.....                           | 1,007          | 100.0              | 1                    | —                  | 1                   | —                  | 10                  | 1.0                | 1                    | 0.1                | 1,006               | 98.9               |
| Totals, South America <sup>2</sup> ..... | 21,143         | 75.2               | 4,396                | 15.6               | 2,588               | 9.2                | 637                 | 4.6                | 1,000                | 7.2                | 12,220              | 88.2               |

<sup>1</sup> Too small to be expressed.

<sup>2</sup> Totals include other countries not specified.

XIII.—CANADA'S IMPORTS AND EXPORTS, BY CONTINENTS AND LEADING COUNTRIES, ACCORDING TO DEGREE OF MANUFACTURE, YEAR ENDED MAR. 31, 1937—concluded.

| Continent and Country.         | Imports.       |                    |                      |                    |                     |                    | Exports (Domestic). |                    |                      |                    |                     |                    |
|--------------------------------|----------------|--------------------|----------------------|--------------------|---------------------|--------------------|---------------------|--------------------|----------------------|--------------------|---------------------|--------------------|
|                                | Raw Materials. |                    | Partly Manufactured. |                    | Fully Manufactured. |                    | Raw Materials.      |                    | Partly Manufactured. |                    | Fully Manufactured. |                    |
|                                | Value.         | Per cent of Total. | Value.               | Per cent of Total. | Value.              | Per cent of Total. | Value.              | Per cent of Total. | Value.               | Per cent of Total. | Value.              | Per cent of Total. |
|                                | \$'000         | p.c.               | \$'000               | p.c.               | \$'000              | p.c.               | \$'000              | p.c.               | \$'000               | p.c.               | \$'000              | p.c.               |
| <b>ASIA.</b>                   |                |                    |                      |                    |                     |                    |                     |                    |                      |                    |                     |                    |
| Br. India.....                 | 829            | 10-0               | 79                   | 0-9                | 7,418               | 89-1               | 19                  | 0-6                | 667                  | 20-7               | 2,535               | 78-7               |
| Br. Str. Settlements.....      | 7,547          | 71-6               | 2,151                | 20-4               | 843                 | 8-0                | 28                  | 1-4                | 3                    | 0-2                | 1,908               | 98-4               |
| Ceylon.....                    | 733            | 15-5               | 763                  | 19-3               | 2,467               | 62-2               | 1                   | 0-7                | 1                    | 0-7                | 135                 | 98-6               |
| China.....                     | 1,132          | 26-5               | 1,416                | 32-1               | 1,727               | 40-4               | 596                 | 12-3               | 2,110                | 42-9               | 2,193               | 44-8               |
| Hong Kong.....                 | 314            | 44-3               | 1                    | —                  | 395                 | 55-7               | 58                  | 4-2                | 73                   | 5-3                | 1,242               | 90-5               |
| Japan.....                     | 888            | 13-5               | 262                  | 5-5                | 3,649               | 76-0               | 5,320               | 24-6               | 11,907               | 55-0               | 4,403               | 20-4               |
| Philippines.....               | 204            | 25-9               | 566                  | 71-8               | 13                  | 2-3                | 16                  | 1-1                | 11                   | 0-7                | 1,485               | 98-2               |
| Totals, Asia.....              | 12,628         | 35-6               | 5,356                | 15-1               | 17,462              | 49-3               | 6,043               | 16-8               | 14,876               | 41-3               | 15,085              | 41-9               |
| <b>OCEANIA.</b>                |                |                    |                      |                    |                     |                    |                     |                    |                      |                    |                     |                    |
| Australia.....                 | 1,579          | 16-7               | 3,192                | 33-7               | 4,699               | 49-6               | 1,774               | 6-6                | 2,198                | 8-1                | 23,982              | 85-3               |
| Fiji.....                      | 21             | 0-9                | 2,370                | 99-0               | 4                   | 0-1                | 6                   | 1-6                | 108                  | 29-7               | 250                 | 68-7               |
| New Zealand.....               | 4,581          | 85-2               | 729                  | 13-6               | 67                  | 1-2                | 262                 | 2-3                | 288                  | 2-6                | 10,637              | 95-1               |
| Totals, Oceania.....           | 6,225          | 35-7               | 6,306                | 36-1               | 4,919               | 23-2               | 2,535               | 6-4                | 2,714                | 6-7                | 34,902              | 86-9               |
| <b>AFRICA.</b>                 |                |                    |                      |                    |                     |                    |                     |                    |                      |                    |                     |                    |
| Br. E. Africa.....             | 2,118          | 74-9               | 667                  | 23-6               | 44                  | 1-5                | 1                   | —                  | 3                    | 0-4                | 773                 | 99-6               |
| Br. S. Africa.....             | 579            | 36-7               | 628                  | 43-0               | 252                 | 17-3               | 130                 | 0-8                | 1,055                | 6-8                | 14,389              | 92-4               |
| Br. W. Africa.....             | 1,113          | 74-3               | 385                  | 25-7               | 1                   | —                  | 171                 | 19-9               | 8                    | 0-9                | 680                 | 79-2               |
| Portuguese Africa.....         | 12             | 100-0              | 1                    | —                  | 1                   | —                  | 49                  | 2-8                | 455                  | 27-4               | 1,235               | 60-8               |
| S. Rhodesia.....               | 1,082          | 100-0              | 1                    | —                  | 1                   | —                  | 1                   | —                  | 19                   | 2-8                | 825                 | 97-7               |
| Totals, Africa.....            | 5,594          | 73-0               | 1,731                | 22-6               | 338                 | 4-4                | 2,151               | 9-6                | 1,670                | 7-4                | 18,647              | 83-0               |
| <b>Grand Totals.....</b>       | <b>195,256</b> | <b>29-0</b>        | <b>65,595</b>        | <b>9-8</b>         | <b>411,025</b>      | <b>61-2</b>        | <b>386,348</b>      | <b>35-3</b>        | <b>296,421</b>       | <b>27-9</b>        | <b>384,413</b>      | <b>36-2</b>        |
| <b>BRITISH EMPIRE.</b>         |                |                    |                      |                    |                     |                    |                     |                    |                      |                    |                     |                    |
| United Kingdom.....            | 12,571         | 9-7                | 14,879               | 11-5               | 102,074             | 78-6               | 193,092             | 47-3               | 99,536               | 24-4               | 115,369             | 28-3               |
| Other Br. Empire.....          | 26,180         | 33-1               | 22,082               | 33-5               | 19,496              | 28-4               | 8,085               | 9-2                | 5,363                | 6-1                | 74,149              | 84-7               |
| Totals, British Empire.....    | 38,751         | 19-6               | 37,861               | 19-1               | 121,570             | 61-3               | 201,181             | 40-6               | 104,899              | 21-2               | 189,518             | 38-2               |
| <b>FOREIGN COUNTRIES.</b>      |                |                    |                      |                    |                     |                    |                     |                    |                      |                    |                     |                    |
| United States.....             | 124,974        | 31-7               | 22,164               | 5-6                | 247,261             | 62-7               | 116,610             | 28-8               | 160,175              | 36-8               | 158,229             | 36-4               |
| Other foreign countries.....   | 31,531         | 39-8               | 5,570                | 7-0                | 42,173              | 53-2               | 62,557              | 47-9               | 31,347               | 24-0               | 36,666              | 28-1               |
| Totals, Foreign Countries..... | 156,505        | 33-0               | 27,734               | 5-9                | 289,454             | 61-1               | 179,167             | 31-7               | 191,522              | 33-9               | 194,895             | 34-4               |

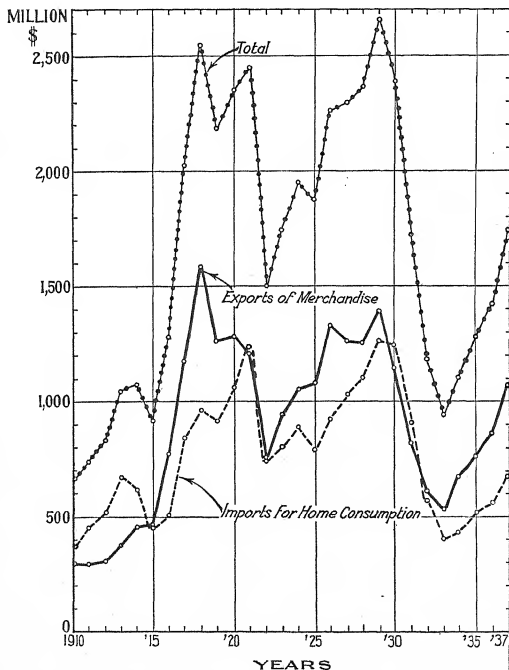
<sup>1</sup> Too small to be expressed.

<sup>2</sup> Totals include other countries not specified.

**Subsection 9.—Main Historical Tables and Tables Showing Current Trends in External Trade.**

In this subsection are assembled, in summary form, the main tables of Canadian trade since Confederation, while the figures of trade in the latest years are given in greater detail by countries and commodities.

# AGGREGATE EXTERNAL MERCHANDISE TRADE OF CANADA 1910-1937



1.—Aggregate External Merchandise Trade of Canada, fiscal years 1868-1937.

| Fiscal Year. | Imports of Merchandise Entered for Home Consumption. |             |               | Exports of Merchandise. |                  |               | Total of Imports for Home Consumption and Exports (Merchandise). |
|--------------|--|-------------|---------------|-------------------------|------------------|---------------|--|
|              | Dutiable.  | Free.       | Total.        | Canadian Produce.       | Foreign Produce. | Total.        |  |
|              | \$   | \$          | \$            | \$                      | \$               | \$            | \$   |
| 1868.....    | 43,655,696   | 23,434,463  | 67,090,159    | 48,504,899              | 4,196,821        | 52,701,720    | 119,791,879  |
| 1869.....    | 41,009,342   | 22,085,599  | 63,154,941    | 52,400,772              | 3,855,801        | 56,256,573    | 119,411,514  |
| 1870.....    | 45,127,421   | 21,774,653  | 66,902,074    | 59,043,590              | 6,527,622        | 65,571,212    | 132,473,286  |
| 1871.....    | 60,094,362   | 24,120,026  | 84,214,388    | 57,630,024              | 9,852,244        | 67,482,268    | 151,697,656  |
| 1872.....    | 68,276,157   | 36,679,210  | 104,955,367   | 65,831,083              | 12,798,182       | 78,629,265    | 183,584,632  |
| 1873.....    | 71,198,176   | 53,310,953  | 124,509,129   | 76,538,025              | 9,405,910        | 85,943,935    | 210,453,064  |
| 1874.....    | 76,232,530   | 46,948,357  | 123,180,887   | 76,741,997              | 10,614,096       | 87,356,093    | 210,536,980  |
| 1875.....    | 78,138,511   | 39,270,057  | 117,408,568   | 69,709,823              | 7,137,319        | 76,847,142    | 194,255,710  |
| 1876.....    | 60,238,297   | 32,374,010  | 92,612,307    | 72,491,437              | 7,234,061        | 79,725,498    | 172,339,505  |
| 1877.....    | 60,916,770   | 33,209,524  | 94,126,294    | 85,030,546              | 7,111,108        | 92,141,654    | 166,268,048  |
| 1878.....    | 50,778,039   | 30,622,812  | 81,400,851    | 67,989,800              | 11,164,878       | 79,154,678    | 169,550,329  |
| 1879.....    | 55,426,836   | 32,275,683  | 87,702,519    | 62,431,025              | 8,355,644        | 70,786,669    | 149,489,188  |
| 1880.....    | 54,182,967   | 15,717,575  | 69,900,542    | 72,899,697              | 13,240,006       | 86,139,703    | 156,040,245  |
| 1881.....    | 71,620,725   | 18,867,604  | 90,488,329    | 83,944,701              | 13,375,117       | 97,319,818    | 187,806,147  |
| 1882.....    | 85,757,433   | 25,387,751  | 111,145,184   | 94,137,657              | 7,628,453        | 101,766,110   | 212,911,294  |
| 1883.....    | 91,588,339   | 30,273,157  | 121,861,496   | 87,702,431              | 9,751,773        | 97,454,204    | 219,315,700  |
| 1884.....    | 80,010,498   | 25,963,490  | 105,973,978   | 79,833,098              | 9,380,106        | 89,222,204    | 195,195,182  |
| 1885.....    | 73,269,618   | 26,486,137  | 99,755,755    | 79,131,735              | 8,079,460        | 87,211,531    | 186,967,168  |
| 1886.....    | 70,658,819   | 25,333,318  | 95,992,137    | 77,756,704              | 7,438,079        | 85,194,783    | 181,186,920  |
| 1887.....    | 75,120,679   | 26,986,331  | 102,107,010   | 80,960,906              | 8,549,333        | 89,510,242    | 194,617,452  |
| 1888.....    | 69,645,824   | 31,025,904  | 100,671,628   | 81,382,072              | 8,803,394        | 90,185,466    | 190,857,094  |
| 1889.....    | 74,475,139   | 34,623,057  | 109,098,196   | 80,272,456              | 6,938,455        | 87,210,911    | 196,309,107  |
| 1890.....    | 77,106,286   | 34,576,287  | 111,682,573   | 85,257,686              | 9,051,781        | 94,309,367    | 205,991,944  |
| 1891.....    | 74,536,036   | 36,997,918  | 111,533,954   | 88,671,738              | 8,798,631        | 97,470,369    | 206,006,323  |
| 1892.....    | 69,160,737   | 45,999,676  | 115,160,413   | 99,032,466              | 13,121,791       | 112,154,257   | 227,314,670  |
| 1893.....    | 69,873,571   | 46,927,259  | 116,800,830   | 105,488,798             | 9,941,850        | 115,430,648   | 229,001,484  |
| 1894.....    | 63,779,182   | 46,291,729  | 110,070,911   | 103,551,764             | 11,838,808       | 115,390,572   | 224,750,480  |
| 1895.....    | 58,587,655   | 42,118,236  | 100,705,891   | 8,485,043               | 109,819,484      | 208,308,527   | 209,087,775  |
| 1896.....    | 67,239,759   | 38,121,402  | 105,361,161   | 109,707,805             | 6,608,738        | 116,316,543   | 221,675,704  |
| 1897.....    | 66,220,765   | 40,397,062  | 106,617,827   | 123,632,540             | 10,825,163       | 134,457,703   | 241,076,530  |
| 1898.....    | 74,625,088   | 51,682,074  | 126,307,162   | 144,548,662             | 14,980,883       | 159,529,545   | 285,836,707  |
| 1899.....    | 89,433,172   | 56,989,244  | 146,422,416   | 137,360,792             | 17,520,088       | 154,880,880   | 304,305,296  |
| 1900.....    | 104,346,795  | 68,304,881  | 172,651,676   | 168,972,301             | 14,265,254       | 183,237,555   | 355,889,231  |
| 1901.....    | 105,969,756  | 71,961,163  | 177,930,919   | 177,431,386             | 10,777,757       | 188,209,143   | 372,440,062  |
| 1902.....    | 118,657,496  | 78,080,308  | 196,737,804   | 186,019,763             | 13,951,101       | 200,970,864   | 406,708,068  |
| 1903.....    | 138,790,058  | 88,293,744  | 226,083,802   | 214,401,674             | 10,828,087       | 225,229,761   | 450,824,570  |
| 1904.....    | 148,099,576  | 94,099,839  | 242,199,415   | 198,414,439             | 12,641,239       | 211,055,678   | 454,965,093  |
| 1905.....    | 150,928,787  | 101,035,427 | 251,964,214   | 190,854,496             | 10,617,115       | 201,471,611   | 453,436,275  |
| 1906.....    | 173,046,109  | 110,694,171 | 283,740,280   | 235,483,956             | 11,773,846       | 246,567,802   | 530,898,082  |
| 1907.....    | 152,055,529  | 108,300,366 | 260,355,895   | 180,545,306             | 11,541,927       | 192,087,233   | 442,313,068  |
| 1908.....    | 218,100,447  | 134,380,332 | 352,540,779   | 246,960,968             | 16,407,984       | 263,368,952   | 615,909,831  |
| 1909.....    | 175,014,160  | 118,580,062 | 293,594,222   | 242,603,584             | 17,318,782       | 259,922,366   | 548,516,562  |
| 1910.....    | 227,264,349  | 143,653,853 | 370,918,199   | 279,247,551             | 19,516,442       | 298,763,993   | 669,682,192  |
| 1911.....    | 252,723,812  | 170,000,791 | 422,724,603   | 274,316,553             | 15,685,057       | 290,000,210   | 712,724,813  |
| 1912.....    | 335,209,616  | 137,100,616 | 472,310,232   | 371,492,994             | 30,716,151       | 402,209,145   | 874,520,379  |
| 1913.....    | 441,606,855  | 229,600,349 | 671,207,204   | 355,754,600             | 21,213,755       | 377,068,355   | 1,048,275,589  |
| 1914.....    | 410,258,744  | 208,935,610 | 619,194,354   | 495,137,224             | 23,848,785       | 455,437,224   | 1,074,631,222  |
| 1915.....    | 279,792,195  | 176,163,718 | 455,955,908   | 409,418,836             | 52,023,673       | 461,442,509   | 917,398,417  |
| 1916.....    | 289,366,527  | 128,834,607 | 418,201,134   | 741,610,638             | 37,689,432       | 779,300,071   | 1,287,501,204  |
| 1917.....    | 461,733,609  | 384,717,269 | 846,450,878   | 1,151,375,768           | 27,835,332       | 1,179,211,100 | 2,025,661,978  |
| 1918.....    | 542,341,522  | 421,101,056 | 963,442,578   | 1,540,027,788           | 46,142,004       | 1,586,169,792 | 2,549,702,370  |
| 1919.....    | 526,494,658  | 393,217,047 | 919,711,705   | 1,216,443,806           | 52,321,479       | 1,268,765,285 | 2,185,476,990  |
| 1920.....    | 695,655,109  | 307,872,958 | 1,003,528,067 | 1,289,492,098           | 47,166,611       | 1,336,658,709 | 2,341,180,832  |
| 1921.....    | 847,591,406  | 392,567,476 | 1,240,158,882 | 1,391,163,701           | 21,264,418       | 1,412,428,119 | 2,652,587,001  |
| 1922.....    | 495,626,332  | 252,178,009 | 747,804,341   | 740,240,080             | 13,686,329       | 753,926,409   | 1,501,731,341  |
| 1923.....    | 537,258,782  | 265,320,462 | 802,579,244   | 931,451,443             | 13,844,394       | 945,295,837   | 1,747,876,381  |
| 1924.....    | 591,299,094  | 302,067,773 | 893,366,867   | 1,045,351,056           | 13,412,241       | 1,058,763,297 | 1,952,130,164  |
| 1925.....    | 516,014,455  | 289,118,082 | 805,132,537   | 1,089,067,353           | 12,294,290       | 1,081,361,643 | 1,878,294,180  |
| 1926.....    | 583,051,670  | 344,277,062 | 927,328,732   | 1,320,568,147           | 13,344,346       | 1,333,912,493 | 2,261,241,225  |
| 1927.....    | 699,897,013  | 370,985,492 | 1,070,882,505 | 1,254,168,897           | 15,416,636       | 1,269,584,533 | 2,300,477,078  |
| 1928.....    | 710,650,283  | 398,906,233 | 1,109,556,516 | 1,233,093,994           | 22,248,691       | 1,255,342,685 | 2,365,109,151  |
| 1929.....    | 821,029,451  | 422,567,811 | 1,243,597,262 | 1,391,235,131           | 25,185,080       | 1,416,420,211 | 2,659,024,625  |
| 1930.....    | 819,230,470  | 428,043,108 | 1,247,273,578 | 1,200,258,302           | 24,679,788       | 1,224,938,070 | 2,472,211,652  |
| 1931.....    | 754,090,230  | 332,522,465 | 1,086,612,695 | 799,742,067             | 17,285,381       | 817,028,448   | 1,723,640,743  |
| 1932.....    | 888,498,048  | 190,006,850 | 1,078,504,900 | 600,031,812             | 11,221,215       | 611,253,027   | 1,689,756,931  |
| 1933.....    | 256,377,100  | 150,006,444 | 406,383,544   | 528,064,278             | 6,913,842        | 534,978,120   | 941,361,864  |
| 1934.....    | 250,476,410  | 113,322,213 | 363,798,623   | 665,954,071             | 8,311,324        | 674,265,395   | 1,038,064,020  |
| 1935.....    | 301,245,922  | 221,153,231 | 522,399,153   | 758,825,925             | 7,658,993        | 766,484,918   | 1,289,716,041  |
| 1936.....    | 309,933,069  | 232,785,967 | 542,719,036   | 849,030,417             | 13,441,659       | 862,472,076   | 1,425,191,139  |
| 1937.....    | 366,933,654  | 301,941,932 | 678,875,586   | 1,061,181,906           | 13,082,314       | 1,074,264,220 | 1,743,119,786  |

¹ Nine months.

## 2.—Ratio of Exports to Imports and Values per Capita of Exports, Imports, and Total Trade, fiscal years 1868-1937.

| Fiscal Year.         | Excess of Imports Entered for Consumption over Total Exports. | Excess of Total Exports over Imports Entered for Consumption. | Percentage Rate of Total Exports to Imports Entered for Consumption. | Values per Capita.           |                |                           |
|----------------------|---|---|--|------------------------------|----------------|---------------------------|
|                      |   |   |  | Exports of Canadian Produce. | Total Imports. | Total Trade. <sup>1</sup> |
|                      | \$  | \$  | p.c.   | \$                           | \$             | \$                        |
| 1868.....            | 14,388,439  | -   | 78.55  | 14.38                        | 19.90          | 34.28                     |
| 1869.....            | 6,898,368   | -   | 89.07  | 15.35                        | 18.50          | 33.85                     |
| 1870.....            | 1,330,862   | -   | 98.01  | 17.09                        | 19.37          | 36.46                     |
| 1871.....            | 16,731,120  | -   | 80.13  | 16.38                        | 23.04          | 40.32                     |
| 1872.....            | 26,326,102  | -   | 74.92  | 18.23                        | 29.06          | 47.29                     |
| 1873.....            | 38,565,194  | -   | 69.03  | 20.57                        | 33.94          | 54.51                     |
| 1874.....            | 35,824,794  | -   | 70.92  | 20.06                        | 32.20          | 52.26                     |
| 1875.....            | 40,561,426  | -   | 64.45  | 17.93                        | 30.21          | 48.14                     |
| 1876.....            | 12,786,709  | -   | 86.18  | 18.36                        | 23.43          | 41.79                     |
| 1877.....            | 18,984,740  | -   | 79.83  | 16.97                        | 23.45          | 40.42                     |
| 1878.....            | 11,241,173  | -   | 87.56  | 16.67                        | 22.10          | 38.83                     |
| 1879.....            | 7,915,850   | -   | 89.94  | 15.06                        | 18.98          | 34.04                     |
| 1880.....            | -   | 10,239,161  | 123.23   | 17.29                        | 16.58          | 33.87                     |
| 1881.....            | -   | 6,831,459   | 107.05   | 19.36                        | 20.86          | 40.22                     |
| 1882.....            | 9,379,074   | -   | 91.57  | 21.47                        | 25.35          | 46.82                     |
| 1883.....            | 24,407,292  | -   | 79.97  | 19.78                        | 27.49          | 47.27                     |
| 1884.....            | 16,750,774  | -   | 84.19  | 17.80                        | 23.63          | 41.43                     |
| 1885.....            | 12,544,394  | -   | 87.42  | 17.43                        | 21.98          | 39.41                     |
| 1886.....            | 10,797,354  | -   | 88.75  | 16.94                        | 20.92          | 37.86                     |
| 1887.....            | 15,596,968  | -   | 85.16  | 17.46                        | 22.06          | 40.12                     |
| 1888.....            | 10,486,162  | -   | 89.68  | 17.36                        | 21.47          | 38.83                     |
| 1889.....            | 21,187,285  | -   | 79.93  | 16.94                        | 23.02          | 39.96                     |
| 1890.....            | 17,373,206  | -   | 84.44  | 17.79                        | 23.30          | 41.09                     |
| 1891.....            | 14,063,585  | -   | 87.39  | 18.31                        | 23.02          | 41.33                     |
| 1892.....            | 8,006,156   | -   | 97.39  | 20.26                        | 23.55          | 43.81                     |
| 1893.....            | 740,176   | -   | 99.36  | 21.37                        | 23.32          | 44.70                     |
| 1894.....            | -   | 6,614,658   | 106.06   | 20.84                        | 21.88          | 42.72                     |
| 1895.....            | -   | 8,637,593   | 108.58   | 20.43                        | 20.00          | 40.43                     |
| 1896.....            | -   | 10,453,382  | 110.40   | 21.57                        | 20.72          | 42.29                     |
| 1897.....            | -   | 27,839,376  | 126.11   | 24.04                        | 20.73          | 44.77                     |
| 1898.....            | -   | 33,222,383  | 126.30   | 27.80                        | 24.29          | 52.09                     |
| 1899.....            | -   | 5,458,464   | 103.65   | 20.12                        | 28.41          | 54.53                     |
| 1900.....            | -   | 10,585,879  | 106.18   | 31.76                        | 32.44          | 64.19                     |
| 1901.....            | -   | 16,578,524  | 100.32   | 32.84                        | 33.13          | 65.97                     |
| 1902.....            | -   | 18,233,060  | 106.73   | 35.43                        | 35.66          | 70.99                     |
| 1903.....            | -   | 134,952   | 100.06   | 37.79                        | 39.68          | 77.47                     |
| 1904.....            | 32,853,737  | -   | 86.53  | 34.06                        | 41.87          | 75.93                     |
| 1905.....            | 50,492,153  | -   | 79.96  | 31.85                        | 42.05          | 73.90                     |
| 1906.....            | 37,082,478  | -   | 86.93  | 38.16                        | 45.98          | 84.14                     |
| 1907 (9 months)..... | 58,138,602  | -   | 76.77  | 28.65                        | 39.70          | 68.35                     |
| 1908.....            | 89,171,927  | -   | 74.71  | 38.05                        | 54.31          | 92.36                     |
| 1909.....            | 28,671,830  | -   | 90.06  | 36.24                        | 43.10          | 79.34                     |
| 1910.....            | 71,554,200  | -   | 80.68  | 40.37                        | 53.54          | 93.91                     |
| 1911.....            | 162,724,393   | -   | 64.06  | 38.06                        | 62.82          | 100.88                    |
| 1912.....            | 214,688,524   | -   | 58.90  | 39.40                        | 70.93          | 110.33                    |
| 1913.....            | 294,138,879   | -   | 56.18  | 47.26                        | 89.17          | 136.43                    |
| 1914.....            | 168,756,774   | -   | 73.56  | 56.10                        | 80.49          | 136.59                    |
| 1915.....            | -   | 5,486,601   | 101.20   | 52.08                        | 57.99          | 110.07                    |
| 1916.....            | -   | 271,093,936   | 153.34   | 92.29                        | 63.24          | 155.53                    |
| 1917.....            | -   | 332,760,222   | 139.31   | 140.75                       | 103.45         | 244.23                    |
| 1918.....            | -   | 622,637,214   | 164.62   | 184.91                       | 115.69         | 300.60                    |
| 1919.....            | -   | 349,058,580   | 137.05   | 145.45                       | 108.48         | 253.93                    |
| 1920.....            | -   | 222,130,586   | 120.87   | 143.61                       | 123.34         | 266.95                    |
| 1921.....            | 29,730,763  | -   | 97.60  | 135.32                       | 141.20         | 276.52                    |
| 1922.....            | -   | 6,122,677   | 100.82   | 83.00                        | 83.84          | 166.84                    |
| 1923.....            | -   | 142,716,593   | 117.78   | 108.39                       | 89.09          | 197.48                    |
| 1924.....            | -   | 165,396,430   | 118.51   | 114.35                       | 97.72          | 212.07                    |
| 1925.....            | -   | 284,429,106   | 135.69   | 115.04                       | 85.76          | 200.80                    |
| 1926.....            | -   | 406,583,761   | 144.50   | 139.73                       | 98.12          | 237.85                    |
| 1927.....            | -   | 238,692,028   | 123.22   | 130.14                       | 106.07         | 236.21                    |
| 1928.....            | -   | 147,196,219   | 113.25   | 125.46                       | 112.76         | 238.22                    |
| 1929.....            | -   | 127,766,443   | 110.08   | 136.43                       | 126.30         | 262.73                    |
| 1930.....            | 103,335,512   | -   | 91.72  | 109.75                       | 122.28         | 232.03                    |
| 1931.....            | 89,534,647  | -   | 90.12  | 77.08                        | 87.37          | 164.45                    |
| 1932.....            | -   | 32,749,123  | 105.63   | 57.11                        | 55.07          | 112.18                    |
| 1933.....            | -   | 128,549,876   | 131.60   | 49.44                        | 38.05          | 87.49                     |
| 1934.....            | -   | 238,466,770   | 154.98   | 61.52                        | 40.08          | 101.60                    |
| 1935.....            | -   | 241,853,735   | 146.30   | 69.11                        | 47.71          | 116.82                    |
| 1936.....            | -   | 299,753,013   | 183.15   | 76.51                        | 50.71          | 127.22                    |
| 1937.....            | -   | 402,368,654   | 159.89   | 96.23                        | 60.92          | 157.15                    |

<sup>1</sup>Not including exports of foreign produce.

## 3.—Movement of Coin and Bullion, fiscal years 1868-1937.

| Fiscal Year.         | Total Imports. | Exports.   |             |             | Total Imports and Exports of Coin and Bullion. |
|----------------------|----------------|------------|-------------|-------------|--|
|                      |                | Canadian.  | Foreign.    | Total.      |  |
|                      | \$             | \$         | \$          | \$          | \$   |
| 1868.....            | 4,895,147      | 4,866,168  | Nil         | 4,866,168   | 9,761,315                                      |
| 1869.....            | 4,247,229      | 4,218,208  | Nil         | 4,218,208   | 8,465,437                                      |
| 1870.....            | 4,335,529      | 8,002,278  | Nil         | 8,002,278   | 12,337,807                                     |
| 1871.....            | 2,733,094      | 6,690,350  | Nil         | 6,690,350   | 9,423,444                                      |
| 1872.....            | 2,753,749      | 4,010,398  | Nil         | 4,010,398   | 6,764,147                                      |
| 1873.....            | 3,005,465      | 3,845,987  | Nil         | 3,845,987   | 6,851,452                                      |
| 1874.....            | 4,223,282      | 1,995,835  | Nil         | 1,995,835   | 6,219,117                                      |
| 1875.....            | 2,210,089      | 1,039,837  | Nil         | 1,039,837   | 3,249,926                                      |
| 1876.....            | 2,220,111      | 1,249,037  | Nil         | 1,249,037   | 3,469,148                                      |
| 1877.....            | 2,174,089      | Nil        | 733,739     | 733,739     | 2,907,828                                      |
| 1878.....            | 803,796        | Nil        | 168,989     | 168,989     | 972,715  |
| 1879.....            | 1,630,089      | Nil        | 704,586     | 704,586     | 2,334,675                                      |
| 1880.....            | 1,881,807      | Nil        | 1,771,755   | 1,771,755   | 3,653,562                                      |
| 1881.....            | 1,123,275      | Nil        | 971,005     | 971,005     | 2,094,280                                      |
| 1882.....            | 1,503,743      | Nil        | 371,093     | 371,093     | 1,874,836                                      |
| 1883.....            | 1,275,523      | Nil        | 631,600     | 631,600     | 1,907,123                                      |
| 1884.....            | 2,207,666      | Nil        | 2,184,292   | 2,184,292   | 4,391,958                                      |
| 1885.....            | 2,954,244      | Nil        | 2,026,980   | 2,026,980   | 4,981,224                                      |
| 1886.....            | 3,610,557      | Nil        | 50,531      | 50,531      | 3,667,088                                      |
| 1887.....            | 532,218        | Nil        | 5,569       | 5,569       | 537,787  |
| 1888.....            | 2,175,472      | Nil        | 17,534      | 17,534      | 2,193,006                                      |
| 1889.....            | 575,251        | Nil        | 1,978,256   | 1,978,256   | 2,553,507                                      |
| 1890.....            | 1,083,011      | Nil        | 2,439,782   | 2,439,782   | 3,522,793                                      |
| 1891.....            | 1,811,170      | 129,328    | 817,599     | 946,927     | 2,758,097                                      |
| 1892.....            | 1,818,530      | 306,447    | 1,502,671   | 1,809,118   | 3,627,648                                      |
| 1893.....            | 6,834,200      | 309,459    | 3,824,239   | 4,133,698   | 10,667,898                                     |
| 1894.....            | 4,023,072      | 310,000    | 1,529,374   | 1,839,380   | 5,862,452                                      |
| 1895.....            | 4,576,620      | 256,571    | 4,068,748   | 4,325,319   | 8,901,939                                      |
| 1896.....            | 5,226,319      | 207,532    | 4,491,777   | 4,699,309   | 9,925,628                                      |
| 1897.....            | 4,076,194      | 327,298    | 3,165,252   | 3,492,550   | 8,108,744                                      |
| 1898.....            | 4,390,844      | 1,045,723  | 3,877,415   | 4,923,138   | 9,013,982                                      |
| 1899.....            | 4,629,177      | 1,101,245  | 2,914,780   | 4,016,025   | 8,645,202                                      |
| 1900.....            | 8,152,640      | 1,070,068  | 6,987,100   | 8,057,198   | 16,809,808                                     |
| 1901.....            | 3,307,069      | Nil        | 1,978,489   | 1,978,489   | 5,285,558                                      |
| 1902.....            | 6,055,791      | Nil        | 1,669,422   | 1,669,422   | 7,725,213                                      |
| 1903.....            | 8,695,707      | Nil        | 619,963     | 619,963     | 9,315,670                                      |
| 1904.....            | 7,554,917      | Nil        | 2,465,557   | 2,465,557   | 10,020,474                                     |
| 1905.....            | 9,961,340      | Nil        | 1,844,811   | 1,844,811   | 11,806,151                                     |
| 1906.....            | 6,620,527      | Nil        | 9,928,828   | 9,928,828   | 16,549,355                                     |
| 1907 (9 months)..... | 7,029,047      | Nil        | 13,189,964  | 13,189,964  | 20,219,011                                     |
| 1908.....            | 5,887,737      | Nil        | 10,637,654  | 10,637,654  | 22,525,391                                     |
| 1909.....            | 9,611,761      | 2          | 1,589,791   | 1,589,793   | 11,201,554                                     |
| 1910.....            | 5,514,817      | Nil        | 2,594,536   | 2,594,536   | 8,109,353                                      |
| 1911.....            | 9,226,715      | Nil        | 7,196,155   | 7,196,155   | 16,422,870                                     |
| 1912.....            | 25,077,515     | Nil        | 7,801,099   | 7,801,099   | 32,678,614                                     |
| 1913.....            | 4,309,511      | Nil        | 16,165,702  | 16,165,702  | 20,475,213                                     |
| 1914.....            | 14,498,451     | 1,219      | 25,450,485  | 25,500,704  | 38,007,155                                     |
| 1915.....            | 131,483,396    | 607        | 29,365,701  | 29,366,368  | 160,849,764                                    |
| 1916.....            | 33,876,227     | 315        | 103,572,117 | 103,572,432 | 137,448,659                                    |
| 1917.....            | 26,986,548     | 86,087     | 196,460,961 | 196,547,048 | 223,533,596                                    |
| 1918.....            | 11,290,341     | 290,281    | 3,201,122   | 3,491,403   | 14,781,744                                     |
| 1919.....            | 1              | 1          | 1           | 1           | 1  |
| 1920.....            | 50,463,494     | 230,117    | 49,815,279  | 50,045,396  | 100,508,890                                    |
| 1921.....            | 7,218,775      | 24,368,846 | 9,815,827   | 34,184,673  | 41,403,448                                     |
| 1922.....            | 4,788,246      | 18,085,901 | 5,251,430   | 23,337,331  | 28,125,577                                     |
| 1923.....            | 26,455,231     | 1,706,060  | 25,782,806  | 27,548,866  | 54,004,097                                     |
| 1924.....            | 3,496,705      | 12,521,619 | 12,924,211  | 25,445,830  | 28,942,535                                     |
| 1925.....            | 4,142,392      | 2,948,583  | 1,971,620   | 4,919,973   | 9,062,365                                      |
| 1926.....            | 51,427,859     | 40,688,052 | 25,242,903  | 65,930,355  | 117,358,214                                    |
| 1927.....            | 46,086,458     | Nil        | 43,040,819  | 43,040,819  | 89,127,277                                     |
| 1928.....            | 31,308,807     | 25,301,005 | 31,031,311  | 56,332,316  | 87,641,123                                     |
| 1929.....            | 29,560,310     | 32,383,006 | 58,299,998  | 90,683,004  | 120,243,314                                    |
| 1930.....            | 2,716,218      | 410,435    | 4,494,783   | 4,905,218   | 7,621,436                                      |
| 1931.....            | 39,126,924     | 80         | 44,996,612  | 44,996,592  | 84,123,516                                     |
| 1932.....            | 1,815,016      | 25,291,905 | 22,860,214  | 48,152,119  | 49,967,135                                     |
| 1933.....            | 1,011,685      | 3,876,674  | 6,842,342   | 10,719,016  | 11,730,701                                     |
| 1934.....            | 849,290        | 12,452,653 | 2,749,629   | 15,202,282  | 16,051,572                                     |
| 1935.....            | 730,612        | 28,196     | 803,782     | 831,978     | 1,562,590                                      |
| 1936.....            | 1,281,141      | 61,957     | 14,498,433  | 14,560,390  | 15,841,531                                     |
| 1937.....            | 1,780,896      | 59,178     | 1,785,452   | 1,844,030   | 3,575,925                                      |

1 No record of imports and exports of coin and bullion for 1919.

**4.—Duties Collected on Exports, 1868-92, and on Imports for Home Consumption, 1868-1937, with Percentages of Expense of Collection to Gross Customs Revenue Collected, fiscal years 1868-1937.**

NOTE.—Duties on exports were not collected after the year 1892. The figures in this table are the gross figures of duties collected; the net national revenue from customs taxation, because of the drawbacks paid where commodities on which duties have been collected are afterwards exported in a more highly manufactured state, is considerably smaller. For net customs revenue, see statistics of revenue from customs duties, in the historical revenue table in Chapter XXI on Public Finance.

| Fiscal Year. | Duties Collected on Exports. | Duties Collected on Imports. | Percentage of Expense of Collection to Gross Customs Revenue. | Fiscal Year. | Duties Collected on Exports. | Duties Collected on Imports. | Percentage of Expense of Collection to Gross Customs Revenue. |
|--------------|------------------------------|------------------------------|---|--------------|------------------------------|------------------------------|---|
|              | \$                           | \$                           | p.c.  |              | \$                           | \$                           | p.c.  |
| 1868.....    | 17,986                       | 8,801,446                    | 5.99  | 1881.....    | 8,141                        | 18,402,045                   | 3.87  |
| 1869.....    | 14,403                       | 8,284,507                    | 7.09  | 1882.....    | 8,810                        | 21,700,028                   | 3.33  |
| 1870.....    | 37,912                       | 9,425,028                    | 5.41  | 1883.....    | 9,756                        | 23,162,553                   | 3.26  |
| 1871.....    | 36,066                       | 11,807,590                   | 4.21  | 1884.....    | 8,515                        | 20,156,448                   | 3.90  |
| 1872.....    | 24,809                       | 13,020,684                   | 4.04  | 1885.....    | 12,305                       | 19,121,254                   | 4.14  |
| 1873.....    | 20,152                       | 12,997,578                   | 4.35  | 1886.....    | 20,726                       | 19,427,398                   | 4.10  |
| 1874.....    | 14,565                       | 14,407,318                   | 4.55  | 1887.....    | 31,397                       | 22,438,309                   | 3.64  |
| 1875.....    | 7,243                        | 15,354,139                   | 4.44  | 1888.....    | 21,772                       | 22,187,869                   | 3.81  |
| 1876.....    | 4,500                        | 12,828,614                   | 5.61  | 1889.....    | 42,207                       | 23,742,317                   | 3.62  |
| 1877.....    | 4,103                        | 12,544,348                   | 5.75  | 1890.....    | 93,674                       | 23,921,234                   | 3.63  |
| 1878.....    | 4,161                        | 12,791,532                   | 5.58  | 1891.....    | 64,803                       | 23,416,266                   | 3.83  |
| 1879.....    | 4,272                        | 12,935,269                   | 5.56  | 1892.....    | 108                          | 20,550,474                   | 4.30  |
| 1880.....    | 8,896                        | 14,129,953                   | 5.04  |              |                              |                              |   |

| Fiscal Year. | Duties Collected on Imports. | Percentage of Expense of Collection to Gross Customs Revenue. | Fiscal Year. | Duties Collected on Imports. | Percentage of Expense of Collection to Gross Customs Revenue. | Fiscal Year. | Duties Collected on Imports. | Percentage of Expense of Collection to Gross Customs Revenue. |
|--------------|------------------------------|---|--------------|------------------------------|---|--------------|------------------------------|---|
|              | \$                           | p.c.  |              | \$                           | p.c.  |              | \$                           | p.c.  |
| 1893.....    | 21,161,711                   | 4.26  | 1908...      | 58,331,074                   | 3.30  | 1923...      | 133,893,370 <sup>1</sup>     | 2.58  |
| 1894.....    | 19,379,822                   | 4.75  | 1909...      | 48,059,792                   | 4.15  | 1924...      | 135,122,345                  | 2.49  |
| 1895.....    | 17,887,269                   | 5.13  | 1910...      | 61,024,239                   | 3.31  | 1925...      | 120,222,454                  | 3.09  |
| 1896.....    | 20,210,037                   | 4.43  | 1911...      | 73,312,368                   | 2.98  | 1926...      | 143,933,111                  | 2.83  |
| 1897.....    | 19,891,997                   | 4.73  | 1912...      | 87,576,037                   | 2.78  | 1927...      | 158,966,367                  | 2.66  |
| 1898.....    | 22,157,788                   | 4.37  | 1913...      | 115,063,688                  | 2.74  | 1928...      | 171,872,768                  | 3.09  |
| 1899.....    | 25,734,229                   | 4.02  | 1914...      | 107,180,578                  | 3.59  | 1929...      | 200,479,505                  | 3.02  |
| 1900.....    | 28,889,110                   | 3.71  | 1915...      | 79,205,910 <sup>1</sup>      | 4.77  | 1930...      | 199,011,628                  | 3.30  |
| 1901.....    | 29,106,980                   | 3.86  | 1916...      | 103,940,101 <sup>1</sup>     | 3.55  | 1931...      | 149,250,992                  | 4.45  |
| 1902.....    | 32,425,532                   | 3.62  | 1917...      | 147,631,455 <sup>1</sup>     | 2.54  | 1932...      | 113,997,851                  | 4.87  |
| 1903.....    | 37,110,355                   | 3.31  | 1918...      | 161,595,629 <sup>1</sup>     | 2.51  | 1933...      | 77,271,965                   | 3.86  |
| 1904.....    | 40,954,349                   | 3.31  | 1919...      | 158,046,334 <sup>1</sup>     | 3.13  | 1934...      | 73,154,472                   | 3.37  |
| 1905.....    | 42,024,340                   | 3.40  | 1920...      | 187,524,182 <sup>1</sup>     | 2.49  | 1935...      | 84,627,473                   | 2.97  |
| 1906.....    | 46,071,101                   | 3.31  | 1921...      | 179,667,683 <sup>1</sup>     | 3.36  | 1936...      | 82,764,317                   | 3.20  |
| 1907.....    | 40,290,172                   | 3.04  | 1922...      | 121,487,394 <sup>1</sup>     | 3.22  | 1937...      | 92,282,590                   | 2.71  |

<sup>1</sup> Includes war tax.

<sup>2</sup> Nine months.



5.—Exports to the United Kingdom, to the United States, and to Other Countries, of Merchandise the Produce of Canada, fiscal years 1868-1937.

| Fiscal Year.    | Exports to United Kingdom. | Per Cent Cdn. Exports to U.K. to Total Cdn. Exports (mdse.). | Exports to United States. | Per Cent Cdn. Exports to U.S. to Total Cdn. Exports (mdse.). | Exports to Other Countries. | Total Exports of Canadian Produce. |
|-----------------|----------------------------|--|---------------------------|--|-----------------------------|------------------------------------|
|                 | \$                         | p.c.   | \$                        | p.c.   | \$                          | \$                                 |
| 1868            | 17,905,808                 | 36.9   | 25,349,568                | 52.3   | 5,249,433                   | 48,504,809                         |
| 1869            | 20,496,389                 | 39.1   | 26,717,656                | 51.0   | 5,196,727                   | 52,409,772                         |
| 1870            | 22,512,901                 | 38.1   | 30,361,328                | 51.4   | 6,139,271                   | 59,013,500                         |
| 1871            | 21,738,550                 | 37.7   | 29,164,858                | 50.6   | 6,732,110                   | 57,630,024                         |
| 1872            | 25,223,785                 | 38.3   | 32,871,496                | 49.9   | 7,735,802                   | 65,831,083                         |
| 1873            | 31,402,234                 | 41.0   | 36,714,144                | 48.0   | 8,421,647                   | 76,538,025                         |
| 1874            | 35,769,190                 | 46.6   | 33,195,805                | 43.3   | 7,777,002                   | 76,741,997                         |
| 1875            | 34,199,134                 | 49.1   | 27,902,748                | 40.0   | 7,607,941                   | 69,709,823                         |
| 1876            | 34,379,005                 | 47.4   | 30,080,738                | 41.5   | 8,031,694                   | 72,491,437                         |
| 1877            | 35,491,671                 | 52.2   | 24,326,332                | 35.8   | 8,212,543                   | 68,030,546                         |
| 1878            | 35,861,110                 | 52.7   | 24,381,009                | 35.9   | 7,747,681                   | 67,989,800                         |
| 1879            | 29,393,424                 | 47.1   | 25,491,356                | 40.8   | 7,646,245                   | 62,431,025                         |
| 1880            | 35,208,031                 | 48.3   | 29,566,211                | 40.6   | 8,125,455                   | 72,899,697                         |
| 1881            | 42,697,219                 | 49.5   | 34,038,431                | 40.5   | 7,269,051                   | 84,004,701                         |
| 1882            | 39,816,813                 | 42.3   | 45,732,584                | 48.6   | 8,538,260                   | 94,137,657                         |
| 1883            | 39,538,067                 | 45.1   | 39,513,225                | 45.1   | 8,651,139                   | 87,702,431                         |
| 1884            | 37,410,870                 | 46.9   | 34,332,641                | 43.0   | 8,089,687                   | 79,833,098                         |
| 1885            | 36,479,051                 | 40.1   | 35,566,810                | 44.9   | 7,085,874                   | 79,131,735                         |
| 1886            | 36,694,263                 | 47.2   | 34,284,490                | 44.1   | 6,777,951                   | 77,756,704                         |
| 1887            | 38,714,331                 | 47.8   | 35,269,922                | 43.6   | 6,976,056                   | 80,960,809                         |
| 1888            | 33,648,284                 | 41.3   | 40,407,483                | 49.6   | 7,326,305                   | 81,382,072                         |
| 1889            | 33,504,281                 | 41.7   | 39,519,940                | 49.2   | 7,248,235                   | 80,272,455                         |
| 1890            | 41,499,149                 | 48.7   | 36,213,279                | 42.5   | 7,646,158                   | 85,267,586                         |
| 1891            | 43,248,784                 | 48.8   | 37,743,439                | 42.6   | 7,644,524                   | 88,671,738                         |
| 1892            | 54,949,055                 | 55.5   | 34,606,070                | 35.0   | 9,437,341                   | 99,032,466                         |
| 1893            | 58,409,066                 | 55.4   | 37,296,110                | 35.4   | 9,783,082                   | 105,488,708                        |
| 1894            | 60,878,056                 | 58.6   | 32,562,509                | 31.4   | 10,411,199                  | 103,851,764                        |
| 1895            | 57,903,564                 | 56.3   | 35,003,863                | 34.6   | 9,321,014                   | 102,628,441                        |
| 1896            | 62,717,941                 | 57.2   | 37,789,481                | 35.4   | 9,200,383                   | 109,707,805                        |
| 1897            | 69,533,852                 | 56.2   | 43,064,187                | 35.3   | 10,434,501                  | 123,032,540                        |
| 1898            | 93,065,019                 | 64.4   | 38,989,625                | 27.0   | 12,494,118                  | 144,548,662                        |
| 1899            | 85,113,681                 | 63.0   | 39,326,485                | 29.0   | 12,920,626                  | 137,360,782                        |
| 1900            | 96,562,875                 | 57.1   | 57,096,488                | 34.2   | 14,412,938                  | 168,072,301                        |
| 1901            | 92,867,325                 | 52.3   | 67,983,673                | 38.3   | 16,590,188                  | 177,431,386                        |
| 1902            | 106,847,345                | 55.8   | 66,567,784                | 38.0   | 20,104,634                  | 193,519,763                        |
| 1903            | 125,199,980                | 58.4   | 67,766,367                | 31.6   | 21,435,327                  | 214,401,674                        |
| 1904            | 110,120,892                | 55.5   | 66,856,885                | 33.7   | 21,436,662                  | 198,414,439                        |
| 1905            | 97,114,867                 | 50.9   | 70,426,765                | 36.9   | 23,313,514                  | 190,854,946                        |
| 1906            | 127,456,465                | 54.1   | 83,546,306                | 35.5   | 24,481,185                  | 235,483,956                        |
| 1907 (9 months) | 98,691,186                 | 54.7   | 62,180,439                | 34.4   | 19,673,081                  | 180,545,306                        |
| 1908            | 126,194,124                | 51.1   | 90,814,871                | 36.8   | 29,951,973                  | 246,960,968                        |
| 1909            | 126,384,724                | 52.1   | 85,334,806                | 35.2   | 30,884,054                  | 242,603,584                        |
| 1910            | 139,482,945                | 50.0   | 104,199,675               | 37.3   | 35,564,931                  | 279,247,551                        |
| 1911            | 132,166,924                | 48.2   | 104,115,823               | 38.0   | 38,048,800                  | 274,316,553                        |
| 1912            | 147,249,413                | 50.7   | 103,294,122               | 35.2   | 40,942,222                  | 291,485,757                        |
| 1913            | 170,161,903                | 47.8   | 139,725,953               | 39.3   | 45,866,846                  | 355,754,600                        |
| 1914            | 215,253,960                | 49.9   | 163,372,825               | 37.9   | 52,061,645                  | 431,588,439                        |
| 1915            | 186,698,554                | 45.6   | 173,320,216               | 42.3   | 49,430,066                  | 409,414,836                        |
| 1916            | 451,852,389                | 60.9   | 201,106,488               | 27.1   | 88,651,751                  | 741,610,638                        |
| 1917            | 742,147,837                | 64.5   | 280,616,330               | 24.4   | 128,611,901                 | 1,151,375,768                      |
| 1918            | 845,480,069                | 54.9   | 417,233,287               | 27.0   | 277,314,432                 | 1,540,027,788                      |
| 1919            | 540,750,977                | 44.5   | 454,873,170               | 37.4   | 220,819,659                 | 1,216,443,806                      |
| 1920            | 459,152,637                | 39.5   | 464,038,183               | 37.4   | 286,311,278                 | 1,239,492,098                      |
| 1921            | 312,844,871                | 26.3   | 542,322,867               | 45.6   | 333,995,865                 | 1,189,163,701                      |
| 1922            | 299,361,975                | 40.4   | 262,588,645               | 39.5   | 148,290,362                 | 740,240,080                        |
| 1923            | 379,067,445                | 40.7   | 369,080,218               | 39.6   | 183,303,730                 | 931,451,433                        |
| 1924            | 360,707,742                | 34.4   | 430,707,544               | 41.2   | 254,585,730                 | 1,045,999,016                      |
| 1925            | 395,843,433                | 37.0   | 417,417,144               | 39.0   | 255,806,776                 | 1,069,067,353                      |
| 1926            | 508,237,560                | 38.5   | 480,199,723               | 36.4   | 332,130,864                 | 1,320,568,147                      |
| 1927            | 446,872,851                | 35.6   | 408,434,180               | 37.3   | 338,861,866                 | 1,254,168,897                      |
| 1928            | 410,691,392                | 33.3   | 483,700,034               | 38.2   | 339,512,568                 | 1,233,903,994                      |
| 1929            | 429,730,485                | 31.4   | 504,161,004               | 36.8   | 434,367,042                 | 1,368,259,531                      |
| 1930            | 281,745,995                | 25.1   | 515,049,763               | 46.0   | 323,462,574                 | 1,120,253,302                      |
| 1931            | 299,246,499                | 27.6   | 349,660,563               | 43.7   | 330,835,605                 | 799,742,667                        |
| 1932            | 174,043,725                | 29.0   | 257,770,160               | 42.9   | 168,217,927                 | 600,031,812                        |
| 1933            | 184,361,019                | 34.9   | 167,424,723               | 37.4   | 146,375,536                 | 528,064,278                        |
| 1934            | 288,582,666                | 33.3   | 220,072,810               | 33.0   | 177,295,885                 | 685,954,071                        |
| 1935            | 290,885,237                | 38.4   | 304,721,354               | 40.3   | 161,019,334                 | 756,625,925                        |
| 1936            | 321,556,798                | 37.9   | 360,302,426               | 42.4   | 167,171,193                 | 849,030,417                        |
| 1937            | 407,996,698                | 38.4   | 435,014,544               | 41.0   | 218,170,664                 | 1,061,181,906                      |

## 6.—Imports from the United Kingdom, from the United States, and from Other Countries, of Merchandise Entered for Home Consumption, fiscal years 1868-1937.

| Fiscal Year.         | Imports from United Kingdom. | Per Cent Imports from U.K. to Total Imports (mdse.). | Imports from United States. | Per Cent Imports from U.S. to Total Imports (mdse.). | Imports from Other Countries. | Total Imports for Home Consumption. |
|----------------------|------------------------------|--|-----------------------------|--|-------------------------------|-------------------------------------|
|                      | \$                           | p.c.   | \$                          | p.c.   | \$                            | \$                                  |
| 1868.....            | 37,617,325                   | 56-1   | 22,060,132                  | 33-8   | 6,812,702                     | 67,090,159                          |
| 1869.....            | 35,496,764                   | 56-2   | 21,497,380                  | 34-0   | 6,160,797                     | 63,154,941                          |
| 1870.....            | 37,537,095                   | 56-1   | 21,687,237                  | 32-4   | 7,687,742                     | 66,902,074                          |
| 1871.....            | 48,498,202                   | 57-6   | 27,185,586                  | 32-3   | 5,530,609                     | 84,214,388                          |
| 1872.....            | 62,209,254                   | 59-7   | 33,741,995                  | 32-1   | 9,004,118                     | 104,955,367                         |
| 1873.....            | 67,996,945                   | 54-6   | 45,189,110                  | 36-3   | 11,323,074                    | 124,509,129                         |
| 1874.....            | 61,424,407                   | 49-9   | 51,706,906                  | 42-0   | 10,049,574                    | 123,180,887                         |
| 1875.....            | 60,009,084                   | 51-1   | 48,930,358                  | 41-7   | 8,469,126                     | 117,408,568                         |
| 1876.....            | 40,479,253                   | 43-8   | 44,099,880                  | 47-7   | 7,933,974                     | 92,513,107                          |
| 1877.....            | 39,331,621                   | 41-8   | 49,376,008                  | 52-5   | 5,418,765                     | 94,126,394                          |
| 1878.....            | 37,252,769                   | 41-2   | 48,002,875                  | 53-1   | 5,140,207                     | 90,395,851                          |
| 1879.....            | 30,967,773                   | 39-3   | 42,170,306                  | 53-6   | 5,594,435                     | 78,702,519                          |
| 1880.....            | 33,764,439                   | 43-3   | 28,193,783                  | 40-3   | 7,942,320                     | 69,900,542                          |
| 1881.....            | 42,885,142                   | 47-4   | 36,335,701                  | 40-6   | 11,264,489                    | 90,488,329                          |
| 1882.....            | 50,356,268                   | 45-2   | 47,032,395                  | 42-3   | 15,735,981                    | 111,145,184                         |
| 1883.....            | 51,679,732                   | 42-4   | 55,147,243                  | 45-3   | 12,934,491                    | 124,831,496                         |
| 1884.....            | 41,925,121                   | 39-6   | 49,785,838                  | 47-0   | 14,261,869                    | 105,972,978                         |
| 1885.....            | 40,031,448                   | 40-1   | 45,576,510                  | 45-7   | 14,147,817                    | 99,755,775                          |
| 1886.....            | 39,033,006                   | 40-7   | 42,818,651                  | 44-6   | 14,140,380                    | 95,992,137                          |
| 1887.....            | 44,741,350                   | 42-6   | 44,795,908                  | 42-6   | 15,559,952                    | 105,107,210                         |
| 1888.....            | 39,107,644                   | 38-9   | 46,440,296                  | 46-1   | 15,063,888                    | 100,071,628                         |
| 1889.....            | 42,251,139                   | 38-7   | 50,029,419                  | 45-9   | 16,817,588                    | 109,098,196                         |
| 1890.....            | 43,277,009                   | 28-8   | 51,365,661                  | 46-0   | 17,039,993                    | 111,682,573                         |
| 1891.....            | 42,018,943                   | 37-7   | 52,083,477                  | 46-7   | 17,481,534                    | 111,533,954                         |
| 1892.....            | 41,063,711                   | 35-7   | 51,742,132                  | 44-9   | 22,554,070                    | 115,180,413                         |
| 1893.....            | 42,529,340                   | 36-9   | 52,839,796                  | 45-4   | 20,801,084                    | 115,170,580                         |
| 1894.....            | 37,035,993                   | 34-0   | 50,745,081                  | 46-5   | 21,288,837                    | 109,070,911                         |
| 1895.....            | 31,059,332                   | 30-9   | 56,179,004                  | 49-8   | 19,437,555                    | 106,675,891                         |
| 1896.....            | 32,824,505                   | 31-2   | 53,529,390                  | 50-8   | 19,007,266                    | 105,361,161                         |
| 1897.....            | 29,401,188                   | 27-6   | 57,023,342                  | 53-5   | 20,193,297                    | 106,617,827                         |
| 1898.....            | 32,043,461                   | 25-4   | 74,824,923                  | 50-2   | 19,438,778                    | 126,307,162                         |
| 1899.....            | 36,966,552                   | 24-7   | 88,506,881                  | 59-2   | 23,943,983                    | 149,422,413                         |
| 1900.....            | 44,280,041                   | 25-7   | 102,224,917                 | 59-2   | 26,146,718                    | 172,551,076                         |
| 1901.....            | 42,820,334                   | 24-1   | 107,377,906                 | 60-3   | 27,732,679                    | 177,930,919                         |
| 1902.....            | 49,022,726                   | 25-0   | 115,001,533                 | 58-4   | 32,713,345                    | 196,737,894                         |
| 1903.....            | 58,793,038                   | 26-2   | 129,071,197                 | 57-3   | 37,230,574                    | 225,094,809                         |
| 1904.....            | 61,724,893                   | 25-3   | 143,329,897                 | 58-7   | 38,854,825                    | 249,909,415                         |
| 1905.....            | 60,342,704                   | 24-0   | 152,778,576                 | 60-6   | 38,842,034                    | 251,954,314                         |
| 1906.....            | 69,183,915                   | 24-4   | 169,256,452                 | 59-6   | 45,209,913                    | 283,740,280                         |
| 1907 (9 months)..... | 64,415,756                   | 25-8   | 149,085,577                 | 59-5   | 36,724,502                    | 250,225,835                         |
| 1908.....            | 94,417,320                   | 26-8   | 205,309,803                 | 58-2   | 52,813,756                    | 352,540,879                         |
| 1909.....            | 70,682,000                   | 24-5   | 170,432,360                 | 59-0   | 47,479,236                    | 288,594,196                         |
| 1910.....            | 95,337,058                   | 25-8   | 218,004,556                 | 58-9   | 56,976,588                    | 370,318,199                         |
| 1911.....            | 109,934,753                  | 24-3   | 275,824,265                 | 60-8   | 66,965,585                    | 452,724,603                         |
| 1912.....            | 116,906,300                  | 22-4   | 331,384,657                 | 63-4   | 74,113,565                    | 522,404,675                         |
| 1913.....            | 138,742,644                  | 20-7   | 436,887,315                 | 65-0   | 95,677,275                    | 671,207,234                         |
| 1914.....            | 132,070,406                  | 20-1   | 396,302,138                 | 64-0   | 90,821,454                    | 619,193,998                         |
| 1915.....            | 90,157,204                   | 19-8   | 297,142,069                 | 65-2   | 68,656,645                    | 455,955,903                         |
| 1916.....            | 77,404,361                   | 15-2   | 370,880,549                 | 73-0   | 59,916,224                    | 508,201,134                         |
| 1917.....            | 107,096,735                  | 12-7   | 565,312,759                 | 78-6   | 74,041,363                    | 846,450,865                         |
| 1918.....            | 81,324,283                   | 8-4  | 792,394,957                 | 82-3   | 89,313,338                    | 963,032,578                         |
| 1919.....            | 73,035,118                   | 8-0  | 750,203,024                 | 81-6   | 96,477,563                    | 919,711,705                         |
| 1920.....            | 126,362,631                  | 11-9   | 801,097,318                 | 75-3   | 137,068,174                   | 1,064,528,123                       |
| 1921.....            | 213,973,502                  | 17-3   | 856,176,820                 | 69-0   | 170,008,500                   | 1,240,158,882                       |
| 1922.....            | 117,135,343                  | 15-7   | 515,958,196                 | 69-0   | 114,710,793                   | 747,804,332                         |
| 1923.....            | 141,330,143                  | 17-6   | 540,989,738                 | 67-4   | 120,259,363                   | 802,579,244                         |
| 1924.....            | 153,586,690                  | 17-2   | 601,256,447                 | 67-3   | 138,523,730                   | 893,366,867                         |
| 1925.....            | 151,083,946                  | 19-0   | 509,780,009                 | 64-0   | 136,093,832                   | 796,932,537                         |
| 1926.....            | 163,731,210                  | 17-6   | 608,618,542                 | 65-6   | 154,678,980                   | 927,328,732                         |
| 1927.....            | 163,939,065                  | 15-9   | 697,022,521                 | 66-6   | 179,930,919                   | 1,030,892,505                       |
| 1928.....            | 189,435,824                  | 16-7   | 718,896,270                 | 64-9   | 203,624,372                   | 1,108,956,466                       |
| 1929.....            | 194,041,391                  | 15-3   | 868,012,229                 | 68-6   | 203,625,481                   | 1,265,679,091                       |
| 1930.....            | 189,179,738                  | 15-2   | 847,445,037                 | 67-9   | 211,651,307                   | 1,248,273,582                       |
| 1931.....            | 149,497,392                  | 10-5   | 584,407,018                 | 64-5   | 172,708,285                   | 906,612,695                         |
| 1932.....            | 106,371,779                  | 18-4   | 351,686,775                 | 60-8   | 120,445,350                   | 578,503,904                         |
| 1933.....            | 86,466,055                   | 21-3   | 232,548,055                 | 57-2   | 87,369,634                    | 406,383,744                         |
| 1934.....            | 105,100,764                  | 24-2   | 238,187,681                 | 54-9   | 90,510,180                    | 433,798,625                         |
| 1935.....            | 111,682,490                  | 21-4   | 303,639,972                 | 58-1   | 107,108,691                   | 522,431,153                         |
| 1936.....            | 117,874,822                  | 20-9   | 319,479,594                 | 56-8   | 125,364,647                   | 562,710,065                         |
| 1937.....            | 129,507,885                  | 19-3   | 393,720,662                 | 58-6   | 138,647,019                   | 671,875,566                         |

### 7.—Percentage Proportions of Imports from the United Kingdom and the United States, respectively, to Totals of Dutiable and Free in the fiscal years 1911-37.

NOTE.—For the years 1868 to 1910, see Canada Year Book, 1927-28, p. 499.

| Fiscal Year. | United Kingdom.             |                     |                                   | United States.              |                     |                                   |
|--------------|-----------------------------|---------------------|-----------------------------------|-----------------------------|---------------------|-----------------------------------|
|              | Dutiable to Total Dutiable. | Free to Total Free. | Dutiable and Free to All Imports. | Dutiable to Total Dutiable. | Free to Total Free. | Dutiable and Free to All Imports. |
| 1911.....    | p.c. 20.82                  | p.c. 15.05          | p.c. 24.34                        | p.c. 54.14                  | p.c. 72.05          | p.c. 60.84                        |
| 1912.....    | 26.69                       | 14.72               | 22.42                             | 58.72                       | 71.74               | 73.37                             |
| 1913.....    | 24.47                       | 13.43               | 20.71                             | 62.57                       | 69.78               | 65.03                             |
| 1914.....    | 24.95                       | 14.26               | 21.35                             | 60.81                       | 70.16               | 63.96                             |
| 1915.....    | 24.31                       | 12.61               | 19.79                             | 60.27                       | 72.85               | 65.13                             |
| 1916.....    | 17.97                       | 11.63               | 15.24                             | 68.93                       | 78.29               | 72.95                             |
| 1917.....    | 16.35                       | 8.24                | 12.67                             | 71.91                       | 86.50               | 78.57                             |
| 1918.....    | 10.70                       | 5.54                | 8.45                              | 79.61                       | 86.29               | 82.27                             |
| 1919.....    | 9.50                        | 5.90                | 7.97                              | 79.10                       | 84.74               | 81.50                             |
| 1920.....    | 13.44                       | 8.93                | 11.87                             | 72.04                       | 81.25               | 75.25                             |
| 1921.....    | 20.07                       | 11.17               | 17.25                             | 64.19                       | 79.51               | 69.04                             |
| 1922.....    | 19.20                       | 8.72                | 15.96                             | 62.97                       | 80.85               | 69.02                             |
| 1923.....    | 21.61                       | 9.40                | 17.61                             | 61.85                       | 78.66               | 67.41                             |
| 1924.....    | 21.32                       | 9.12                | 17.10                             | 60.20                       | 81.21               | 67.30                             |
| 1925.....    | 24.16                       | 9.40                | 18.96                             | 55.63                       | 79.36               | 64.00                             |
| 1926.....    | 22.83                       | 8.89                | 17.65                             | 57.97                       | 78.94               | 65.76                             |
| 1927.....    | 20.44                       | 7.81                | 15.90                             | 59.52                       | 79.53               | 66.73                             |
| 1928.....    | 21.13                       | 8.95                | 16.76                             | 58.59                       | 76.06               | 64.87                             |
| 1929.....    | 18.82                       | 8.91                | 15.34                             | 63.82                       | 77.40               | 68.50                             |
| 1930.....    | 18.14                       | 9.45                | 15.16                             | 63.88                       | 75.55               | 67.89                             |
| 1931.....    | 18.91                       | 12.31               | 16.49                             | 62.65                       | 67.59               | 64.46                             |
| 1932.....    | 20.51                       | 14.04               | 18.39                             | 59.11                       | 64.23               | 60.78                             |
| 1933.....    | 21.71                       | 20.52               | 21.28                             | 56.07                       | 59.16               | 57.20                             |
| 1934.....    | 22.77                       | 20.22               | 21.52                             | 55.85                       | 53.50               | 54.88                             |
| 1935.....    | 19.83                       | 23.39               | 20.60                             | 60.14                       | 55.38               | 58.12                             |
| 1936.....    | 18.07                       | 24.48               | 20.97                             | 61.25                       | 51.27               | 56.78                             |
| 1937.....    | 16.30                       | 22.92               | 19.27                             | 68.99                       | 51.99               | 58.00                             |

### 8.—Average ad valorem Rates of Duty Collected on Dutiable<sup>1</sup> and Total Imports from the United Kingdom, the United States, and All Countries, fiscal years 1868-1937.

| Fiscal Year. | U.K.              |                | U.S.              |                | All Countries.    |                | Fiscal Year. | U.K.              |                | U.S.              |                | All Countries.    |                |
|--------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|--------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|
|              | Dutiable Imports. | Total Imports. | Dutiable Imports. | Total Imports. | Dutiable Imports. | Total Imports. |              | Dutiable Imports. | Total Imports. | Dutiable Imports. | Total Imports. | Dutiable Imports. | Total Imports. |
| 1868.....    | p.c. 2            | p.c. 2         | p.c. 2            | p.c. 2         | p.c. 2            | p.c. 2         | 1903.....    | p.c. 23.3         | p.c. 16.7      | p.c. 24.9         | p.c. 13.3      | p.c. 27.1         | p.c. 18.5      |
| 1869.....    | 16.9              | 13.5           | 20.1              | 7.3            | 20.2              | 13.1           | 1904.....    | 24.1              | 17.6           | 25.2              | 13.3           | 27.5              | 18.8           |
| 1870.....    | 16.8              | 13.4           | 19.5              | 7.8            | 20.9              | 14.1           | 1905.....    | 24.8              | 18.5           | 20.1              | 13.5           | 27.8              | 18.0           |
| 1871.....    | 16.4              | 13.5           | 16.3              | 8.4            | 19.6              | 14.0           | 1906.....    | 24.6              | 18.7           | 24.8              | 13.1           | 27.0              | 18.4           |
| 1872.....    | 16.4              | 12.7           | 18.0              | 7.1            | 18.1              | 12.4           | 1907.....    | 24.3              | 18.4           | 24.2              | 12.8           | 26.5              | 16.1           |
| 1873.....    | 15.6              | 10.9           | 17.7              | 6.5            | 18.3              | 10.4           | 1908.....    | 24.2              | 18.3           | 24.6              | 13.2           | 26.7              | 16.5           |
| 1874.....    | 16.5              | 12.8           | 17.4              | 7.1            | 18.9              | 11.7           | 1909.....    | 25.8              | 19.0           | 24.9              | 13.2           | 27.5              | 16.7           |
| 1875.....    | 18.1              | 14.8           | 17.3              | 7.9            | 19.6              | 13.1           | 1910.....    | 25.1              | 18.9           | 24.8              | 13.5           | 26.8              | 16.5           |
| 1876.....    | 18.8              | 15.0           | 19.2              | 9.3            | 21.3              | 13.0           | 1911.....    | 24.6              | 18.9           | 24.7              | 13.7           | 25.9              | 16.2           |
| 1877.....    | 19.4              | 16.2           | 18.7              | 7.9            | 20.0              | 13.3           | 1912.....    | 25.0              | 19.1           | 25.0              | 14.8           | 26.1              | 16.8           |
| 1878.....    | 20.1              | 17.3           | 20.4              | 9.4            | 21.4              | 14.2           | 1913.....    | 25.1              | 19.6           | 24.9              | 15.8           | 26.1              | 17.1           |
| 1879.....    | 20.5              | 18.0           | 23.2              | 13.1           | 23.3              | 16.4           | 1914.....    | 25.2              | 19.5           | 24.8              | 15.6           | 26.1              | 17.3           |
| 1880.....    | 24.0              | 20.0           | 23.1              | 16.0           | 26.1              | 20.2           | 1915.....    | 27.1              | 20.5           | 25.1              | 14.2           | 27.4              | 16.8           |
| 1881.....    | 24.5              | 20.5           | 22.0              | 15.5           | 25.8              | 20.4           | 1916.....    | 28.4              | 19.1           | 25.0              | 13.5           | 27.2              | 15.5           |
| 1882.....    | 24.1              | 19.9           | 21.5              | 15.0           | 25.3              | 19.5           | 1917.....    | 24.9              | 17.6           | 22.7              | 11.4           | 23.8              | 13.0           |
| 1883.....    | 24.3              | 19.2           | 21.1              | 14.8           | 25.3              | 19.9           | 1918.....    | 24.3              | 17.8           | 20.5              | 11.1           | 21.5              | 12.1           |
| 1884.....    | 24.4              | 19.1           | 20.7              | 14.9           | 25.2              | 19.0           | 1919.....    | 22.3              | 15.3           | 20.9              | 11.0           | 21.5              | 12.3           |
| 1885.....    | 24.8              | 19.0           | 21.2              | 14.5           | 25.1              | 19.2           | 1920.....    | 22.1              | 16.2           | 22.5              | 14.0           | 22.5              | 14.7           |
| 1886.....    | 25.7              | 20.0           | 22.8              | 15.8           | 27.5              | 20.2           | 1921.....    | 20.9              | 16.6           | 20.3              | 12.9           | 20.6              | 14.1           |
| 1887.....    | 26.1              | 20.8           | 23.8              | 16.2           | 28.7              | 21.3           | 1922.....    | 24.8              | 20.1           | 23.0              | 13.9           | 24.5              | 16.2           |
| 1888.....    | 29.1              | 22.9           | 26.2              | 15.3           | 31.8              | 22.0           | 1923.....    | 24.5              | 20.1           | 22.6              | 13.8           | 24.9              | 16.7           |
| 1889.....    | 29.3              | 22.4           | 25.4              | 14.7           | 31.9              | 21.8           | 1924.....    | 22.3              | 18.3           | 23.3              | 13.2           | 22.9              | 15.1           |
| 1890.....    | 28.8              | 22.1           | 20.6              | 15.8           | 31.0              | 21.4           | 1925.....    | 22.1              | 18.2           | 23.1              | 13.0           | 23.3              | 15.1           |
| 1891.....    | 29.0              | 21.7           | 20.0              | 14.9           | 31.4              | 21.0           | 1926.....    | 21.6              | 18.4           | 23.0              | 13.2           | 24.7              | 15.5           |
| 1892.....    | 29.4              | 22.1           | 20.6              | 16.1           | 29.7              | 17.8           | 1927.....    | 23.9              | 19.7           | 23.1              | 13.2           | 24.1              | 15.4           |
| 1893.....    | 29.8              | 22.8           | 20.7              | 14.6           | 30.3              | 18.4           | 1928.....    | 25.6              | 20.6           | 23.3              | 13.6           | 24.2              | 15.5           |
| 1894.....    | 30.0              | 22.3           | 27.0              | 15.7           | 30.9              | 17.8           | 1929.....    | 25.9              | 20.8           | 23.4              | 14.1           | 24.4              | 15.8           |
| 1895.....    | 30.1              | 22.6           | 26.7              | 15.7           | 30.5              | 17.8           | 1930.....    | 25.5              | 20.0           | 23.8              | 14.4           | 24.3              | 15.9           |
| 1896.....    | 30.2              | 22.4           | 26.7              | 14.5           | 30.0              | 19.2           | 1931.....    | 26.9              | 19.5           | 24.3              | 15.2           | 26.0              | 16.4           |
| 1897.....    | 30.7              | 21.1           | 20.7              | 14.3           | 30.0              | 18.7           | 1932.....    | 29.2              | 21.9           | 27.4              | 17.0           | 29.3              | 19.7           |
| 1898.....    | 29.5              | 20.8           | 26.1              | 13.3           | 29.7              | 17.5           | 1933.....    | 25.8              | 16.6           | 23.1              | 17.4           | 30.1              | 19.0           |
| 1899.....    | 26.6              | 19.8           | 26.3              | 13.2           | 28.8              | 17.2           | 1934.....    | 26.2              | 14.2           | 28.6              | 16.8           | 29.2              | 16.9           |
| 1900.....    | 25.6              | 18.2           | 25.0              | 13.2           | 27.7              | 16.7           | 1935.....    | 26.2              | 13.8           | 27.4              | 16.3           | 28.1              | 16.2           |
| 1901.....    | 24.7              | 18.3           | 24.8              | 12.4           | 27.5              | 16.4           | 1936.....    | 26.7              | 12.7           | 26.3              | 15.6           | 26.7              | 14.7           |
| 1902.....    | 24.0              | 17.2           | 25.2              | 13.2           | 27.3              | 16.5           | 1937.....    | 25.8              | 12.0           | 23.8              | 14.3           | 24.9              | 13.7           |

<sup>1</sup> See p. 513, also Table 18, p. 577.

<sup>2</sup> Not separable by countries.

<sup>3</sup> Nine months.

## 9.—Imports for Home Consumption of Certain Raw Materials Used in Canadian Manufactures, fiscal years 1911-37.

NOTE.—For the years 1902 to 1910, see Canada Year Book, 1926, p. 463.

| Fiscal Year. | Sugar, Raw. | Vegetable Oil for Soap Industry. | Crude Cotton-seed Oil. | Raw Rubber (Including Balata). | Tobacco, Raw. | Hides and Skins. | Cotton, Raw (Including Linters). | Hemp, Dressed or Undressed. | Silk, Raw, etc. |
|--------------|-------------|----------------------------------|------------------------|--------------------------------|---------------|------------------|----------------------------------|-----------------------------|-----------------|
|              | ton.        | gal.                             | cwt.                   | cwt.                           | lb.           | \$               | cwt.                             | cwt.                        | lb.             |
| 1911....     | 271,532     | 297,338                          | 1                      | 28,035                         | 17,204,271    | 8,105,330        | 313,622                          | 31,017                      | 121,748         |
| 1912....     | 281,402     | 409,861                          | 80,916                 | 44,313                         | 17,203,513    | 8,903,727        | 727,933                          | 82,661                      | 112,581         |
| 1913....     | 210,101     | 439,973                          | 243,872                | 56,755                         | 22,153,588    | 13,486,459       | 774,573                          | 64,990                      | 75,776          |
| 1914....     | 347,168     | 397,278                          | 265,789                | 44,504                         | 17,598,449    | 8,331,010        | 769,930                          | 55,572                      | 101,669         |
| 1915....     | 335,820     | 413,819                          | 293,849                | 65,045                         | 18,595,957    | 12,342,558       | 730,325                          | 55,370                      | 94,458          |
| 1916....     | 298,433     | 618,162                          | 430,013                | 99,132                         | 20,834,672    | 12,441,731       | 969,679                          | 50,934                      | 80,745          |
| 1917....     | 355,772     | 1,251,233                        | 315,621                | 107,530                        | 17,702,637    | 12,573,970       | 877,634                          | 15,845                      | 138,745         |
| 1918....     | 332,307     | 2,114,796                        | 408,850                | 130,956                        | 17,824,947    | 8,706,966        | 880,374                          | 45,177                      | 153,648         |
| 1919....     | 359,470     | 2,393,003                        | 459,685                | 192,272                        | 25,103,060    | 5,427,544        | 1,117,235                        | 72,857                      | 213,411         |
| 1920....     | 540,787     | 870,289                          | 578,986                | 244,335                        | 24,345,295    | 22,654,661       | 964,715                          | 46,553                      | 298,985         |
| 1921....     | 347,504     | 1,114,470                        | 417,301                | 228,062                        | 20,007,411    | 10,652,787       | 983,315                          | 47,090                      | 272,508         |
| 1922....     | 432,212     | 1,351,805                        | 458,683                | 189,525                        | 20,370,509    | 5,808,087        | 953,850                          | 77,833                      | 371,570         |
| 1923....     | 571,728     | 1,945,466                        | 255,381                | 253,957                        | 14,543,694    | 7,947,410        | 1,232,615                        | 203,944                     | 863,026         |
| 1924....     | 419,710     | 1,935,543                        | 216,082                | 288,857                        | 15,941,339    | 461,531          | 955,969                          | 340,402                     | 335,465         |
| 1925....     | 410,371     | 1,733,293                        | 213,201                | 344,509                        | 13,712,835    | 502,586          | 1,008,798                        | 249,032                     | 391,466         |
| 1926....     | 579,272     | 2,622,651                        | 335,755                | 469,893                        | 14,943,884    | 534,089          | 1,355,738                        | 281,639                     | 520,446         |
| 1927....     | 564,779     | 3,311,449                        | 297,706                | 503,312                        | 17,446,774    | 579,085          | 1,497,438                        | 123,426                     | 679,923         |
| 1928....     | 447,839     | 3,611,761                        | 623,148                | 582,089                        | 18,475,772    | 678,670          | 1,462,249                        | 99,503                      | 938,459         |
| 1929....     | 409,585     | 4,354,829                        | 302,197                | 777,169                        | 18,726,618    | 507,778          | 1,511,270                        | 27,390                      | 1,232,815       |
| 1930....     | 402,871     | 3,980,590                        | 400,653                | 733,400                        | 17,113,472    | 480,442          | 1,260,569                        | 42,620                      | 1,668,972       |
| 1931....     | 415,090     | 4,217,434                        | 174,711                | 595,591                        | 16,580,394    | 345,439          | 1,067,222                        | 28,423                      | 1,954,395       |
| 1932....     | 406,007     | 4,243,234                        | 386,275                | 552,094                        | 13,075,335    | 281,316          | 1,009,023                        | 18,348                      | 2,539,133       |
| 1933....     | 311,305     | 3,689,995                        | 407,055                | 410,939                        | 10,199,212    | 268,355          | 1,009,073                        | 15,810                      | 2,572,949       |
| 1934....     | 229,330     | 4,699,056                        | 165,257                | 511,681                        | 8,129,142     | 313,482          | 1,394,536                        | 23,498                      | 2,505,200       |
| 1935....     | 321,025     | 4,610,785                        | 130,743                | 636,347                        | 9,414,889     | 335,013          | 1,434,403                        | 19,166                      | 2,092,993       |
| 1936....     | 296,358     | 3,788,338                        | 255,976                | 569,286                        | 5,772,038     | 404,708          | 1,425,413                        | 19,324                      | 3,001,902       |
| 1937....     | 330,108     | 6,685,469                        | 155,387                | 625,029                        | 3,006,175     | 381,128          | 1,541,306                        | 47,848                      | 2,318,030       |

| Fiscal Year. | Wool, Raw. <sup>3</sup> | Noils and Worsted Tops. | Artificial Silk Rovings, Yarns, etc. | Manila, Sisal, Istle, Tampico. | Rags, Waste Paper, and other Waste. | Iron Ore. | Alumina, Bauxite, Cryolite. | Tin in Blocks, Ingots, etc. | Crude Petroleum for Refining. <sup>4</sup> |
|--------------|-------------------------|-------------------------|--------------------------------------|--------------------------------|-------------------------------------|-----------|-----------------------------|-----------------------------|--|
|              | cwt.                    | \$                      | lb.                                  | cwt.                           | cwt.                                | ton.      | cwt.                        | cwt.                        | '000 gal.                                  |
| 1911....     | 44,224                  | 778,320                 | 1                                    | 274,493                        | 536,604                             | 1         | 185,152                     | 35,706                      | 54,311                                     |
| 1912....     | 71,954                  | 689,304                 | 1                                    | 291,976                        | 564,290                             | 1         | 218,998                     | 41,740                      | 72,231                                     |
| 1913....     | 92,092                  | 980,432                 | 115,710                              | 346,109                        | 750,003                             | 2,116,933 | 226,170                     | 51,319                      | 143,338                                    |
| 1914....     | 72,521                  | 1,072,096               | 129,982                              | 190,867                        | 716,882                             | 1,972,207 | 312,255                     | 46,076                      | 177,880                                    |
| 1915....     | 131,940                 | 1,312,885               | 128,148                              | 284,620                        | 540,922                             | 1,055,724 | 261,553                     | 29,402                      | 196,208                                    |
| 1916....     | 211,407                 | 2,587,949               | 183,278                              | 384,152                        | 510,472                             | 1,595,995 | 385,950                     | 32,758                      | 186,753                                    |
| 1917....     | 145,812                 | 2,988,177               | 276,873                              | 327,661                        | 780,062                             | 2,318,547 | 816,509                     | 35,726                      | 153,533                                    |
| 1918....     | 115,380                 | 4,418,854               | 160,090                              | 496,904                        | 505,643                             | 2,203,506 | 1,664,799                   | 38,683                      | 191,376                                    |
| 1919....     | 158,767                 | 5,314,793               | 161,206                              | 315,057                        | 570,211                             | 2,227,919 | 1,916,920                   | 28,044                      | 280,820                                    |
| 1920....     | 117,717                 | 5,447,787               | 360,207                              | 456,801                        | 826,593                             | 1,632,011 | 451,340                     | 44,010                      | 298,541                                    |
| 1921....     | 92,772                  | 55,331 <sup>1</sup>     | 512,109                              | 457,497                        | 1,142,850                           | 1,905,291 | 1,198,605                   | 42,727                      | 311,719                                    |
| 1922....     | 125,867                 | 72,254 <sup>2</sup>     | 570,450                              | 189,071                        | 686,433                             | 656,902   | 156,095                     | 27,242                      | 331,293                                    |
| 1923....     | 182,556                 | 91,103 <sup>2</sup>     | 933,791                              | 219,591                        | 870,542                             | 1,044,999 | 792,210                     | 39,258                      | 397,604                                    |
| 1924....     | 193,217                 | 86,062 <sup>2</sup>     | 1,239,986                            | 272,402                        | 1,123,282                           | 1,807,223 | 1,266,799                   | 30,837                      | 418,701                                    |
| 1925....     | 143,029                 | 58,231 <sup>1</sup>     | 1,684,811                            | 258,804                        | 1,232,567                           | 911,586   | 1,358,148                   | 43,535                      | 440,672                                    |
| 1926....     | 134,344                 | 61,421 <sup>1</sup>     | 1,689,730                            | 442,561                        | 1,207,473                           | 1,053,593 | 1,336,538                   | 44,409                      | 470,617                                    |
| 1927....     | 164,234                 | 78,875 <sup>1</sup>     | 1,516,448                            | 323,074                        | 1,364,897                           | 1,445,504 | 1,647,244                   | 50,858                      | 596,487                                    |
| 1928....     | 138,957                 | 81,331 <sup>1</sup>     | 1,563,020                            | 529,541                        | 1,371,460                           | 1,401,234 | 2,863,166                   | 45,742                      | 790,960                                    |
| 1929....     | 140,219                 | 86,470 <sup>2</sup>     | 2,240,704                            | 770,836                        | 1,314,494                           | 2,272,130 | 3,444,911                   | 58,923                      | 885,336                                    |
| 1930....     | 103,343                 | 62,939 <sup>2</sup>     | 2,132,362                            | 464,378                        | 1,606,931                           | 2,456,919 | 2,738,777                   | 56,313                      | 1,110,170                                  |
| 1931....     | 107,449                 | 66,493 <sup>2</sup>     | 2,569,574                            | 487,035                        | 1,254,557                           | 1,428,970 | 2,221,550                   | 49,727                      | 994,363                                    |
| 1932....     | 90,245                  | 73,994 <sup>2</sup>     | 2,501,739                            | 469,827                        | 1,365,974                           | 892,163   | 1,704,023                   | 38,003                      | 1,016,355                                  |
| 1933....     | 83,557                  | 80,071 <sup>2</sup>     | 958,047                              | 783,850                        | 789,035                             | 66,515    | 2,765,455                   | 23,763                      | 845,538                                    |
| 1934....     | 172,153                 | 119,317 <sup>2</sup>    | 2,082,202                            | 699,657                        | 880,831                             | 205,811   | 1,241,609                   | 31,322                      | 1,026,711                                  |
| 1935....     | 120,123                 | 90,903 <sup>2</sup>     | 955,341                              | 424,579                        | 1,132,684                           | 1,060,843 | 1,856,059                   | 42,283                      | 1,085,729                                  |
| 1936....     | 192,191                 | 137,474 <sup>2</sup>    | 1,078,504                            | 623,696                        | 1,151,442 <sup>2</sup>              | 1,431,111 | 2,578,330                   | 45,757                      | 1,166,803                                  |
| 1937....     | 237,712                 | 134,793 <sup>2</sup>    | 1,410,756                            | 585,808                        | 1,140,861                           | 1,325,168 | 3,650,911                   | 51,876                      | 1,243,339                                  |

<sup>1</sup> None recorded. <sup>2</sup> Cwt. to 1917 includes all crude petroleum.<sup>3</sup> Includes hair of the camel, alpaca, goat, etc. <sup>4</sup> Prior to 1917 includes all crude petroleum.<sup>2</sup> Revised since the publication of the 1937 Year Book.

10.—Exports to the United Kingdom, to the United States, and to All Countries, of Classes of Merchandise the Produce of Canada, by Values and Percentages, fiscal years 1934-37.

[illegible]



## 12.—Principal Exports of Canadian Produce from Canada to United

| No.  | Item.   | United Kingdom. |             |             |             |
|--|---|-----------------|-------------|-------------|-------------|
|  |   | 1934.           | 1935.       | 1936.       | 1937.       |
| <b>I. Agricultural and Vegetable Products.</b> |   |                 |             |             |             |
| <b>A. MAINLY FOOD.</b>                         |   |                 |             |             |             |
| 1  | Fruits—   |                 |             |             |             |
|  | Apples, fresh.....                              | bbl. 3,057,897  | 1,807,398   | 2,202,053   | 1,280,402   |
|  |   | \$ 11,368,385   | 7,201,174   | 8,456,959   | 4,662,034   |
| 2  | Fruits, canned.....                             | lb. 16,886,316  | 24,082,578  | 22,726,011  | 20,333,851  |
|  |   | \$ 898,066      | 1,392,196   | 1,271,154   | 1,244,542   |
|  | Totals, Fruits <sup>1</sup> .....               | \$ 12,706,637   | 8,909,350   | 10,452,283  | 6,279,061   |
| 3  | Vegetables—                                     |                 |             |             |             |
|  | Potatoes.....                                   | bu. 3           | 3           | 750         | Nil         |
|  |   | \$ -            | -           | 225         | -           |
| 4  | Turnips.....                                    | bu. 3           | 14          | 3           | 3           |
|  |   | \$ -            | 15          | -           | -           |
| 5  | Canned vegetables.....                          | lb. 14,212,760  | 15,634,099  | 31,317,592  | 37,416,350  |
|  |   | \$ 674,183      | 758,814     | 1,300,448   | 1,597,538   |
| 6  | Pickles and sauces.....                         | \$ 1,357,265    | 1,071,058   | 1,497,404   | 1,957,829   |
|  | Totals, Vegetables <sup>1</sup> .....           | \$ 2,031,538    | 1,829,935   | 2,803,197   | 3,568,209   |
| <b>Grains and Products—</b>                    |   |                 |             |             |             |
| <b>Grains—</b>                                 |   |                 |             |             |             |
| 7  | Barley.....                                     | bu. 1,398,043   | 3,344,273   | 5,179,377   | 5,213,812   |
|  |   | \$ 579,194      | 1,815,129   | 2,305,530   | 2,999,467   |
| 8  | Oats.....                                       | bu. 4,009,382   | 7,973,704   | 9,900,380   | 6,675,305   |
|  |   | \$ 1,138,017    | 2,985,457   | 3,491,878   | 2,608,878   |
| 9  | Rye.....  | bu. 241,820     | 111,425     | 405,235     | 1,763,042   |
|  |   | \$ 107,631      | 64,881      | 168,238     | 977,811     |
| 10   | Wheat.....                                      | bu. 112,787,849 | 113,357,139 | 133,095,085 | 155,390,472 |
|  |   | \$ 75,699,056   | 90,191,151  | 111,656,432 | 153,247,606 |
|  | Totals, Grains <sup>1</sup> .....               | \$ 77,600,084   | 95,197,180  | 117,681,648 | 159,857,300 |
| 11   | Bran, shorts and middlings.....                 | cwt. 682,554    | 352,475     | 587,828     | 321,202     |
|  |   | \$ 517,894      | 386,900     | 548,109     | 317,144     |
| 12   | Cereal foods.....                               | \$ 2,795,236    | 3,107,135   | 3,388,607   | 3,788,426   |
| 13   | Malt.....                                       | bu. 3           | 983         | 35,275      | 41,346      |
|  |   | \$ -            | 983         | 42,270      | 45,091      |
| 14   | Oatmeal and rolled oats.....                    | cwt. 403,733    | 483,479     | 482,358     | 543,454     |
|  |   | \$ 1,430,565    | 2,009,442   | 2,213,638   | 2,648,498   |
| 15   | Wheat flour.....                                | bbl. 2,551,249  | 2,426,437   | 2,428,339   | 2,337,674   |
|  |   | \$ 8,781,577    | 8,724,402   | 9,577,241   | 10,661,520  |
|  | Totals, Grains and Products <sup>1</sup> .....  | \$ 91,275,357   | 109,611,265 | 133,746,818 | 177,692,344 |
| <b>Sugar—</b>                                  |   |                 |             |             |             |
| 16   | Confectionery.....                              | \$ 74,423       | 77,422      | 106,968     | 208,220     |
| 17   | Maple sugar.....                                | lb. 32,928      | 30,925      | 30,179      | 28,028      |
|  |   | \$ 5,070        | 5,351       | 4,406       | 4,198       |
|  | Totals, Sugar <sup>1</sup> .....                | \$ 83,274       | 87,302      | 116,512     | 220,511     |
|  | TOTALS, A. MAINLY FOOD <sup>1</sup> .....       | \$ 106,393,193  | 120,819,904 | 147,337,462 | 188,106,862 |
| <b>B. OTHER THAN FOOD.</b>                     |   |                 |             |             |             |
| <b>Beverages, Alcoholic—</b>                   |   |                 |             |             |             |
| 18   | Whisky.....                                     | pf. gal. 12,770 | 18,361      | 14,021      | 21,178      |
|  |   | \$ 58,691       | 83,818      | 70,558      | 95,916      |
|  | Totals, Beverages, Alcoholic <sup>1</sup> ..... | \$ 58,931       | 84,013      | 72,364      | 96,706      |
| <b>Rubber—</b>                                 |   |                 |             |             |             |
| 19   | Belting of rubber.....                          | \$ 45,985       | 64,459      | 110,744     | 114,195     |
| 20   | Canvas shoes, rubber soles.....                 | pair 1,185,352  | 2,127,922   | 1,718,202   | 1,642,082   |
|  |   | \$ 592,841      | 1,111,009   | 800,607     | 728,877     |
| 21   | Boots and shoes, rubber.....                    | pair 1,538,064  | 1,350,392   | 1,891,306   | 3,190,182   |
|  |   | \$ 1,458,346    | 1,265,590   | 1,712,393   | 2,761,895   |
| 22   | Heels and soles.....                            | \$ 329,505      | 374,195     | 347,574     | 308,193     |
| 23   | Motor vehicle tire casings.....                 | \$ 72,163       | 12,550      | 6,659       | 173,269     |
| 24   | Motor vehicle inner tubes.....                  | \$ 2,285        | 1,247       | 49          | 8,429       |
|  | Totals, Rubber <sup>1</sup> .....               | \$ 2,878,563    | 3,315,602   | 3,436,653   | 4,625,107   |

<sup>1</sup> Totals include other items not specified.<sup>2</sup> Excluding seed potatoes after Mar. 31, 1936 (see p. 540).

## Kingdom, United States, and All Countries, fiscal years 1934-37.

| United States. |            |            |                      | All Countries. |             |             |                        | No. |
|----------------|------------|------------|----------------------|----------------|-------------|-------------|------------------------|-----|
| 1934.          | 1935.      | 1936.      | 1937.                | 1934.          | 1935.       | 1936.       | 1937.                  |     |
| 3,213          | 4,493      | 2,834      | 8,323                | 3,476,114      | 2,059,618   | 2,288,010   | 1,506,227              | 1   |
| 8,427          | 10,029     | 7,923      | 34,826               | 12,823,785     | 8,218,846   | 8,821,752   | 5,453,273              | 2   |
| 213,092        | 80,863     | 118,524    | 269,157              | 17,947,577     | 24,968,437  | 23,773,441  | 21,758,571             |     |
| 12,321         | 7,281      | 8,055      | 20,228               | 944,841        | 1,460,454   | 1,355,944   | 1,306,376              |     |
| 227,446        | 380,420    | 251,105    | 489,937              | 14,607,881     | 10,496,062  | 11,258,858  | 7,778,559              |     |
| 1,901,128      | 625,451    | 508,386    | 743,554 <sup>2</sup> | 2,707,693      | 1,430,267   | 1,409,663   | 1,130,350 <sup>2</sup> | 3   |
| 1,337,304      | 337,413    | 303,476    | 682,506              | 1,876,331      | 848,185     | 863,386     | 909,467                |     |
| 1,920,249      | 1,815,207  | 2,375,906  | 2,612,010            | 1,949,022      | 1,855,158   | 2,387,891   | 2,823,787              | 4   |
| 630,679        | 306,478    | 634,991    | 729,969              | 638,733        | 405,191     | 639,259     | 754,745                |     |
| 98,039         | 1,698,494  | 1,838,469  | 54,853               | 17,009,088     | 21,101,353  | 38,162,952  | 43,175,939             | 5   |
| 3,381          | 69,565     | 65,351     | 13,762               | 810,295        | 1,013,494   | 1,608,355   | 1,902,141              |     |
| 813            | 44,580     | 408        | 239                  | 1,433,524      | 1,178,640   | 1,601,944   | 2,061,367              | 6   |
| 2,042,592      | 894,071    | 1,042,514  | 1,404,927            | 4,911,728      | 3,561,664   | 4,860,294   | 5,809,174              |     |
| 50             | 7,902,482  | 1,806,344  | 13,342,569           | 1,569,569      | 12,001,178  | 7,319,384   | 18,749,802             | 7   |
| 15             | 6,008,304  | 1,221,567  | 11,826,339           | 658,747        | 8,210,230   | 3,674,119   | 14,901,211             |     |
| 120,005        | 3,514,848  | 737,035    | 226,995              | 5,707,502      | 12,873,595  | 12,739,083  | 6,162,122              | 8   |
| 44,003         | 1,354,794  | 212,646    | 87,731               | 1,747,650      | 4,915,135   | 4,220,822   | 3,178,469              |     |
| 2,545,771      | 604,503    | 1,576      | 1,083,027            | 2,788,213      | 737,372     | 634,242     | 4,446,730              | 9   |
| 1,405,538      | 380,567    | 801        | 1,152,003            | 1,513,598      | 463,420     | 291,643     | 2,622,959              |     |
| 431,449        | 13,933,191 | 21,583,831 | 22,878,726           | 175,534,255    | 155,701,983 | 179,124,180 | 227,990,513            | 10  |
| 261,505        | 11,196,828 | 10,660,253 | 21,668,808           | 118,969,445    | 132,441,685 | 148,676,975 | 223,461,009            |     |
| 1,829,154      | 18,983,538 | 18,156,363 | 35,064,181           | 123,284,392    | 146,467,012 | 157,383,360 | 244,772,885            |     |
| 1,829,032      | 2,599,358  | 2,613,665  | 3,933,025            | 2,598,860      | 3,013,465   | 3,240,413   | 4,320,863              | 11  |
| 1,416,635      | 2,799,416  | 2,396,136  | 4,591,824            | 2,015,610      | 3,259,679   | 2,938,324   | 5,020,834              |     |
| 40,906         | 42,910     | 66,747     | 242,846              | 2,981,706      | 3,274,009   | 3,554,774   | 4,160,890              | 12  |
| 2,230,217      | 2,751,557  | 2,440,277  | 1,883,212            | 3,572,247      | 2,872,633   | 2,604,089   | 2,018,088              | 13  |
| 2,731,557      | 2,789,940  | 2,708,160  | 2,106,289            | 3,017,394      | 2,935,114   | 2,919,996   | 2,281,235              |     |
| -              | 4,658      | 16,505     | 16,008               | 463,245        | 550,733     | 673,412     | 626,650                | 14  |
| 3,114          | 11,966     | 32,767     | 18,743               | 1,705,451      | 2,330,784   | 2,670,894   | 3,083,738              |     |
| 13,527         | 40,592     | 179,826    | 105,253              | 5,619,937      | 4,936,827   | 4,858,947   | 4,771,007              | 15  |
|                | 201,479    | 574,660    | 342,784              | 19,729,782     | 18,386,040  | 19,382,617  | 21,587,038             |     |
| 6,223,536      | 25,647,214 | 24,287,603 | 43,588,573           | 153,818,519    | 177,929,602 | 189,850,047 | 282,890,831            |     |
| 4,260          | 4,901      | 7,045      | 8,232                | 2,219,322      | 251,408     | 305,104     | 473,123                | 16  |
| 2,251,563      | 3,133,602  | 3,905,248  | 5,968,093            | 2,295,042      | 3,176,655   | 4,022,139   | 6,031,841              | 17  |
| 363,896        | 468,489    | 641,074    | 865,292              | 370,443        | 475,398     | 649,739     | 877,079                |     |
| 444,823        | 641,461    | 1,031,801  | 1,107,292            | 1,568,353      | 1,324,583   | 1,481,776   | 1,683,217              |     |
| 8,983,137      | 27,593,578 | 26,652,672 | 46,050,006           | 174,959,074    | 193,908,632 | 207,926,168 | 298,742,686            |     |
| 1,659,962      | 2,134,858  | 2,015,796  | 5,214,571            | 2,543,225      | 2,201,515   | 2,991,354   | 5,286,023              | 18  |
| 11,553,409     | 13,085,101 | 15,918,595 | 21,450,569           | 16,028,484     | 13,407,076  | 16,288,585  | 21,777,246             |     |
| 12,076,897     | 13,187,890 | 15,043,851 | 21,546,800           | 16,586,299     | 13,547,945  | 16,356,413  | 21,913,616             |     |
| 583            | 293        | 20,170     | 2,642                | 286,412        | 495,227     | 552,921     | 586,829                | 19  |
| 100            | 48         | 46         | 299                  | 1,966,921      | 3,118,539   | 2,435,352   | 2,132,666              | 20  |
| 161            | 47         | 56         | 369                  | 1,029,381      | 1,649,255   | 1,206,251   | 964,274                |     |
| 795            | 17,687     | 5,775      | 5,843                | 2,143,580      | 2,042,340   | 2,560,801   | 3,940,229              | 21  |
| 1,556          | 35,155     | 12,256     | 9,596                | 2,173,548      | 2,031,666   | 2,480,596   | 3,589,091              |     |
|                |            | 103        |                      | 370,560        | 434,884     | 400,596     | 370,399                | 22  |
| 6,125          | 9,788      | 298,564    | 45,893               | 4,002,561      | 6,325,367   | 6,666,294   | 7,091,311              | 23  |
| 213            | 285        | 42,392     | 2,893                | 304,724        | 491,120     | 551,903     | 621,669                | 24  |
| 95,879         | 128,966    | 477,406    | 210,178              | 8,968,722      | 12,425,465  | 12,901,311  | 14,513,793             |     |

<sup>2</sup> None reported.



## 12.—Principal Exports of Canadian Produce from Canada to United

| No.   | Item.  | United Kingdom. |             |             |             |
|---|--|-----------------|-------------|-------------|-------------|
|   |  | 1934.           | 1935.       | 1936.       | 1937.       |
| <b>I. Agricultural and Vegetable Products—conc.</b> |  |                 |             |             |             |
| <b>B. OTHER THAN FOOD—concluded.</b>                |  |                 |             |             |             |
| 1   | Seeds—   |                 |             |             |             |
|   | Clover seed..... bu.   | 54,009          | 9,006       | 22,933      | 29,138      |
|   |  | 416,078         | 107,035     | 221,249     | 259,418     |
| 2   | Flaxseed..... bu.  | 44,547          | 11,608      | 17,434      | 175,653     |
|   |  | 60,859          | 52,940      | 86,151      | 314,368     |
| 3   | Grass seed..... bu.  | 1,200           | 925         | 7,792       | 1,816       |
|   |  | 1,092           | 1,777       | 9,790       | 4,940       |
| 4   | Potatoes, seed..... bu.  | 1               | 1           | 1           | Nil         |
|   |  | \$              | —           | —           | —           |
|   | Totals, Seeds <sup>2</sup> .....                               | \$              | 493,396     | 179,732     | 340,423     |
|   |  |                 |             |             | 594,583     |
| 5   | Tobacco leaf..... lb.  | 8,288,753       | 9,903,130   | 8,182,158   | 8,562,102   |
|   |  | 2,083,888       | 2,710,913   | 2,531,612   | 2,653,121   |
| 6   | Hay and fodder..... \$   | 436,528         | 393,926     | 438,103     | 822,850     |
|   | TOTALS, B. OTHER THAN FOOD <sup>2</sup> .....                  | \$              | 6,104,653   | 6,837,742   | 6,924,513   |
|   |  |                 |             |             | 8,976,705   |
|   | Totals, Agricultural and Vegetable Products <sup>2</sup> ..... | \$              | 112,497,816 | 127,657,616 | 154,261,975 |
|   |  |                 |             |             | 197,083,567 |
| <b>II. Animals and Animal Products.</b>             |  |                 |             |             |             |
| <b>Animals, Living—</b>                             |  |                 |             |             |             |
| 7   | Cattle..... No.  | 54,448          | 47,861      | 2,811       | 36,453      |
|   |  | 3,504,613       | 3,085,021   | 190,240     | 2,767,267   |
| 8   | Horses..... No.  | 4               | 34          | 222         | 298         |
|   |  | 550             | 5,900       | 49,525      | 47,990      |
| 9   | Swine..... No.   | 5               | 5           | 5           | Nil         |
|   |  | \$              | —           | —           | —           |
|   | Totals, Animals, Living <sup>2</sup> .....                     | \$              | 3,509,487   | 3,117,191   | 241,456     |
|   |  |                 |             |             | 2,817,208   |
| <b>Fishery Products—</b>                            |  |                 |             |             |             |
| <b>Fish, Fresh—</b>                                 |  |                 |             |             |             |
| 10  | Lobsters..... cwt.   | 1               | 4           | 1           | Nil         |
|   |  | 21              | 85          | 23          | —           |
| 11  | Salmon..... cwt.   | 51,416          | 44,189      | 48,453      | 47,316      |
|   |  | 742,595         | 621,105     | 670,979     | 667,219     |
| 12  | White fish..... cwt.   | 2               | —           | —           | —           |
|   |  | \$              | —           | —           | —           |
|   | Totals, Fish, Fresh <sup>2</sup> .....                         | \$              | 792,041     | 832,406     | 917,965     |
|   |  |                 |             |             | 859,819     |
| <b>Fish, Dried, Salted, Smoked, Pickled—</b>        |  |                 |             |             |             |
| 13  | Codfish, dried..... cwt.                                       | 733             | 90          | 46          | 250         |
|   |  | 3,337           | 600         | 425         | 1,443       |
|   | Totals, Fish, Dried, Salted, etc. <sup>1</sup> .....           | \$              | 50,313      | 69,465      | 61,022      |
|   |  |                 |             |             | 49,612      |
| <b>Fish, Preserved—</b>                             |  |                 |             |             |             |
| 14  | Lobsters, canned..... cwt.                                     | 30,374          | 27,521      | 25,131      | 19,692      |
|   |  | 1,167,598       | 1,232,367   | 1,253,638   | 1,059,267   |
| 15  | Salmon, canned..... cwt.                                       | 129,223         | 142,637     | 192,223     | 184,325     |
|   |  | 2,601,631       | 3,265,640   | 4,190,414   | 3,395,650   |
| 16  | Sardines..... cwt.   | 200             | 43          | Nil         | Nil         |
|   |  | 1,769           | 483         | —           | —           |
|   | Totals, Fish, Preserved <sup>2</sup> .....                     | \$              | 3,771,590   | 4,500,215   | 5,445,204   |
|   |  |                 |             |             | 4,455,079   |
|   | Totals, Fishery Products <sup>2</sup> .....                    | \$              | 4,613,944   | 5,402,086   | 6,424,191   |
|   |  |                 |             |             | 5,389,876   |
| <b>Furs—</b>  |  |                 |             |             |             |
| <b>Furs, Undressed—</b>                             |  |                 |             |             |             |
| 17  | Beaver skins..... \$   | 348,808         | 370,333     | 240,177     | 302,359     |
| 18  | Fox skins..... \$  | 5,551,527       | 6,598,136   | 6,710,773   | 6,903,481   |
| 19  | Marten skins..... \$   | 172,736         | 185,471     | 175,396     | 213,467     |
| 20  | Mink skins..... \$   | 707,858         | 754,153     | 506,217     | 526,841     |
| 21  | Muskrat skins..... \$  | 701,055         | 1,020,602   | 672,447     | 962,585     |
|   | Totals, Furs, Undressed <sup>2</sup> .....                     | \$              | 8,564,553   | 10,005,253  | 9,259,525   |
|   |  |                 |             |             | 10,159,382  |
|   | Totals, Furs <sup>2</sup> .....                                | \$              | 8,810,882   | 10,362,789  | 9,774,694   |
|   |  |                 |             |             | 10,767,906  |

<sup>1</sup> Included with other potatoes prior to April 1, 1936 (see footnote 2, p. 538). <sup>2</sup> Totals include other items not specified. <sup>3</sup> None reported. <sup>4</sup> Less than 0.5 cwt.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

| United States. |            |            |            | All Countries. |             |             |             | No. |
|----------------|------------|------------|------------|----------------|-------------|-------------|-------------|-----|
| 1934.          | 1935.      | 1936.      | 1937.      | 1934.          | 1935.       | 1936.       | 1937.       |     |
| 347            | 1,608      | 952        | 242,889    | 117,405        | 16,753      | 31,545      | 295,367     | 1   |
| 2,879          | 10,559     | 9,322      | 1,857,508  | 905,401        | 191,028     | 300,051     | 2,396,019   | 2   |
| 565,724        | 41         | 160        | 4,150      | 610,327        | 17,740      | 150,108     | 180,108     | 3   |
| 623,528        | 107        | 170        | 2,759      | 659,520        | 53,401      | 86,650      | 318,493     | 4   |
| 21,288         | 77,645     | 86,399     | 97,610     | 27,351         | 84,768      | 103,181     | 101,514     | 5   |
| 17,462         | 358,931    | 224,686    | 187,557    | 24,482         | 369,840     | 252,713     | 196,508     | 6   |
| -              | -          | -          | 701,270    | -              | -           | -           | 1,336,167   | 7   |
| -              | -          | -          | 709,934    | -              | -           | -           | 1,380,620   | 8   |
| 660,738        | 398,761    | 245,982    | 2,790,121  | 1,650,395      | 657,234     | 681,103     | 4,344,968   | 9   |
| 533            | 352        | 3,720      | 24,681     | 8,460,639      | 10,204,600  | 8,884,737   | 9,414,023   | 10  |
| 139            | 98         | 410        | 990        | 2,110,265      | 2,773,452   | 2,664,681   | 2,818,534   | 11  |
| 227,154        | 1,285,057  | 815,345    | 1,678,187  | 870,316        | 1,906,923   | 1,544,629   | 3,072,489   | 12  |
| 13,329,602     | 15,554,492 | 18,010,538 | 26,953,215 | 30,845,452     | 32,324,465  | 34,935,709  | 47,707,942  | 13  |
| 22,312,739     | 43,148,070 | 44,663,210 | 73,603,221 | 205,804,526    | 226,233,097 | 212,861,877 | 346,450,628 | 14  |
| 5,024          | 31,167     | 140,526    | 273,430    | 64,206         | 83,430      | 147,792     | 315,271     | 15  |
| 339,618        | 1,757,011  | 7,019,224  | 11,010,035 | 3,965,769      | 4,979,152   | 7,390,179   | 14,000,092  | 16  |
| 5,946          | 3,490      | 10,703     | 15,238     | 6,175          | 3,806       | 11,257      | 10,023      | 17  |
| 295,646        | 406,951    | 1,216,246  | 1,899,446  | 333,586        | 455,004     | 1,311,191   | 2,011,696   | 18  |
| 77             | 158        | 30,301     | 76,404     | 5,903          | 4,095       | 34,725      | 83,456      | 19  |
| 480            | 3,355      | 531,703    | 1,365,785  | 21,702         | 24,407      | 556,982     | 1,398,361   | 20  |
| 771,818        | 2,358,492  | 9,078,806  | 14,879,807 | 4,471,870      | 5,710,296   | 9,577,305   | 18,053,751  | 21  |
| 101,317        | 99,387     | 99,197     | 97,782     | 101,318        | 99,395      | 99,198      | 97,783      | 22  |
| 1,558,211      | 1,029,333  | 1,815,551  | 2,129,553  | 1,558,232      | 1,629,481   | 1,815,612   | 2,129,553   | 23  |
| 51,522         | 58,605     | 61,940     | 98,071     | 117,209        | 112,889     | 119,097     | 164,871     | 24  |
| 392,927        | 436,388    | 483,000    | 609,517    | 1,262,352      | 1,219,051   | 1,256,453   | 1,512,205   | 25  |
| 114,087        | 112,722    | 120,357    | 127,996    | 114,087        | 112,722     | 120,357     | 127,996     | 26  |
| 1,052,720      | 1,074,193  | 1,284,755  | 1,573,533  | 1,052,720      | 1,074,193   | 1,284,755   | 1,573,533   | 27  |
| 6,742,282      | 7,368,480  | 8,916,554  | 10,131,354 | 7,737,482      | 8,355,079   | 9,984,074   | 11,197,210  | 28  |
| 73,991         | 83,388     | 75,358     | 63,008     | 335,779        | 358,169     | 266,411     | 207,464     | 29  |
| 403,758        | 487,353    | 388,894    | 363,074    | 1,783,090      | 2,087,489   | 1,362,980   | 1,077,114   | 30  |
| 1,031,808      | 1,268,859  | 1,172,006  | 1,295,982  | 4,110,530      | 4,750,960   | 4,031,658   | 3,813,814   | 31  |
| 11,613         | 8,523      | 5,954      | 6,277      | 59,305         | 52,913      | 45,519      | 39,396      | 32  |
| 407,136        | 453,697    | 318,662    | 395,499    | 2,222,128      | 2,508,173   | 2,269,904   | 2,173,234   | 33  |
| 39,633         | 323        | 39,977     | 19,563     | 503,037        | 392,321     | 513,301     | 554,694     | 34  |
| 226,853        | 5,708      | 235,113    | 113,422    | 5,773,403      | 5,989,887   | 7,344,642   | 6,980,946   | 35  |
| 1              | Nil        | 1          | 4          | 34,200         | 52,755      | 53,429      | 66,540      | 36  |
| 10             | -          | 4          | 3          | 263,560        | 418,135     | 450,284     | 581,388     | 37  |
| 766,253        | 671,794    | 747,768    | 693,602    | 8,456,821      | 9,305,374   | 10,418,916  | 10,076,578  | 38  |
| 8,558,355      | 9,321,056  | 10,860,004 | 12,281,632 | 20,323,170     | 22,425,636  | 24,459,042  | 25,275,978  | 39  |
| 470,359        | 262,737    | 413,793    | 492,935    | 837,707        | 640,447     | 662,645     | 819,023     | 40  |
| 780,685        | 1,274,950  | 1,287,022  | 1,586,680  | 7,289,002      | 8,559,455   | 8,707,437   | 9,234,142   | 41  |
| 137,800        | 115,304    | 207,672    | 331,834    | 813,916        | 303,116     | 389,639     | 555,696     | 42  |
| 1,465,397      | 1,120,480  | 1,622,499  | 1,966,952  | 2,202,563      | 1,895,932   | 2,154,500   | 2,506,195   | 43  |
| 449,870        | 311,800    | 663,679    | 558,894    | 1,174,684      | 1,368,245   | 1,386,059   | 1,548,562   | 44  |
| 4,402,752      | 4,097,553  | 5,623,071  | 7,363,645  | 14,030,007     | 14,897,986  | 15,738,166  | 18,444,080  | 45  |
| 4,455,565      | 4,160,590  | 5,720,058  | 7,524,218  | 14,363,776     | 15,383,771  | 16,395,705  | 19,336,425  | 46  |

## 12.—Principal Exports of Canadian Produce from Canada to United

| No.   | Item.   | United Kingdom. |            |            |            |
|---|---|-----------------|------------|------------|------------|
|   |   | 1934.           | 1935.      | 1936.      | 1937.      |
| <b>II. Animals and Animal Products—concluded.</b> |   |                 |            |            |            |
| 1   | Hair..... \$  | 1,634           | 12,512     | 5,880      | 8,187      |
| 2   | Hides and skins, raw..... cwt.                        | 10,734          | 24,295     | 23,608     | 25,660     |
|   | \$  | 85,337          | 171,815    | 158,823    | 200,437    |
| 3   | Leather, unmanufactured..... \$                       | 2,400,834       | 2,825,122  | 3,426,423  | 5,343,490  |
| 4   | Leather, manufactured..... \$                         | 265,271         | 560,424    | 592,824    | 787,961    |
| <b>Meats—</b>                                     |   |                 |            |            |            |
| 5   | Bacon and hams..... cwt.                              | 945,597         | 1,270,529  | 1,186,509  | 1,718,258  |
|   | \$  | 12,366,426      | 19,834,321 | 19,030,333 | 27,839,074 |
| 6   | Beef, fresh..... cwt.                                 | 76,763          | 121,357    | 24,420     | 67,556     |
|   | \$  | 410,066         | 671,618    | 137,310    | 359,287    |
| 7   | Pork, fresh..... cwt.                                 | 8,233           | 2,458      | 5,943      | 6,972      |
|   | \$  | 86,632          | 29,786     | 85,282     | 95,305     |
| 8   | Pork, dry salted, pickled..... cwt.                   | 9,448           | 6,250      | 2,403      | 905        |
|   | \$  | 101,173         | 85,721     | 36,310     | 13,722     |
| 9   | Poultry..... lb.                                      | 1,428,753       | 2,831,867  | 1,562,543  | 3,509,152  |
|   | \$  | 234,898         | 530,024    | 371,708    | 727,581    |
|   | Totals, Meats <sup>1</sup> ..... \$                   | 14,261,527      | 22,747,475 | 21,162,489 | 31,380,280 |
| <b>Milk and Its Products—</b>                     |   |                 |            |            |            |
| 10  | Butter..... cwt.                                      | 37,185          | 4          | 71,358     | 44,330     |
|   | \$  | 665,867         | 89         | 1,055,987  | 1,003,220  |
| 11  | Cheese..... cwt.                                      | 714,133         | 572,102    | 523,781    | 675,846    |
|   | \$  | 7,710,667       | 6,065,948  | 6,001,037  | 9,334,456  |
| 12  | Milk, processed..... cwt.                             | 171,151         | 190,019    | 160,615    | 111,629    |
|   | \$  | 1,127,588       | 1,379,386  | 1,295,458  | 827,184    |
|   | Totals, Milk and Its Products <sup>1</sup> ..... \$   | 9,504,252       | 7,445,782  | 8,953,082  | 11,164,860 |
| <b>Oils, Fats, Greases and Waxes—</b>             |   |                 |            |            |            |
| 13  | Fish and whale oil..... gal.                          | 74,166          | 400,153    | 592,108    | 1,506,141  |
|   | \$  | 9,621           | 60,626     | 131,832    | 403,277    |
| 14  | Lard and compounds..... cwt.                          | 17,979          | 28,922     | 181,797    | 323,559    |
|   | \$  | 121,961         | 261,056    | 2,338,263  | 3,841,408  |
| 15  | Tallow..... cwt.                                      | 1,267           | 430        | 5          | 8,154      |
|   | \$  | 4,138           | 1,565      | 40         | 88,779     |
|   | Totals, Oils, Fats, Greases and Waxes <sup>1</sup> \$ | 149,837         | 350,367    | 2,539,908  | 4,350,339  |
| 16  | Eggs..... doz.  | 1,920,055       | 1,748,180  | 912,060    | 992,850    |
|   | \$  | 397,749         | 393,109    | 235,262    | 261,183    |
| 17  | Honey..... lb.  | 1,853,093       | 2,203,322  | 1,542,807  | 2,415,795  |
|   | \$  | 166,445         | 206,248    | 124,350    | 202,808    |
| 18  | Sausage casings..... \$                               | 386,629         | 662,454    | 667,054    | 469,611    |
| 19  | Tankage..... cwt.                                     | 10,835          | 33,725     | Nil        | Nil        |
|   | \$  | 15,732          | 45,334     | -          | -          |
|   | Totals, Animals and Animal Products <sup>1</sup> \$   | 44,707,074      | 54,567,585 | 54,592,114 | 73,350,911 |
| <b>III. Fibres and Textiles.</b>                  |   |                 |            |            |            |
| 20  | Cotton..... \$  | 276,200         | 376,741    | 348,613    | 551,860    |
| 21  | Silk and manufactures of, <i>n.o.p.</i> ..... \$      | 76,637          | 76,814     | 55,729     | 57,181     |
| 22  | Silk socks and stockings..... doz. pr.                | 26,395          | 35,000     | 47,843     | 49,180     |
|   | \$  | 213,328         | 258,305    | 327,304    | 328,897    |
| <b>Wool—</b>                                      |   |                 |            |            |            |
| 23  | Wool, raw..... lb.                                    | 2,604,343       | 3,671,931  | 3,176,279  | 1,230,582  |
|   | \$  | 455,085         | 465,746    | 503,883    | 260,438    |
| 24  | Woollen clothing..... \$                              | 9,372           | 12,101     | 7,277      | 6,662      |
|   | Totals, Wool <sup>1</sup> ..... \$                    | 495,132         | 482,348    | 513,437    | 268,094    |
| 25  | Silk, artificial..... \$                              | 111,620         | 104,411    | 130,674    | 282,320    |
| 26  | Binder twine..... cwt.                                | 61,521          | 65,133     | 67,737     | 68,205     |
|   | \$  | 291,655         | 376,787    | 392,227    | 479,598    |
| 27  | Felt manufactures..... \$                             | 186,507         | 150,745    | 142,791    | 145,709    |
| 28  | Rags..... cwt.  | 9,134           | 7,000      | 6,773      | 6,300      |
|   | \$  | 71,561          | 55,677     | 46,532     | 43,737     |
|   | Totals, Fibres and Textiles <sup>1</sup> ..... \$     | 1,949,624       | 2,219,483  | 2,320,693  | 2,508,340  |

<sup>1</sup> Totals include other items not specified.<sup>2</sup> Less than 0.5 cwt.

## Kingdom, United States, and All Countries, fiscal years 1931-37—continued.

| United States. |            |            |            | All Countries. |            |             |             | No. |
|----------------|------------|------------|------------|----------------|------------|-------------|-------------|-----|
| 1934.          | 1935.      | 1936.      | 1937.      | 1934.          | 1935.      | 1936.       | 1937.       |     |
| 133,790        | 215,215    | 251,894    | 296,065    | 293,794        | 377,679    | 382,417     | 504,894     | 1   |
| 312,389        | 218,877    | 374,241    | 364,666    | 344,076        | 279,891    | 417,447     | 418,282     | 2   |
| 2,328,435      | 1,347,582  | 3,077,792  | 3,472,474  | 2,590,163      | 1,805,242  | 3,454,341   | 3,088,888   | 3   |
| 435,108        | 243,616    | 463,906    | 532,862    | 3,289,095      | 3,514,834  | 4,312,801   | 6,335,282   | 4   |
| 76,292         | 41,317     | 53,649     | 111,352    | 384,829        | 684,726    | 823,790     | 1,197,583   | 5   |
| 7,335          | 3,291      | 6,889      | 25,092     | 960,178        | 1,276,051  | 1,201,012   | 1,757,048   | 6   |
| 197,409        | 114,751    | 213,710    | 663,823    | 12,683,273     | 19,998,575 | 19,407,285  | 28,801,291  | 7   |
| 1,691          | 20,726     | 42,834     | 15,285     | 102,771        | 179,707    | 92,573      | 140,008     | 8   |
| 11,280         | 281,802    | 511,056    | 176,949    | 626,921        | 1,197,928  | 916,415     | 833,605     | 9   |
| 3,967          | 5,837      | 87,177     | 128,799    | 14,098         | 9,908      | 65,223      | 139,895     | 10  |
| 48,333         | 80,356     | 835,613    | 1,777,294  | 161,044        | 132,022    | 1,002,572   | 1,936,265   | 11  |
| 1,801          | 10         | 2,461      | 8,537      | 35,690         | 24,050     | 32,562      | 52,805      | 12  |
| 26,399         | 40,923     | 97,913     | 158,662    | 272,621        | 198,862    | 325,527     | 543,995     | 13  |
| 9,149          | 7,664      | 97,913     | 168,882    | 1,688,919      | 3,164,790  | 2,064,402   | 4,139,279   | 14  |
| 1,684          |            | 19,782     | 42,613     | 285,962        | 596,365    | 488,431     | 884,562     | 15  |
| 380,806        | 568,145    | 1,830,811  | 3,033,299  | 15,503,994     | 24,114,755 | 24,220,802  | 36,114,497  | 16  |
| 44             | 50         | 661        | 213        | 44,019         | 4,406      | 76,911      | 51,406      | 17  |
| 1,042          | 1,171      | 16,609     | 5,634      | 818,996        | 104,758    | 1,795,784   | 1,183,633   | 18  |
| 11,816         | 6,634      | 81,208     | 105,719    | 749,669        | 602,130    | 555,449     | 807,391     | 19  |
| 157,813        | 100,887    | 425,724    | 1,498,372  | 8,176,271      | 6,480,947  | 6,789,588   | 11,230,543  | 20  |
| 5,126          | 15,233     | 15,838     | 8,174      | 234,806        | 264,302    | 245,874     | 199,093     | 21  |
| 102,533        | 148,323    | 178,129    | 112,417    | 1,853,897      | 2,277,088  | 2,216,410   | 1,946,436   | 22  |
| 297,883        | 250,401    | 627,131    | 1,691,364  | 10,880,289     | 8,863,192  | 10,807,451  | 14,447,544  | 23  |
| 362,944        | 773,090    | 647,203    | 816,906    | 447,068        | 1,703,920  | 1,679,765   | 2,345,384   | 24  |
| 161,623        | 180,871    | 196,112    | 280,545    | 174,011        | 325,898    | 424,034     | 690,991     | 25  |
| 51             | 1,285      | 5,558      | 4,798      | 22,376         | 32,942     | 190,013     | 331,258     | 26  |
| 381            | 10,984     | 52,284     | 36,807     | 161,481        | 298,733    | 2,426,343   | 3,913,141   | 27  |
| 2,598          | 87,428     | 100,002    | 114,581    | 10,744         | 83,477     | 100,080     | 129,089     | 28  |
| 8,508          | 301,831    | 655,919    | 571,691    | 84,591         | 305,287    | 656,679     | 641,367     | 29  |
| 176,324        | 527,145    | 957,084    | 934,172    | 391,662        | 988,762    | 3,631,980   | 5,396,160   | 30  |
| 539            | 60,874     | 7,173      | 1,641      | 2,122,904      | 2,006,633  | 1,140,856   | 1,225,381   | 31  |
| 172            | 9,050      | 1,539      | 486        | 448,236        | 455,500    | 304,789     | 330,150     | 32  |
| 8,610          | 6,413      | 6,360      | 21,783     | 2,306,248      | 2,304,461  | 1,957,982   | 2,728,262   | 33  |
| 810            | 678        | 693        | 1,858      | 187,786        | 212,538    | 151,204     | 224,507     | 34  |
| 274,409        | 317,882    | 242,947    | 444,519    | 1,046,010      | 1,220,679  | 1,070,660   | 1,104,913   | 35  |
| 226,745        | 228,131    | 250,146    | 304,287    | 242,044        | 264,934    | 250,171     | 304,339     | 36  |
| 288,264        | 266,109    | 346,698    | 528,730    | 310,846        | 316,286    | 340,748     | 528,845     | 37  |
| 18,485,329     | 19,922,848 | 34,058,519 | 46,431,986 | 75,151,480     | 86,848,144 | 100,932,110 | 133,946,776 | 38  |
| 83,382         | 7,055      | 5,906      | 16,025     | 1,345,459      | 1,819,350  | 1,736,169   | 2,114,101   | 39  |
| 2,220          | 18,524     | 112,786    | 58,689     | 159,536        | 184,324    | 301,320     | 240,450     | 40  |
| 469            | 24         | 306        | 19         | 208,972        | 271,000    | 331,397     | 434,085     | 41  |
| 2,766          | 137        | 2,039      | 142        | 1,404,244      | 1,772,931  | 2,118,917   | 2,698,884   | 42  |
| 7,914,861      | 753,299    | 4,676,806  | 3,629,466  | 10,903,821     | 5,019,358  | 8,723,846   | 9,104,460   | 43  |
| 1,360,968      | 150,161    | 982,172    | 696,223    | 1,922,433      | 689,337    | 1,645,767   | 2,307,462   | 44  |
| 23,606         | 40,960     | 103,442    | 211,682    | 107,847        | 175,701    | 306,843     | 459,299     | 45  |
| 1,431,380      | 231,973    | 1,153,446  | 1,279,131  | 2,094,259      | 929,941    | 2,055,046   | 2,907,567   | 46  |
| 984            | 2,335      | 2,821      | 3,870      | 212,874        | 292,897    | 589,379     | 1,020,098   | 47  |
| 68,217         | 28,916     | 107,648    | 81,771     | 150,317        | 120,005    | 186,828     | 161,883     | 48  |
| 317,186        | 180,798    | 623,394    | 551,052    | 705,496        | 710,550    | 1,077,961   | 1,115,234   | 49  |
| 4,652          | 4,879      | 5,473      | 7,216      | 491,226        | 387,182    | 330,646     | 374,456     | 50  |
| 104,599        | 83,149     | 109,020    | 176,195    | 118,968        | 102,255    | 194,937     | 191,652     | 51  |
| 349,154        | 309,829    | 613,982    | 920,063    | 455,612        | 419,090    | 748,154     | 1,012,139   | 52  |
| 2,536,968      | 854,821    | 2,612,474  | 3,063,772  | 7,828,684      | 7,523,144  | 10,273,697  | 12,830,212  | 53  |

## 12.—Principal Exports of Canadian Produce from Canada to United

| No.                                | Item.   | United Kingdom. |            |            |            |
|------------------------------------|---|-----------------|------------|------------|------------|
|                                    |   | 1934.           | 1935.      | 1936.      | 1937.      |
| IV. Wood, Wood Products and Paper. |   |                 |            |            |            |
| Wood, Unmanufactured—              |   |                 |            |            |            |
| Logs and Round Timber—             |   |                 |            |            |            |
| 1                                  | Logs, Douglas fir..... M ft.                                | Nil             | 178        | 20         | Nil        |
|                                    | \$  | —               | 1,520      | 225        | —          |
| 2                                  | Logs, hardwood..... M ft.                                   | 8,143           | 9,847      | 6,923      | 8,265      |
|                                    | \$  | 243,787         | 301,219    | 284,508    | 293,450    |
| 3                                  | Poles, telegraph and telephone..... No.                     | 25              | Nil        | Nil        | Nil        |
|                                    | \$  | 100             | —          | —          | —          |
| 4                                  | Railroad ties..... No.                                      | 800             | 67,806     | 320,203    | 171,630    |
|                                    | \$  | 1,153           | 30,134     | 171,024    | 98,093     |
|                                    | Totals, Logs and Round Timber <sup>1</sup> ... \$           | 245,830         | 342,201    | 461,922    | 293,450    |
| 5                                  | Laths..... M  | 2               | 2          | 5          | 45         |
|                                    | \$  | —               | —          | 23         | 125        |
| Planks and Boards—                 |   |                 |            |            |            |
| 6                                  | Birch..... M ft.  | 46,437          | 63,430     | 67,921     | 59,489     |
|                                    | \$  | 1,280,097       | 1,761,029  | 1,846,250  | 1,634,443  |
| 7                                  | Douglas fir..... M ft.                                      | 266,633         | 333,040    | 390,846    | 540,758    |
|                                    | \$  | 3,662,851       | 5,295,522  | 6,268,343  | 10,013,997 |
| 8                                  | Pine..... M ft.   | 18,421          | 26,475     | 32,247     | 39,072     |
|                                    | \$  | 660,175         | 1,025,677  | 1,296,120  | 1,579,636  |
| 9                                  | Spruce..... M ft.   | 224,347         | 297,714    | 188,852    | 258,851    |
|                                    | \$  | 3,584,261       | 5,402,171  | 3,506,808  | 5,287,767  |
|                                    | Totals, Planks and Boards <sup>1</sup> ..... M ft.          | 595,647         | 766,578    | 712,616    | 1,011,350  |
|                                    | \$  | 10,302,495      | 14,521,798 | 13,926,422 | 20,768,318 |
| 10                                 | Pulpwood..... cord  | 21              | 2,904      | Nil        | Nil        |
|                                    | \$  | 116             | 22,984     | —          | —          |
| 11                                 | Shingles..... squares                                       | 3,635           | 6,410      | 16,171     | 17,784     |
|                                    | \$  | 8,441           | 13,032     | 38,243     | 47,097     |
| 12                                 | Shooks..... \$  | 148,400         | 150,391    | 162,884    | 205,384    |
| 13                                 | Spoolwood..... M ft.  | 6,947           | 6,999      | 7,349      | 5,480      |
|                                    | \$  | 307,047         | 292,655    | 333,719    | 235,448    |
| 14                                 | Timber, square..... M ft.                                   | 40,677          | 24,013     | 26,215     | 30,837     |
|                                    | \$  | 646,473         | 451,301    | 571,980    | 686,153    |
|                                    | Totals, Wood, Unmanufactured <sup>1</sup> .... \$           | 11,946,193      | 16,393,243 | 16,273,050 | 23,626,490 |
| Wood, Manufactured—                |   |                 |            |            |            |
| 15                                 | Doors..... \$   | 385,081         | 825,603    | 2,234,800  | 2,455,098  |
| 16                                 | Match splints..... \$                                       | 323,525         | 377,548    | 318,191    | 295,845    |
| Wood-pulp—                         |   |                 |            |            |            |
| 17                                 | Chemical..... cwt.  | 417,055         | 646,899    | 699,710    | 643,764    |
|                                    | \$  | 1,158,699       | 1,635,870  | 1,760,082  | 1,770,426  |
| 18                                 | Mechanical..... cwt.  | 161,975         | 62,206     | 418,208    | 168,950    |
|                                    | \$  | 153,315         | 66,123     | 426,603    | 174,484    |
|                                    | Totals, Wood-Pulp <sup>1</sup> ..... cwt.                   | 579,501         | 709,123    | 1,118,427  | 812,714    |
|                                    | \$  | 1,313,243       | 1,702,028  | 2,217,830  | 1,944,910  |
|                                    | Totals, Wood, Manufactured <sup>1</sup> ..... \$            | 2,374,905       | 3,470,224  | 5,296,334  | 5,232,242  |
| Paper—                             |   |                 |            |            |            |
| 19                                 | Pulp and fibreboard..... cwt.                               | 134,490         | 174,696    | 193,023    | 211,170    |
|                                    | \$  | 407,178         | 521,063    | 598,102    | 604,099    |
| 20                                 | Paper board, n.o.p..... \$                                  | 839,070         | 1,920,552  | 2,375,489  | 2,048,393  |
| 21                                 | Book paper..... cwt.  | 4,081           | 11,746     | 18,143     | 15,845     |
|                                    | \$  | 33,175          | 88,016     | 132,035    | 118,530    |
| 22                                 | Newsprint paper..... cwt.                                   | 2,393,452       | 1,502,533  | 2,269,553  | 2,406,052  |
|                                    | \$  | 4,300,990       | 2,374,235  | 3,424,312  | 3,714,428  |
| 23                                 | Wrapping paper..... cwt.                                    | 9,600           | 5,753      | 7,660      | 14,755     |
|                                    | \$  | 47,604          | 31,441     | 36,491     | 59,232     |
|                                    | Totals, Paper <sup>1</sup> ..... \$                         | 5,948,280       | 8,402,143  | 6,997,774  | 7,027,436  |
| 24                                 | Books and printed matter..... \$                            | 133,323         | 186,359    | 205,176    | 177,897    |
|                                    | Totals, Wood, Wood Products and Paper <sup>1</sup> ..... \$ | 20,403,201      | 25,451,969 | 28,772,934 | 36,061,065 |

<sup>1</sup> Totals include other items not specified.<sup>2</sup> None reported.

## Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

| United States <sup>1</sup> |             |             |             | All Countries. |             |             |             | No. |
|----------------------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|-----|
| 1934.                      | 1935.       | 1936.       | 1937.       | 1934.          | 1935.       | 1936.       | 1937.       |     |
| 56,803                     | 3,120       | 42,838      | 3,936       | 165,108        | 197,875     | 205,815     | 150,747     | 1   |
| 550,806                    | 39,810      | 467,639     | 40,193      | 1,497,525      | 1,791,575   | 2,037,924   | 2,281,520   | 2   |
| 1,844                      | 3,152       | 4,253       | 3,942       | 11,562         | 16,346      | 10,810      | 20,952      | 3   |
| 26,997                     | 49,870      | 63,430      | 63,851      | 290,783        | 379,149     | 424,289     | 587,222     | 4   |
| 191,662                    | 193,853     | 200,400     | 294,209     | 192,950        | 194,329     | 201,013     | 265,061     | 5   |
| 565,189                    | 528,730     | 563,508     | 808,370     | 569,495        | 529,835     | 565,018     | 812,450     | 6   |
| 394,177                    | 298,295     | 197,421     | 286,485     | 874,586        | 504,507     | 906,358     | 798,329     | 7   |
| 402,098                    | 241,679     | 135,170     | 220,527     | 600,165        | 420,096     | 513,820     | 566,137     | 8   |
| 2,117,289                  | 1,284,508   | 1,916,444   | 811,950     | 3,958,019      | 3,957,124   | 4,455,839   | 4,036,667   | 9   |
| 167,050                    | 150,333     | 278,075     | 286,626     | 172,504        | 160,564     | 284,470     | 290,730     | 10  |
| 412,779                    | 392,882     | 727,597     | 1,043,498   | 425,610        | 415,068     | 743,847     | 1,037,697   | 11  |
| 19,010                     | 8,857       | 17,507      | 36,625      | 65,761         | 72,785      | 85,613      | 96,557      | 12  |
| 611,314                    | 294,193     | 568,067     | 1,284,925   | 1,994,291      | 2,069,860   | 2,420,436   | 2,933,797   | 13  |
| 22,655                     | 3,075       | 91,589      | 88,002      | 436,498        | 530,158     | 650,875     | 913,094     | 14  |
| 394,834                    | 70,031      | 1,414,427   | 1,539,209   | 6,801,454      | 8,059,056   | 10,179,725  | 14,920,588  | 15  |
| 114,706                    | 86,721      | 80,575      | 80,568      | 140,614        | 121,267     | 119,207     | 133,350     | 16  |
| 2,576,017                  | 2,121,972   | 2,108,907   | 2,462,992   | 3,483,967      | 3,387,914   | 3,585,504   | 4,275,559   | 17  |
| 151,491                    | 124,660     | 106,497     | 276,793     | 389,241        | 450,092     | 368,540     | 549,080     | 18  |
| 3,079,038                  | 3,004,298   | 3,963,726   | 6,627,444   | 6,969,184      | 9,024,138   | 7,896,565   | 12,341,036  | 19  |
| 323,080                    | 235,434     | 404,293     | 554,245     | 1,210,769      | 1,801,361   | 1,382,714   | 1,880,811   | 20  |
| 7,150,097                  | 5,012,329   | 9,448,877   | 14,165,558  | 21,288,280     | 24,900,902  | 27,608,281  | 40,284,864  | 21  |
| 693,077                    | 994,158     | 968,160     | 1,166,466   | 693,098        | 1,003,102   | 973,738     | 1,153,391   | 22  |
| 4,883,202                  | 7,054,650   | 6,901,315   | 8,544,006   | 4,883,318      | 7,131,238   | 6,943,102   | 8,079,198   | 23  |
| 1,726,795                  | 1,388,285   | 2,828,830   | 2,530,088   | 1,762,363      | 1,427,227   | 2,867,885   | 2,586,992   | 24  |
| 3,689,405                  | 3,427,462   | 7,009,429   | 6,432,913   | 3,764,418      | 3,505,425   | 7,062,957   | 6,878,972   | 25  |
| 29,998                     | 26,499      | 1,048       | 117         | 697,728        | 691,442     | 675,507     | 735,009     | 26  |
| 874                        | 1,424       | 3,138       | 5,132       | 7,524          | 5,123       | 10,897      | 10,612      | 27  |
| 26,993                     | 47,894      | 115,242     | 190,464     | 234,172        | 340,049     | 466,227     | 425,612     | 28  |
| 802                        | 905         | 2,968       | 3,936       | 129,827        | 119,163     | 89,245      | 104,675     | 29  |
| 14,379                     | 29,007      | 52,447      | 65,618      | 1,716,051      | 1,707,425   | 1,477,822   | 1,797,211   | 30  |
| 19,128,395                 | 19,164,041  | 27,940,579  | 33,808,956  | 33,193,347     | 44,282,275  | 52,046,268  | 67,080,452  | 31  |
| 1,931                      | 728         | 344         | 892         | 401,953        | 833,607     | 2,269,547   | 2,462,391   | 32  |
| Nil                        | Nil         | Nil         | Nil         | 328,720        | 377,548     | 918,101     | 295,845     | 33  |
| 7,329,889                  | 6,971,856   | 8,280,235   | 10,197,666  | 9,609,586      | 9,408,860   | 10,339,190  | 12,147,082  | 34  |
| 17,112,390                 | 17,206,402  | 20,053,432  | 24,838,959  | 21,791,075     | 22,567,432  | 24,547,748  | 29,222,055  | 35  |
| 2,542,803                  | 2,350,012   | 2,317,147   | 2,716,717   | 2,704,778      | 2,412,218   | 2,733,355   | 2,855,667   | 36  |
| 2,045,845                  | 2,688,689   | 2,442,899   | 2,955,709   | 2,709,160      | 2,754,812   | 2,860,432   | 3,130,193   | 37  |
| 10,345,358                 | 9,746,030   | 11,210,106  | 13,626,850  | 12,906,150     | 12,949,540  | 13,722,878  | 15,792,020  | 38  |
| 20,223,982                 | 20,428,536  | 23,140,252  | 28,603,029  | 25,162,881     | 25,898,296  | 28,108,976  | 33,210,287  | 39  |
| 20,558,753                 | 20,621,899  | 23,246,887  | 28,786,375  | 27,320,853     | 28,411,698  | 31,872,820  | 37,217,274  | 40  |
| 374                        | 540         | 3,590       | 18,838      | 203,178        | 279,596     | 307,223     | 365,261     | 41  |
| 842                        | 1,645       | 12,446      | 58,022      | 640,113        | 858,215     | 981,152     | 1,177,521   | 42  |
| 420,651                    | 361,007     | 445,060     | 640,942     | 1,451,824      | 2,514,140   | 3,089,637   | 2,894,863   | 43  |
| 401                        | 331         | 336         | 277         | 43,903         | 50,702      | 61,296      | 65,833      | 44  |
| 5,807                      | 3,616       | 3,563       | 3,107       | 296,830        | 351,254     | 435,014     | 444,507     | 45  |
| 33,246,032                 | 39,068,685  | 42,362,075  | 50,597,101  | 40,481,134     | 47,350,462  | 53,261,626  | 62,899,709  | 46  |
| 61,180,121                 | 68,106,166  | 72,956,142  | 89,166,874  | 73,238,482     | 82,147,844  | 90,701,379  | 110,176,443 | 47  |
| 14,901                     | 19,465      | 18,386      | 17,446      | 186,701        | 245,953     | 251,291     | 384,777     | 48  |
| 24,487                     | 27,655      | 27,881      | 29,178      | 519,662        | 690,446     | 751,887     | 1,295,775   | 49  |
| 61,871,299                 | 68,649,416  | 73,683,795  | 90,641,369  | 77,040,786     | 87,569,412  | 97,004,240  | 117,818,478 | 50  |
| 296,220                    | 289,433     | 376,617     | 480,975     | 587,382        | 669,324     | 818,420     | 952,272     | 51  |
| 102,156,627                | 108,724,794 | 125,247,878 | 153,717,675 | 143,142,398    | 160,932,769 | 181,831,748 | 223,918,476 | 52  |

## 12.—Principal Exports of Canadian Produce from Canada to United

| No.                       | Item.  | United Kingdom. |            |            |            |
|---------------------------|--|-----------------|------------|------------|------------|
|                           |  | 1934.           | 1935.      | 1936.      | 1937.      |
| V. Iron and Its Products. |  |                 |            |            |            |
| 1                         | Pigs, ingots and billets..... ton                  | 9,726           | 27,231     | 62,988     | 91,187     |
|                           | \$   | 193,035         | 636,396    | 1,353,852  | 2,232,118  |
| 2                         | Scrap iron or steel..... ton                       | 770             | 2,195      | 139        | 2,857      |
|                           | \$   | 6,574           | 21,289     | 2,318      | 25,988     |
| 3                         | Rolling-mill products..... ton                     | 9,622           | 41,539     | 46,053     | 41,263     |
|                           | \$   | 267,590         | 1,253,789  | 1,376,305  | 1,298,031  |
| 4                         | Tubes and pipes..... \$                            | 22,213          | 25,426     | 34,490     | 40,205     |
| 5                         | Wire..... \$                                       | 95,112          | 315,841    | 385,710    | 470,850    |
| 6                         | Farm implements..... \$                            | 292,816         | 593,915    | 774,526    | 1,086,548  |
| 7                         | Hardware and cutlery..... \$                       | 860,737         | 1,112,607  | 1,266,901  | 1,291,790  |
| Machinery—                |  |                 |            |            |            |
| 8                         | Adding machines..... \$                            | 60,726          | 114,627    | 205,313    | 678,813    |
| 9                         | Electric vacuum cleaners..... \$                   | 307,060         | 230,855    | 540,029    | 103,263    |
| 10                        | Sewing machines..... \$                            | 4,872           | 4,847      | 7,766      | 433        |
| 11                        | Washing machines and wringers..... \$              | 153,313         | 349,470    | 383,163    | 452,637    |
| 12                        | Typewriters and parts..... \$                      | 11,119          | 12,965     | 13,962     | 502,430    |
|                           | Totals, Machinery <sup>1</sup> ..... \$            | 1,388,039       | 2,061,513  | 2,560,694  | 3,713,677  |
| 13                        | Tools..... \$                                      | 223,250         | 267,835    | 315,855    | 394,115    |
| Vehicles—                 |  |                 |            |            |            |
| 14                        | Automobiles, freight..... No.                      | 6               | 4          | 7          | 3          |
|                           | \$   | 1,921           | 2,009      | 2,973      | 1,506      |
| 15                        | Automobiles, passenger..... No.                    | 2,471           | 5,277      | 3,843      | 2,546      |
|                           | \$   | 1,645,380       | 3,530,912  | 2,725,993  | 2,145,036  |
| 16                        | Automobiles, parts of..... \$                      | 21,828          | 19,646     | 19,018     | 8,839      |
|                           | Totals, Vehicles <sup>1</sup> ..... \$             | 1,670,701       | 3,553,535  | 2,751,303  | 2,155,847  |
|                           | Totals, Iron and Its Products <sup>1</sup> .... \$ | 5,237,085       | 10,074,340 | 11,159,695 | 13,032,283 |
| VI. Non-Ferrous Metals.   |  |                 |            |            |            |
| 17                        | Aluminium in bars, blocks, etc..... cwt.           | 229,022         | 270,232    | 330,608    | 417,592    |
|                           | \$   | 4,099,258       | 4,629,061  | 5,745,538  | 8,081,088  |
| 18                        | Brass..... \$                                      | 602,141         | 464,225    | 363,439    | 459,562    |
| Copper—                   |  |                 |            |            |            |
| 19                        | Copper ore..... cwt.                               | 170,205         | 28,697     | 10,884     | 8,098      |
|                           | \$   | 893,781         | 137,048    | 58,277     | 63,141     |
| 20                        | Copper blister..... cwt.                           | —               | —          | —          | —          |
| 21                        | Copper in ingots, bars, rods, strips, etc.... cwt. | 1,275,579       | 1,963,329  | 2,034,342  | 2,568,253  |
|                           | \$   | 9,810,054       | 14,398,141 | 16,102,177 | 25,235,656 |
|                           | Totals, Copper <sup>1</sup> ..... \$               | 10,881,661      | 14,741,154 | 16,381,403 | 25,587,108 |
| 22                        | Lead in ore..... cwt.                              | —               | —          | 29         | Nil        |
|                           | \$   | —               | —          | 104        | —          |
| 23                        | Lead in pigs, etc..... cwt.                        | 1,722,778       | 1,832,589  | 1,877,370  | 2,069,348  |
|                           | \$   | 3,289,246       | 3,185,588  | 5,234,242  | 8,024,985  |
| Nickel—                   |  |                 |            |            |            |
| 24                        | Nickel in ore, matte, etc..... cwt.                | 258,818         | 379,653    | 400,898    | 301,646    |
|                           | \$   | 4,657,310       | 6,838,730  | 7,218,434  | 5,429,863  |
| 25                        | Nickel, fine..... cwt.                             | 79,719          | 61,212     | 204,364    | 179,533    |
|                           | \$   | 3,827,623       | 2,748,981  | 9,064,223  | 7,717,814  |
| 26                        | Nickel, oxide..... cwt.                            | 1,856           | 3,193      | 2,644      | 2,858      |
|                           | \$   | 58,816          | 110,144    | 84,605     | 96,801     |
|                           | Totals, Nickel..... \$                             | 8,543,749       | 9,697,855  | 16,307,262 | 13,244,478 |
| Precious Metals—          |  |                 |            |            |            |
| 27                        | Gold-bearing quartz, dust, etc..... oz.            | —               | —          | 21         | 261        |
|                           | \$   | —               | —          | 696        | 8,394      |
| 28                        | Gold bullion, other than monetary..... oz.         | 1,950,543       | 486,449    | 73,924     | 52,921     |
|                           | \$   | 60,981,255      | 16,702,500 | 2,599,500  | 1,876,500  |
| 29                        | Platinum in concentrates..... \$                   | 2,021,750       | 5,402,955  | 5,174,200  | 8,062,314  |
| 30                        | Silver in ore..... oz.                             | —               | —          | 61,553     | 3,359      |
|                           | \$   | —               | —          | 32,504     | 1,525      |
| 31                        | Silver bullion..... oz.                            | 482,352         | 2,464,911  | 1,552,802  | 2,428,324  |
|                           | \$   | 211,520         | 1,138,918  | 1,035,609  | 1,099,263  |
|                           | Totals, Precious Metals <sup>1</sup> ..... \$      | 63,500,509      | 23,498,743 | 9,230,206  | 11,348,320 |

<sup>1</sup> Totals include other items not specified.

\* None reported.

\* Quantity not stated.

## Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

| United States. |            |            |            | All Countries. |             |             |            | No. |
|----------------|------------|------------|------------|----------------|-------------|-------------|------------|-----|
| 1934.          | 1935.      | 1936.      | 1937.      | 1934.          | 1935.       | 1936.       | 1937.      |     |
| 72,889         | 44,072     | 55,938     | 71,793     | 83,517         | 71,809      | 119,881     | 164,848    | 1   |
| 2,095,148      | 1,084,899  | 1,325,181  | 1,744,250  | 2,937,512      | 1,767,267   | 2,730,748   | 4,074,851  | 2   |
| 81,505         | 46,917     | 88,389     | 132,567    | 143,747        | 89,652      | 123,371     | 206,865    | 3   |
| 487,278        | 371,600    | 815,811    | 1,450,203  | 889,558        | 742,285     | 1,163,261   | 2,189,890  | 4   |
| 4,878          | 1,633      | 1,962      | 1,635      | 36,182         | 64,754      | 78,704      | 91,520     | 5   |
| 123,541        | 42,683     | 56,784     | 41,077     | 1,080,697      | 1,967,381   | 2,463,441   | 3,093,006  | 6   |
| 256,109        | 83,145     | 93,759     | 44,183     | 808,114        | 886,287     | 917,938     | 884,497    | 7   |
| 2,618          | 670        | 856        | 982        | 336,711        | 850,834     | 1,065,028   | 1,166,356  | 8   |
| 322,519        | 603,040    | 2,467,203  | 1,926,351  | 1,819,826      | 3,567,253   | 6,344,437   | 6,276,008  | 9   |
| 8,566          | 55,371     | 161,768    | 142,724    | 1,368,473      | 1,823,704   | 2,108,350   | 2,201,921  | 10  |
| 65             | 1,777      | 675        | 175        | 63,207         | 134,573     | 322,019     | 781,865    | 11  |
| 1,065          | 3,487      | 2,230      | 3,028      | 338,387        | 295,277     | 609,701     | 172,297    | 12  |
| 10,112         | 1,646      | 3,217      | 5,738      | 649,051        | 1,907,814   | 1,532,803   | 1,548,582  | 13  |
| 498            | 645        | 588        | 318        | 162,616        | 393,271     | 541,996     | 706,577    | 14  |
| 3,659          | 3,253      | 1,207      | 2,147      | 290,340        | 389,115     | 181,323     | 985,469    | 15  |
| 216,359        | 213,204    | 130,472    | 150,702    | 2,923,526      | 5,368,907   | 5,808,925   | 7,607,472  | 16  |
| 3,050          | 8,947      | 15,592     | 27,945     | 584,670        | 811,122     | 994,314     | 1,203,200  | 17  |
| 14             | 11         | 13         | 19         | 7,041          | 17,420      | 17,420      | 15,155     | 18  |
| 1,710          | 6,064      | 3,948      | 6,498      | 2,510,838      | 4,675,901   | 6,188,120   | 5,618,387  | 19  |
| 330            | 357        | 388        | 437        | 21,360         | 36,083      | 49,311      | 38,424     | 20  |
| 84,535         | 75,487     | 118,300    | 148,226    | 8,934,250      | 14,516,260  | 17,727,901  | 18,809,343 | 21  |
| 23,532         | 51,050     | 38,094     | 59,324     | 1,444,515      | 2,642,335   | 3,224,008   | 2,902,938  | 22  |
| 116,758        | 151,097    | 191,265    | 241,655    | 12,932,520     | 21,904,732  | 27,208,481  | 22,460,693 | 23  |
| 4,348,230      | 2,739,062  | 5,411,683  | 6,072,255  | 26,641,482     | 40,736,038  | 52,368,057  | 53,173,175 | 24  |
| 22,205         | 36,217     | 41,980     | 85,039     | 347,129        | 457,653     | 558,850     | 680,357    | 25  |
| 362,867        | 579,434    | 622,700    | 1,365,224  | 6,174,995      | 7,738,189   | 9,358,074   | 12,522,047 | 26  |
| 89,420         | 57,470     | 194,978    | 318,861    | 1,002,979      | 920,565     | 984,322     | 1,141,648  | 27  |
| 191,679        | 223,125    | 255,178    | 368,831    | 402,089        | 331,611     | 378,973     | 521,729    | 28  |
| 1,006,094      | 973,889    | 1,364,610  | 2,800,339  | 2,109,770      | 1,454,256   | 2,024,180   | 3,963,652  | 29  |
| 148,084        | 454,657    | 544,845    | Nil        | 148,034        | 454,657     | 544,845     | Nil        | 30  |
| 1,246,090      | 3,499,641  | 4,174,227  | 1,246,096  | 3,499,641      | 4,174,227   | 4,174,227   | 3,583,982  | 31  |
| —              | 29         | 36         | 222        | 2,013,093      | 2,558,417   | 2,986,166   | 3,478,145  | 32  |
| —              | 405        | 557        | 2,239      | 15,254,562     | 18,750,596  | 23,697,792  | 34,878,145 | 33  |
| 2,284,241      | 4,608,924  | 5,638,968  | 3,089,411  | 19,222,279     | 24,539,749  | 31,031,411  | 40,221,228 | 34  |
| 40,620         | 19,183     | 1,146      | 28,086     | 135,617        | 219,939     | 79,502      | 108,123    | 35  |
| 161,665        | 70,726     | 4,581      | 123,913    | 400,809        | 459,703     | 231,624     | 340,609    | 36  |
| —              | —          | 21         | 10         | 2,888,907      | 2,897,087   | 2,860,854   | 3,439,935  | 37  |
| —              | —          | 111        | 63         | 5,501,523      | 5,080,045   | 8,055,158   | 13,438,592 | 38  |
| 89,726         | 85,831     | 96,484     | 111,378    | 437,394        | 598,277     | 661,947     | 601,906    | 39  |
| 1,618,268      | 1,543,184  | 1,737,027  | 2,004,725  | 7,878,026      | 10,766,932  | 11,907,860  | 10,835,789 | 40  |
| 410,149        | 433,501    | 615,251    | 842,984    | 544,189        | 505,607     | 908,045     | 1,131,141  | 41  |
| 10,702,445     | 10,088,412 | 15,433,539 | 21,067,972 | 17,118,102     | 16,375,391  | 28,439,250  | 38,413,742 | 42  |
| 15,018         | 7,367      | 10,251     | 28,410     | 84,583         | 34,111      | 33,660      | 57,315     | 43  |
| 340,255        | 150,102    | 208,377    | 578,930    | 3,202,110      | 1,280,516   | 1,297,270   | 1,632,653  | 44  |
| 12,660,968     | 12,381,698 | 17,373,943 | 23,651,627 | 28,198,238     | 28,422,859  | 41,644,350  | 45,882,184 | 45  |
| —              | 117,645    | 138,689    | 185,955    | —              | 117,877     | 139,686     | 190,914    | 46  |
| 2,638,966      | 3,718,241  | 4,767,713  | 6,326,990  | 2,629,346      | 3,728,211   | 4,802,029   | 6,497,281  | 47  |
| 707,130        | 2,304,303  | 2,309,548  | 2,135,278  | 2,717,681      | 2,790,752   | 2,388,472   | 2,188,199  | 48  |
| 25,629,671     | 80,023,431 | 80,815,354 | 74,790,709 | 86,610,926     | 96,728,931  | 83,414,854  | 76,667,269 | 49  |
| —              | —          | 600        | Nil        | 2,110,949      | 5,522,018   | 5,286,260   | 8,185,250  | 50  |
| 3,424,828      | 1,230,929  | 1,226,111  | 2,833,246  | 3,467,676      | 1,433,079   | 1,732,537   | 3,387,273  | 51  |
| 1,145,062      | 545,738    | 771,064    | 1,293,770  | 1,161,949      | 628,071     | 1,083,213   | 1,496,431  | 52  |
| 5,669,451      | 5,081,710  | 16,871,081 | 10,145,504 | 11,373,585     | 9,553,163   | 18,458,481  | 12,800,319 | 53  |
| 2,331,070      | 2,636,063  | 10,361,530 | 4,538,264  | 4,524,948      | 4,729,586   | 11,420,747  | 5,747,319  | 54  |
| 31,989,242     | 87,232,740 | 97,136,557 | 87,547,822 | 97,578,188     | 111,891,463 | 106,793,429 | 99,531,903 | 55  |



## 12.—Principal Exports of Canadian Produce from Canada to United

| No.   | Item.   | United Kingdom. |             |             |             |
|---|---|-----------------|-------------|-------------|-------------|
|   |   | 1934.           | 1935.       | 1936.       | 1937.       |
| <b>VI. Non-Ferrous Metals—concluded.</b>    |   |                 |             |             |             |
| 1   | Zinc—   |                 |             |             |             |
|   | Zinc ore..... cwt.                                    | Nil             | 68,578      | 10,580      | Nil         |
|   | \$  | —               | 117,250     | 17,500      | —           |
| 2   | Zinc spelter..... cwt.                                | 1,391,620       | 1,944,907   | 2,188,952   | 2,061,828   |
|   | \$  | 4,299,743       | 5,264,044   | 6,690,035   | 6,756,236   |
|   | Totals, Zinc <sup>1</sup> ..... \$                    | 4,315,475       | 5,394,622   | 6,724,160   | 6,766,597   |
| 3   | Electrical apparatus..... \$                          | 615,592         | 562,796     | 620,339     | 951,395     |
|   | Totals, Non-Ferrous Metals <sup>1</sup> ..... \$      | 96,816,118      | 63,100,604  | 61,821,441  | 75,819,787  |
| <b>VII. Non-Metallic Minerals.</b>          |   |                 |             |             |             |
| 4   | Asbestos—   |                 |             |             |             |
|   | Asbestos, raw..... ton                                | 4,780           | 4,437       | 4,792       | 6,971       |
|   | \$  | 317,537         | 310,313     | 292,560     | 449,251     |
| 5   | Asbestos sand and waste..... ton                      | 2,686           | 2,135       | 3,630       | 4,576       |
|   | \$  | 51,919          | 45,985      | 74,921      | 86,531      |
|   | Totals, Asbestos <sup>1</sup> ..... \$                | 427,908         | 449,871     | 478,045     | 634,612     |
| 6   | Clay and products..... \$                             | 18,916          | 13,916      | 4,976       | 22,861      |
| <b>Coal and Its Products—</b>               |   |                 |             |             |             |
| 7   | Coal..... ton   | 7,559           | 24,427      | 37,948      | 26,209      |
|   | \$  | 43,104          | 132,760     | 224,786     | 133,576     |
| 8   | Coke..... ton   | Nil             | Nil         | 779         | 1,090       |
|   | \$  | —               | —           | 29,080      | 34,200      |
| 9   | Tar, pitch, and oils..... \$                          | 101,141         | 10          | Nil         | Nil         |
|   | Totals, Coal and Its Products <sup>1</sup> ..... \$   | 144,245         | 132,770     | 253,866     | 167,776     |
| 10  | Petroleum and products..... \$                        | 23,683          | 21,657      | 53,711      | 68,094      |
|   | \$  | 70,941          | 89,736      | 94,023      | 167,594     |
| 11  | Abrasives, artificial, crude..... cwt.                | 529,527         | 709,172     | 752,513     | 1,038,343   |
|   | \$  | 2               | 31,895      | 65,024      | 104,925     |
| 12  | Gypsum, crude..... ton                                | 2               | 33,477      | 66,764      | 110,282     |
|   | \$  | —               | —           | —           | —           |
|   | Totals, Non-Metallic Minerals <sup>1</sup> ..... \$   | 1,897,685       | 2,053,754   | 2,207,869   | 2,730,516   |
| <b>VIII. Chemicals and Allied Products.</b> |   |                 |             |             |             |
| 13  | Acids..... \$   | 934,439         | 868,208     | 710,500     | 1,088,035   |
| 14  | Cobalt oxide and salts..... \$                        | 262,185         | 283,112     | 469,169     | 561,555     |
| 15  | Drugs, medicinal..... \$                              | 405,612         | 444,705     | 554,819     | 662,758     |
| <b>Fertilizers—</b>                         |   |                 |             |             |             |
| 16  | Ammonium sulphate..... cwt.                           | 33,600          | Nil         | Nil         | Nil         |
|   | \$  | 28,560          | —           | —           | —           |
| 17  | Cyanamid..... cwt                                     | Nil             | Nil         | Nil         | 56          |
|   | \$  | —               | —           | —           | 90          |
|   | Totals, Fertilizers <sup>1</sup> ..... \$             | 28,560          | Nil         | Nil         | 90          |
| 18  | Paints and varnishes..... \$                          | 182,501         | 293,593     | 323,262     | 454,538     |
| 19  | Soap..... \$  | 512,857         | 533,645     | 595,074     | 814,967     |
| 20  | Sodium compounds..... \$                              | 28,401          | 51,436      | 63,596      | 93,068      |
|   | Totals, Chemicals and Allied Products <sup>1</sup> \$ | 3,136,678       | 3,030,908   | 3,212,081   | 4,191,193   |
| <b>IX. Miscellaneous Commodities.</b>       |   |                 |             |             |             |
| 21  | Containers (outside coverings)..... \$                | 7,817           | 10,454      | 12,037      | 15,054      |
| 22  | Electric energy..... M. k.w.h.                        | Nil             | Nil         | Nil         | Nil         |
| 23  | Films..... \$   | 1,048,693       | 1,382,831   | 1,868,619   | 1,514,207   |
| 24  | Settlers' effects..... \$                             | 438,842         | 487,470     | 454,419     | 510,764     |
| 25  | Ships..... \$   | 2               | 2           | 2           | 2,000       |
| 26  | Stationery, n.o.p..... \$                             | 311,359         | 475,478     | 517,879     | 632,256     |
|   | Totals, Miscellaneous Commodities <sup>1</sup> ... \$ | 1,943,355       | 2,728,948   | 3,197,996   | 3,216,036   |
|   | Totals, Exports, Canadian Produce <sup>1</sup> ... \$ | 288,582,666     | 290,885,237 | 321,556,798 | 407,996,698 |

<sup>1</sup> Totals include other items not specified.<sup>2</sup> None reported.

## Kingdom, United States, and All Countries, fiscal years 1934-37—concluded.

| United States. |             |             |             | All Countries. |             |             |               | No. |
|----------------|-------------|-------------|-------------|----------------|-------------|-------------|---------------|-----|
| 1934.          | 1935.       | 1936.       | 1937.       | 1934.          | 1935.       | 1936.       | 1937.         |     |
| Nil            | 61          | 8           | 3           | 180,922        | 353,632     | 100,468     | 486,781       | 1   |
| -              | 276         | 30          | 13          | 304,720        | 602,928     | 288,665     | 945,303       | 2   |
| 560            | 4,370       | 11,766      | 75,029      | 1,909,926      | 2,516,290   | 2,633,771   | 2,659,489     | 3   |
| 2,156          | 10,063      | 36,205      | 303,636     | 5,928,446      | 6,900,018   | 8,056,628   | 8,842,991     | 4   |
| 5,497          | 10,339      | 39,353      | 304,675     | 6,284,375      | 7,545,793   | 8,418,199   | 9,863,937     | 5   |
| 19,485         | 28,105      | 45,067      | 28,120      | 2,023,985      | 2,306,266   | 2,941,248   | 3,611,393     | 6   |
| 48,029,226     | 195,236,347 | 121,783,549 | 117,328,207 | 168,375,134    | 191,345,386 | 212,547,372 | 230,152,314   | 7   |
| 55,572         | 43,991      | 64,354      | 83,664      | 87,767         | 51,494      | 109,270     | 140,804       | 8   |
| 2,658,118      | 2,040,464   | 3,321,538   | 4,346,725   | 4,432,855      | 4,021,968   | 5,865,196   | 7,602,623     | 9   |
| 68,015         | 69,981      | 100,785     | 168,919     | 74,563         | 76,649      | 108,828     | 180,183       | 10  |
| 939,021        | 998,168     | 1,589,583   | 2,754,216   | 1,061,147      | 1,131,540   | 1,746,708   | 2,966,679     | 11  |
| 3,599,312      | 3,040,400   | 4,911,047   | 7,101,580   | 5,585,001      | 5,299,825   | 7,778,782   | 10,793,696    | 12  |
| 39,718         | 50,793      | 72,531      | 113,004     | 178,268        | 200,629     | 443,578     | 462,421       | 13  |
| 102,108        | 119,834     | 173,009     | 210,417     | 230,686        | 334,721     | 434,982     | 418,065       | 14  |
| 358,779        | 445,105     | 646,804     | 788,413     | 1,083,631      | 1,527,011   | 1,970,367   | 1,780,856     | 15  |
| 28,038         | 40,113      | 29,815      | 28,615      | 24,416         | 41,903      | 33,325      | 33,870        | 16  |
| 314,485        | 548,901     | 271,144     | 237,331     | 325,061        | 571,053     | 350,267     | 343,665       | 17  |
| 285,902        | 501,656     | 729,348     | 636,118     | 593,938        | 726,094     | 805,622     | 703,000       | 18  |
| 909,775        | 1,495,887   | 1,648,197   | 1,656,862   | 2,013,239      | 2,824,388   | 3,126,507   | 2,827,651     | 19  |
| 1,033,726      | 316,676     | 252,804     | 620,629     | 1,734,940      | 1,001,223   | 986,735     | 1,585,920     | 20  |
| 784,787        | 1,186,028   | 1,340,606   | 1,651,369   | 866,997        | 1,306,215   | 1,455,723   | 1,856,674     | 21  |
| 2,239,034      | 2,970,756   | 3,295,236   | 4,410,575   | 2,821,805      | 3,781,372   | 4,121,262   | 5,568,676     | 22  |
| 308,666        | 315,338     | 365,267     | 603,302     | 308,566        | 351,277     | 304,291     | 708,227       | 23  |
| 367,998        | 371,745     | 428,982     | 710,280     | 367,998        | 410,996     | 496,746     | 520,662       | 24  |
| 9,217,668      | 9,214,868   | 11,566,497  | 17,080,392  | 14,808,912     | 15,654,323  | 19,083,643  | 26,061,028    | 25  |
| 2,189,506      | 2,143,965   | 1,806,814   | 1,898,306   | 3,190,794      | 3,063,484   | 2,585,329   | 3,078,334     | 26  |
| 100,364        | Nil         | Nil         | 14          | 451,459        | 366,125     | 480,633     | 872,545       | 27  |
| 19,692         | 22,607      | 28,185      | 28,203      | 671,733        | 774,843     | 1,014,485   | 1,310,276     | 28  |
| 470,030        | 351,283     | 285,974     | 382,283     | 1,490,575      | 996,903     | 1,005,546   | 1,466,723     | 29  |
| 432,125        | 395,775     | 325,176     | 383,499     | 1,316,451      | 1,056,771   | 1,099,605   | 1,826,131     | 30  |
| 1,884,896      | 2,016,986   | 2,209,296   | 2,732,530   | 1,409,244      | 2,165,882   | 2,275,723   | 3,382,169     | 31  |
| 1,469,924      | 2,152,583   | 2,290,663   | 2,934,849   | 1,499,489      | 2,340,884   | 2,384,610   | 3,089,325     | 32  |
| 2,517,188      | 3,227,673   | 3,218,373   | 4,459,772   | 3,474,192      | 4,179,314   | 4,282,833   | 6,088,875     | 33  |
| 23,103         | 29,361      | 58,375      | 52,402      | 436,904        | 633,734     | 723,313     | 911,046       | 34  |
| 162            | 419,590     | 391,462     | 703         | 645,592        | 1,115,906   | 1,152,439   | 990,349       | 35  |
| 1,439,492      | 1,150,628   | 1,484,119   | 1,642,885   | 3,314,348      | 3,375,974   | 4,019,629   | 4,221,997     | 36  |
| 6,429,888      | 7,333,756   | 7,458,104   | 8,699,580   | 13,843,829     | 15,270,064  | 16,015,391  | 19,237,697    | 37  |
| 147,711        | 233,123     | 296,179     | 938,907     | 284,436        | 440,405     | 1,129,677   | 1,663,657     | 38  |
| 1,097,457      | 1,209,625   | 1,329,414   | 1,624,878   | 1,097,495      | 1,269,667   | 1,329,457   | 1,624,934     | 39  |
| 2,038,444      | 3,016,221   | 3,187,905   | 3,760,966   | 2,641,110      | 3,019,154   | 3,160,817   | 3,764,831     | 40  |
| 755,361        | 1,110,903   | 1,414,532   | 1,417,840   | 2,713,905      | 3,026,941   | 3,768,115   | 3,432,860     | 41  |
| 2,479,348      | 2,459,740   | 2,178,530   | 2,840,145   | 3,128,615      | 3,238,124   | 2,911,546   | 3,137,466     | 42  |
| 93,200         | 110,245     | 8,235       | 8,050       | 260,548        | 232,308     | 78,235      | 164,950       | 43  |
| 16,107         | 14,551      | 30,326      | 20,496      | 435,070        | 619,263     | 716,550     | 883,782       | 44  |
| 6,612,125      | 7,546,288   | 7,500,512   | 9,077,366   | 10,357,626     | 12,063,920  | 13,113,527  | 15,397,690    | 45  |
| 220,072,310    | 364,721,354 | 360,302,426 | 435,014,544 | 665,954,071    | 756,625,925 | 819,030,417 | 1,061,181,906 | 46  |

## 13.—Principal Imports into Canada for Consumption from United

| No.  | Item.                          | United Kingdom. |           |           |           |
|--|--------------------------------|-----------------|-----------|-----------|-----------|
|  |                                | 1934.           | 1935.     | 1936.     | 1937.     |
| <b>I. Agricultural and Vegetable Products.</b> |                                |                 |           |           |           |
| <b>A. MAINLY FOOD.</b>                         |                                |                 |           |           |           |
| <b>Fresh Fruits—</b>                           |                                |                 |           |           |           |
| 1  | Bananas.....stem               | Nil             | Nil       | Nil       | Nil       |
|  | \$                             | -               | -         | -         | -         |
| 2  | Grapefruit.....lb.             | Nil             | 25,800    | Nil       | 5,167     |
|  | \$                             | -               | 893       | -         | 191       |
| 3  | Grapes.....lb.                 | 22,628          | 55,630    | 103,790   | 43,334    |
|  | \$                             | 1,631           | 3,239     | 13,057    | 4,705     |
| 4  | Lemons.....box                 | 6,507           | 3,123     | 737       | 2,110     |
|  | \$                             | 18,325          | 10,860    | 3,435     | 8,397     |
| 5  | Oranges.....cu. ft.            | 6,651           | 2,813     | 12,858    | 65,404    |
|  | \$                             | 8,916           | 6,121     | 19,033    | 70,094    |
| 6  | Pears.....lb.                  | 6,700           | Nil       | 12,300    | 4,500     |
|  | \$                             | 431             | -         | 961       | 125       |
| 7  | Strawberries.....lb.           | Nil             | Nil       | Nil       | Nil       |
|  | \$                             | -               | -         | -         | -         |
| Totals, Fresh Fruits <sup>1</sup> .....        |                                | \$ 28,686       | 21,337    | 37,103    | 83,866    |
| <b>Dried Fruits—</b>                           |                                |                 |           |           |           |
| 8  | Currents.....lb.               | 140,228         | 1,498     | 50,842    | 597       |
|  | \$                             | 11,319          | 275       | 4,526     | 66        |
| 9  | Dates.....lb.                  | 5,333,806       | 4,009,247 | 2,387,383 | 1,249,097 |
|  | \$                             | 137,885         | 119,772   | 67,550    | 31,893    |
| 10   | Prunes and dried plums.....lb. | 20              | 3,145     | 4,480     | Nil       |
|  | \$                             | 2               | 234       | 159       | -         |
| 11   | Raisins.....lb.                | 1,428,788       | 990,563   | 579,291   | 364,043   |
|  | \$                             | 89,297          | 57,880    | 35,838    | 22,611    |
| Totals, Dried Fruits <sup>1</sup> .....        |                                | \$ 292,651      | 287,398   | 143,923   | 110,588   |
| <b>Preserved Fruits—</b>                       |                                |                 |           |           |           |
| 12   | Peaches, canned.....lb.        | Nil             | 29,368    | Nil       | 150       |
|  | \$                             | -               | 2,470     | -         | 10        |
| 13   | Pineapples, canned.....lb.     | 8,756           | Nil       | 35,100    | 3,791     |
|  | \$                             | 607             | -         | 892       | 360       |
| Totals, Preserved Fruits <sup>1</sup> .....    |                                | \$ 36,911       | 58,719    | 57,268    | 88,734    |
| 14   | Fruit juices.....\$            | 9,493           | 16,726    | 9,150     | 17,186    |
| <b>Nuts—</b>                                   |                                |                 |           |           |           |
| 15   | Coco-nuts.....\$               | 2               | 2         | 2         | 2         |
| 16   | Nuts, not shelled.....lb.      | 1,106,391       | 1,320,880 | 1,217,319 | 778,549   |
|  | \$                             | 75,563          | 70,228    | 75,090    | 60,823    |
| 17   | Nuts, shelled.....lb.          | 53,161          | 82,330    | 50,949    | 149,071   |
|  | \$                             | 13,458          | 17,622    | 12,167    | 27,655    |
| Totals, Nuts <sup>1</sup> .....                |                                | \$ 89,021       | 87,850    | 88,560    | 88,681    |
| <b>Vegetables—</b>                             |                                |                 |           |           |           |
| 18   | Onions.....\$                  | 13,025          | 3,249     | 12,745    | 3,954     |
| 19   | Potatoes, sweet.....\$         | 2               | 2         | 2         | 2         |
| 20   | Potatoes, n.o.p.....cwt.       | 2               | 2         | 2         | 2         |
|  | \$                             | -               | -         | -         | -         |
| 21   | Tomatoes, fresh.....lb.        | 40,780          | Nil       | 60        | 224       |
|  | \$                             | 2,316           | -         | 7         | 20        |
| 22   | Other fresh vegetables.....\$  | 185             | 140       | 674       | 1,165     |
| 23   | Vegetables, canned.....lb.     | 4,848           | 3,958     | 207       | 2,369     |
|  | \$                             | 392             | 417       | 117       | 316       |
| 24   | Pickles and sauces.....\$      | 137,238         | 148,233   | 184,668   | 221,445   |
| Totals, Vegetables <sup>1</sup> .....          |                                | \$ 155,116      | 154,192   | 210,898   | 244,213   |
| <b>Grains and Products—</b>                    |                                |                 |           |           |           |
| 25   | Biscuits.....lb.               | 1,373,549       | 1,439,393 | 2,361,673 | 2,102,235 |
|  | \$                             | 156,424         | 156,544   | 321,902   | 318,887   |
| 26   | Corn.....bu.                   | 125,397         | 36        | 38        | 217,749   |
|  | \$                             | 75,521          | 50        | 73        | 167,190   |
| 27   | Rice.....cwt.                  | 1,278           | 8,337     | 3,042     | 1,305     |
|  | \$                             | 2,866           | 20,701    | 8,791     | 3,757     |
| Totals, Grains and Products <sup>1</sup> ..... |                                | \$ 468,487      | 728,857   | 651,516   | 680,959   |

<sup>1</sup> Totals include other items not specified.<sup>2</sup> None reported.

DETAILED IMPORTS FOR CONSUMPTION

551

Kingdom, United States, and All Countries, fiscal years 1934-37.

| United States. |            |            |            | All Countries. |            |            |            | No. |
|----------------|------------|------------|------------|----------------|------------|------------|------------|-----|
| 1934.          | 1935.      | 1936.      | 1937.      | 1934.          | 1935.      | 1936.      | 1937.      |     |
| 429,315        | 235,235    | 324,317    | 325,754    | 2,474,096      | 3,223,648  | 2,967,234  | 3,392,309  | 1   |
| 775,526        | 379,508    | 527,845    | 553,362    | 1,522,706      | 1,687,818  | 1,767,092  | 2,002,960  | 2   |
| 28,188,019     | 28,984,183 | 31,775,950 | 42,160,118 | 31,065,691     | 33,623,930 | 39,688,217 | 46,808,118 | 3   |
| 755,322        | 777,454    | 853,956    | 1,105,564  | 818,903        | 892,283    | 1,029,688  | 1,211,327  | 4   |
| 15,630,300     | 18,401,757 | 19,088,754 | 25,699,639 | 15,973,756     | 18,724,357 | 19,420,400 | 26,137,351 | 5   |
| 554,275        | 738,646    | 589,525    | 937,825    | 570,064        | 756,823    | 653,770    | 905,392    | 6   |
| 149,333        | 200,348    | 338,028    | 288,842    | 359,867        | 380,893    | 371,022    | 371,520    | 7   |
| 608,029        | 679,008    | 1,234,028  | 1,360,477  | 1,152,765      | 1,122,687  | 1,335,037  | 1,020,873  | 8   |
| 3,054,768      | 3,744,151  | 4,260,658  | 4,501,344  | 4,149,783      | 4,561,162  | 4,904,074  | 5,197,043  | 9   |
| 4,137,452      | 4,940,138  | 5,239,209  | 6,388,233  | 4,733,848      | 6,028,259  | 5,772,238  | 6,980,752  | 10  |
| 7,481,599      | 13,432,332 | 18,012,247 | 22,812,894 | 8,178,041      | 13,656,015 | 18,082,713 | 23,166,619 | 11  |
| 262,197        | 412,213    | 407,888    | 553,251    | 284,436        | 421,539    | 411,078    | 567,050    | 12  |
| 5,204,951      | 5,986,144  | 4,988,431  | 4,640,083  | 5,204,951      | 5,986,144  | 4,988,431  | 4,640,175  | 13  |
| 375,360        | 416,180    | 391,012    | 424,025    | 375,360        | 416,180    | 391,012    | 424,053    | 14  |
| 8,493,824      | 9,414,581  | 10,620,591 | 13,182,435 | 10,576,033     | 12,586,403 | 12,897,652 | 15,881,565 | 15  |
| Nil            | 1,500      | 250        | 300        | 3,480,586      | 5,044,972  | 5,025,746  | 4,069,960  | 16  |
| -              | 180        | 32         | 39         | 300,216        | 471,679    | 521,438    | 423,443    | 17  |
| 715,368        | 210,394    | 359,448    | 544,666    | 13,690,680     | 15,819,210 | 17,189,420 | 16,553,813 | 18  |
| 40,313         | 15,196     | 24,718     | 30,292     | 409,559        | 449,406    | 458,719    | 455,653    | 19  |
| 16,531,952     | 17,354,938 | 19,310,400 | 17,747,349 | 16,771,803     | 17,448,433 | 19,318,065 | 17,747,691 | 20  |
| 912,644        | 935,195    | 786,951    | 509,359    | 930,953        | 942,745    | 787,456    | 809,889    | 21  |
| 10,560,047     | 9,101,865  | 7,766,200  | 7,010,677  | 27,687,507     | 37,262,634 | 35,810,480 | 40,260,540 | 22  |
| 452,330        | 458,919    | 381,818    | 433,820    | 2,044,238      | 2,982,886  | 3,057,640  | 3,845,146  | 23  |
| 1,757,233      | 1,689,090  | 1,553,509  | 1,692,373  | 4,325,923      | 5,517,990  | 5,496,178  | 6,257,465  | 24  |
| 169,179        | 171,312    | 272,155    | 171,828    | 2,257,641      | 2,475,427  | 3,704,195  | 4,569,722  | 25  |
| 9,006          | 11,373     | 16,516     | 11,404     | 134,961        | 157,036    | 243,159    | 305,171    | 26  |
| 83,886         | 155,104    | 195,897    | 634,210    | 14,720,631     | 20,073,365 | 19,239,113 | 26,271,885 | 27  |
| 8,452          | 14,433     | 17,355     | 50,584     | 451,009        | 638,306    | 642,190    | 900,779    | 28  |
| 130,228        | 158,695    | 201,483    | 324,844    | 1,064,439      | 1,491,067  | 1,638,972  | 2,161,156  | 29  |
| 45,807         | 87,875     | 189,830    | 339,770    | 75,173         | 156,538    | 266,083    | 495,779    | 30  |
| 677            | 394        | 345        | 714        | 133,155        | 151,479    | 196,666    | 213,815    | 31  |
| 2,043,225      | 1,444,300  | 1,624,887  | 2,518,902  | 32,379,813     | 44,286,729 | 39,193,302 | 41,278,409 | 32  |
| 103,349        | 122,137    | 189,967    | 303,141    | 1,145,561      | 1,127,291  | 1,407,446  | 1,632,016  | 33  |
| 872,524        | 829,521    | 1,148,313  | 1,220,893  | 7,716,168      | 8,569,738  | 9,681,170  | 9,928,133  | 34  |
| 233,811        | 243,899    | 342,099    | 391,514    | 1,400,676      | 1,497,325  | 1,831,029  | 1,864,530  | 35  |
| 387,842        | 365,930    | 532,467    | 755,730    | 2,713,675      | 2,812,416  | 3,470,937  | 3,748,241  | 36  |
| 88,775         | 60,788     | 89,136     | 120,766    | 228,410        | 181,779    | 272,008    | 263,255    | 37  |
| 88,546         | 108,365    | 110,136    | 145,198    | 90,943         | 110,488    | 112,750    | 145,998    | 38  |
| 96,480         | 113,920    | 104,703    | 119,570    | 108,935        | 123,363    | 115,389    | 122,354    | 39  |
| 143,842        | 152,697    | 145,075    | 289,180    | 162,403        | 170,452    | 161,071    | 290,850    | 40  |
| 9,054,635      | 11,290,783 | 6,145,044  | 16,305,971 | 20,161,389     | 30,612,570 | 32,242,753 | 40,593,715 | 41  |
| 421,318        | 345,266    | 617,018    | 581,311    | 800,532        | 835,391    | 1,028,059  | 1,307,263  | 42  |
| 1,970,746      | 2,079,400  | 2,495,898  | 3,050,150  | 2,063,677      | 2,168,990  | 2,612,923  | 3,144,820  | 43  |
| 728,989        | 550,922    | 937,911    | 1,849,033  | 1,986,882      | 2,327,218  | 2,387,284  | 3,562,950  | 44  |
| 63,804         | 51,631     | 76,495     | 131,056    | 179,840        | 217,421    | 232,591    | 300,292    | 45  |
| 55,200         | 41,899     | 51,914     | 63,478     | 261,286        | 270,213    | 310,784    | 361,390    | 46  |
| 2,849,206      | 2,857,690  | 3,302,454  | 4,439,492  | 3,818,476      | 4,039,296  | 4,773,138  | 5,900,976  | 47  |
| 333,796        | 382,511    | 373,937    | 313,514    | 1,788,407      | 1,915,311  | 2,807,607  | 2,482,180  | 48  |
| 48,022         | 48,465     | 50,421     | 49,086     | 218,453        | 220,506    | 381,616    | 376,681    | 49  |
| 3,508,934      | 3,151,220  | 292,449    | 490,134    | 5,668,371      | 7,957,211  | 8,307,618  | 18,632,448 | 50  |
| 1,886,541      | 2,208,598  | 307,611    | 480,128    | 2,788,601      | 4,988,051  | 4,958,387  | 10,551,080 | 51  |
| 156,479        | 78,075     | 161,771    | 45,708     | 683,542        | 641,650    | 727,399    | 730,165    | 52  |
| 305,141        | 177,930    | 461,770    | 133,261    | 1,213,328      | 1,187,625  | 1,532,602  | 1,287,377  | 53  |
| 3,047,023      | 3,266,246  | 1,613,249  | 1,810,403  | 5,499,468      | 8,445,638  | 8,375,007  | 14,209,382 | 54  |

## 13.—Principal Imports into Canada for Consumption from United

| No.  | Item.   | United Kingdom. |            |            |            |
|--|---|-----------------|------------|------------|------------|
|  |   | 1934.           | 1935.      | 1936.      | 1937.      |
| <b>I.—Agricultural and Vegetable Products—continued.</b> |   |                 |            |            |            |
| <b>A. MAINLY FOOD—concluded.</b>                         |   |                 |            |            |            |
| <b>Oils, Vegetable, for Food—</b>                        |   |                 |            |            |            |
| 1  | Olive oil..... gal.                                     | 651             | 126        | 2,578      | 185        |
|  | \$  | 784             | 119        | 775        | 178        |
|  | Totals, Oils, Vegetable, for Food <sup>1</sup> ..... \$ | 116,107         | 122,917    | 148,632    | 211,357    |
| <b>Sugar and Its Products—</b>                           |   |                 |            |            |            |
| 2  | Confectionery..... lb.                                  | 3,542,958       | 4,008,898  | 4,288,757  | 4,332,113  |
|  | \$  | 446,126         | 492,698    | 538,480    | 533,891    |
| 3  | Molasses and syrups..... gal.                           | 31,327          | 28,185     | 1,139,617  | 28,613     |
|  | \$  | 24,996          | 19,979     | 106,924    | 16,802     |
| 4  | Sugar, not above No. 16 D.S..... cwt.                   | Nil             | Nil        | Nil        | Nil        |
|  | \$  | Nil             | Nil        | Nil        | Nil        |
| 5  | Sugar, for refining, above No. 16 D.S..... cwt.         | Nil             | Nil        | Nil        | Nil        |
|  | \$  | Nil             | Nil        | Nil        | Nil        |
| 6  | Sugar, above No. 16 D.S., other, <i>n.o.p.</i> ... cwt. | 476             | 42         | 72         | 169        |
|  | \$  | 1,137           | 238        | 386        | 475        |
|  | Totals, Sugar and Its Products <sup>1</sup> ..... \$    | 472,259         | 512,815    | 645,797    | 551,248    |
| 7  | Cocoa and chocolate..... \$                             | 37,211          | 91,754     | 201,112    | 589,108    |
| 8  | Coffee and chicory..... lb.                             | 1,659,938       | 1,442,080  | 1,744,528  | 2,495,478  |
|  | \$  | 253,433         | 209,800    | 220,191    | 326,879    |
| 9  | Spices..... \$  | 321,380         | 337,672    | 311,606    | 283,224    |
| 10   | Tea..... lb.  | 12,084,404      | 91,119,398 | 10,675,961 | 11,280,343 |
|  | \$  | 3,144,074       | 2,489,822  | 2,714,461  | 2,998,675  |
| 11   | Yeast..... lb.  | 190,926         | 248,487    | 304,755    | 308,821    |
|  | \$  | 21,638          | 32,036     | 29,873     | 22,945     |
| 12   | Hops..... lb.   | 241,994         | 155,310    | 178,559    | 150,277    |
|  | \$  | 47,157          | 51,639     | 48,400     | 30,516     |
| 13   | Liquorice..... lb.                                      | 1,093           | 1,823      | 1,393      | 1,255      |
|  | \$  | 304             | 503        | 427        | 294        |
|  | TOTALS, A. MAINLY FOOD <sup>1</sup> ..... \$            | 5,536,914       | 5,245,863  | 5,554,113  | 6,367,900  |
| <b>B. OTHER THAN FOOD.</b>                               |   |                 |            |            |            |
| <b>Beverages, Alcoholic—</b>                             |   |                 |            |            |            |
| 14   | Brandy..... pf. gal.                                    | 840             | 90         | 57         | 1,016      |
|  | \$  | 16,310          | 1,068      | 976        | 17,084     |
| 15   | Gin..... pf. gal.                                       | 58,607          | 46,607     | 66,177     | 74,591     |
|  | \$  | 1,151,995       | 912,522    | 238,056    | 248,991    |
| 16   | Rum..... pf. gal.                                       | 77,462          | 84,210     | 112,890    | 100,444    |
|  | \$  | 1,466,037       | 1,594,425  | 2,199,537  | 1,968,724  |
| 17   | Whisky..... pf. gal.                                    | 457,829         | 457,530    | 608,537    | 650,882    |
|  | \$  | 9,541,822       | 9,378,598  | 3,710,956  | 3,431,055  |
| 18   | Wines, non-sparkling and sparkling..... \$              | 143,419         | 165,130    | 168,298    | 167,718    |
|  | Totals, Beverages, Alcoholic <sup>1</sup> ..... \$      | 12,516,086      | 12,434,625 | 6,476,069  | 5,987,186  |
| 19   | Gums and resins..... \$                                 | 59,600          | 62,451     | 67,712     | 46,066     |
| 20   | Oilseeds and meal..... cwt.                             | 4,948           | 12,014     | 3,223      | 3,908      |
|  | \$  | 7,204           | 19,514     | 4,305      | 7,295      |
| <b>Oils, Vegetable, not Food—</b>                        |   |                 |            |            |            |
| 21   | Cotton-seed oil, crude..... cwt.                        | 58,024          | 129,501    | 248,009    | 155,387    |
|  | \$  | 245,973         | 463,316    | 1,438,251  | 912,191    |
| 22   | Oil for soap..... gal.                                  | 542,270         | 273,351    | 2,102,222  | 667,842    |
|  | \$  | 238,236         | 107,203    | 939,085    | 395,082    |
| 23   | Peanut oil, crude..... cwt.                             | 55,302          | 19,398     | 204,384    | 363,874    |
|  | \$  | 275,747         | 130,962    | 1,651,959  | 2,296,392  |
|  | Totals, Oils, Vegetable, not Food <sup>1</sup> ..... \$ | 1,118,433       | 1,067,292  | 4,380,860  | 4,117,088  |
| 24   | Plants, shrubs and trees..... \$                        | 37,805          | 41,459     | 55,602     | 32,938     |
| <b>Rubber and Products—</b>                              |   |                 |            |            |            |
| 25   | Rubber, crude..... lb.                                  | 105,329         | 19,579     | 282,453    | 986,556    |
|  | \$  | 15,947          | 6,984      | 38,819     | 166,346    |
| 26   | Recovered, powdered and substitute..... cwt.            | 2,149           | 2,749      | 2,690      | 1,982      |
|  | \$  | 48,277          | 64,301     | 60,622     | 39,942     |
| 27   | Tires, pneumatic..... \$                                | 31,022          | 54,332     | 30,664     | 59,294     |
|  | Totals, Rubber and Products <sup>1</sup> ..... \$       | 447,505         | 411,302    | 751,285    | 625,280    |

<sup>1</sup> Totals include other items not specified.<sup>2</sup> None reported.

## Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

| United States.  |   |   |  | All Countries.   |  |  |  | No. |
|---|---|---|--|--|--|--|--|-----|
| 1934.   | 1935.   | 1936.   | 1937.  | 1934.  | 1935.  | 1936.  | 1937.  |     |
| 8,978<br>11,720   | 7,517<br>10,469   | 2,048<br>5,322  | 3,517<br>6,892   | 331,793<br>351,435   | 339,416<br>438,265   | 390,257<br>473,498   | 273,447<br>393,297   | 1   |
| 46,450  | 60,293  | 52,411  | 36,727   | 561,091  | 638,669  | 717,275  | 682,650  |     |
| 219,711<br>43,490<br>1,777,317<br>164,471<br>Nil<br>Nil<br>-<br>19,782<br>88,252  | 265,759<br>46,885<br>180,287<br>80,388<br>Nil<br>Nil<br>-<br>42,001<br>154,709  | 295,464<br>59,802<br>279,838<br>100,788<br>Nil<br>Nil<br>-<br>42,518<br>207,864   | 517,316<br>105,220<br>501,285<br>126,947<br>Nil<br>Nil<br>-<br>52,558<br>249,645   | 4,636,706<br>563,408<br>12,614,893<br>2,143,721<br>4,590,593<br>7,554,778<br>2,345,386<br>4,105,810<br>49,896<br>154,360                         | 4,971,289<br>598,240<br>9,442,507<br>2,334,445<br>6,430,492<br>10,843,614<br>2,330,611<br>3,629,557<br>51,060<br>206,223                           | 5,513,832<br>699,800<br>13,594,356<br>2,660,693<br>5,927,102<br>10,196,464<br>3,260,887<br>5,487,623<br>44,322<br>211,561                          | 5,813,405<br>699,145<br>14,441,657<br>2,217,281<br>6,602,157<br>11,147,051<br>3,607,966<br>6,105,954<br>83,553<br>252,002                          | 2   |
| 309,737   | 323,381   | 384,764   | 500,546  | 14,535,640   | 17,023,398   | 19,242,458   | 20,440,887   |     |
| 366,277<br>711,838<br>325,621<br>82,732<br>25,251<br>4,359<br>1,355,751<br>239,381<br>136,051<br>48,756<br>1,113,872<br>141,259 | 308,621<br>755,619<br>316,611<br>142,062<br>21,019<br>4,261<br>1,392,259<br>234,413<br>631,822<br>192,154<br>1,138,707<br>141,437 | 298,272<br>1,066,684<br>413,556<br>163,335<br>54,922<br>6,338<br>1,127,873<br>186,124<br>690,696<br>155,017<br>971,593<br>109,545 | 1,380,840<br>936,417<br>383,291<br>235,367<br>16,547<br>3,625<br>1,031,193<br>169,973<br>325,289<br>98,711<br>1,160,027<br>127,419 | 1,472,174<br>33,117,206<br>3,519,261<br>705,091<br>36,192,227<br>7,389,717<br>1,548,230<br>261,679<br>793,870<br>641,860<br>1,147,664<br>147,955 | 1,594,487<br>33,349,420<br>3,822,952<br>862,500<br>30,370,010<br>7,107,322<br>1,643,955<br>267,847<br>1,451,511<br>641,860<br>1,245,865<br>153,216 | 1,807,704<br>36,796,544<br>3,573,157<br>845,829<br>37,148,787<br>8,153,748<br>1,476,943<br>229,138<br>1,609,175<br>436,512<br>1,107,563<br>129,568 | 3,701,613<br>40,978,228<br>4,005,028<br>936,718<br>40,620,874<br>9,348,409<br>1,395,146<br>212,871<br>1,800,092<br>392,096<br>1,174,456<br>129,883 | 7   |
| 18,311,958  | 19,602,553  | 19,822,571  | 25,543,867   | 57,096,013   | 67,872,973   | 72,143,351   | 83,605,608   | 8   |
| 2<br>2<br>2<br>2<br>1<br>4<br>96  | 1<br>15<br>2<br>-<br>-<br>-<br>215<br>1,313   | 34<br>457<br>2<br>-<br>1<br>9<br>11<br>46<br>137  | Nil<br>-<br>-<br>-<br>33<br>1,183<br>14,005<br>6,079   | 66,808<br>541,854<br>77,683<br>1,280,775<br>103,884<br>1,695,560<br>458,006<br>9,542,682<br>1,091,887<br>968,794                                 | 74,447<br>662,731<br>62,781<br>961,723<br>116,225<br>1,740,230<br>458,735<br>9,590,079<br>1,007,548<br>1,007,548                                   | 109,841<br>795,516<br>70,252<br>272,100<br>176,849<br>2,293,051<br>602,340<br>3,719,490<br>1,107,548<br>1,009,666                                  | 139,060<br>917,041<br>77,427<br>274,935<br>240,502<br>2,137,814<br>652,331<br>3,443,551<br>1,174,456<br>1,009,666                                  | 14  |
| 112   | 1,566   | 1,435   | 21,145   | 14,223,899   | 14,350,828   | 8,392,380  | 8,094,533  | 15  |
| 1,246,371<br>107,856<br>127,234   | 1,367,343<br>39,107<br>93,650   | 1,339,981<br>132,274<br>153,453   | 1,726,489<br>145,289<br>240,846  | 1,573,736<br>131,132<br>101,506  | 1,692,344<br>94,510<br>126,571   | 1,757,319<br>209,154<br>232,218  | 2,028,197<br>202,979<br>327,019  | 16  |
| 107,233<br>368,249<br>1,871,821<br>595,342<br>25,815<br>118,539   | 1,242<br>5,434<br>2,628,070<br>897,791<br>9,402<br>30,760   | 5<br>50<br>1,193,697<br>593,436<br>22,816<br>184,747  | Nil<br>-<br>1,004,621<br>934,587<br>Nil<br>-   | 165,257<br>614,219<br>4,984,361<br>1,616,107<br>410,780<br>1,661,939   | 130,743<br>468,750<br>7,100,083<br>2,048,848<br>549,171<br>2,015,204   | 255,976<br>1,476,522<br>9,788,338<br>3,786,356<br>566,800<br>3,329,721   | 155,387<br>912,191<br>8,685,469<br>677,816<br>1,033,229<br>3,888,640   | 17  |
| 2,102,439   | 2,107,340   | 2,510,019   | 3,171,876  | 5,566,620  | 6,787,237  | 11,348,208   | 12,004,219   | 18  |
| 116,538   | 170,002   | 199,679   | 228,439  | 633,141  | 748,345  | 844,593  | 837,588  | 19  |
| 50,529,964<br>3,854,890<br>83,196<br>272,206<br>113,158   | 49,347,334<br>6,143,661<br>106,069<br>432,294<br>148,935  | 12,211,949<br>1,559,105<br>115,810<br>474,485<br>137,112  | 10,065,961<br>1,859,083<br>159,322<br>653,480<br>139,508   | 51,148,547<br>3,921,198<br>85,406<br>322,330<br>147,795  | 63,618,101<br>7,958,308<br>109,178<br>509,200<br>208,443   | 56,915,391<br>6,736,561<br>101,310,668<br>558,104<br>181,906   | 62,546,059<br>10,310,668<br>120,000,000<br>720,062<br>220,353  | 20  |
| 5,046,185   | 7,800,977   | 3,397,346   | 4,181,685  | 5,895,034  | 10,438,911   | 9,400,810  | 13,284,292   | 21  |

## 13.—Principal Imports into Canada for Consumption from United

| No.  | Item.   | United Kingdom. |            |            |            |
|--|---|-----------------|------------|------------|------------|
|  |   | 1934.           | 1935.      | 1936.      | 1937.      |
| <b>I. Agricultural and Vegetable Products—concluded.</b> |   |                 |            |            |            |
| <b>B. OTHER THAN FOOD—concluded.</b>                     |   |                 |            |            |            |
| Seeds—   |   |                 |            |            |            |
| 1  | Flaxseed..... bu.   | 243             | 75         | 454        | 119        |
|  | \$  | 784             | 375        | 1,955      | 396        |
| 2  | Grass seed..... lb.   | 20,191          | 93,460     | 69,300     | 34,154     |
|  | \$  | 2,193           | 8,123      | 9,518      | 3,428      |
|  | Totals, Seeds <sup>1</sup> ..... \$                               | 143,685         | 260,480    | 206,173    | 208,699    |
| Tobacco—   |   |                 |            |            |            |
| 3  | Tobacco, raw..... lb.   | 4,943           | 34,390     | 66,587     | 67,950     |
|  | \$  | 7,343           | 91,654     | 39,622     | 38,194     |
| 4  | Tobacco, manufactured..... lb.                                    | 99,155          | 101,320    | 95,928     | 104,879    |
|  | \$  | 320,462         | 329,176    | 314,232    | 345,162    |
|  | Totals, Tobacco <sup>1</sup> ..... \$                             | 327,805         | 420,830    | 353,854    | 383,356    |
| 5  | Broom corn..... \$  | Nil             | Nil        | 1,845      | Nil        |
| 6  | Turpentine, spirits of..... gal.                                  | 530             | 499        | 819        | 280        |
|  | \$  | 464             | 512        | 580        | 216        |
|  | TOTALS, B. OTHER THAN FOOD <sup>1</sup> ..... \$                  | 14,804,482      | 14,858,401 | 12,453,286 | 11,555,653 |
|  | Totals, Agricultural and Vegetable Products <sup>1</sup> ..... \$ | 20,341,896      | 26,104,264 | 18,067,399 | 17,923,553 |
| <b>II. Animals and Animal Products.</b>                  |   |                 |            |            |            |
| 7  | Animals, living..... \$   | 46,792          | 84,820     | 90,974     | 169,535    |
| 8  | Bone, ivory and shell products..... \$                            | 44,798          | 48,465     | 63,945     | 80,116     |
| 9  | Feathers and quills..... \$                                       | 65,674          | 35,326     | 26,190     | 30,004     |
| Fish—  |   |                 |            |            |            |
| 10   | Fish, fresh..... \$   | 1,353           | 816        | 492        | 683        |
| 11   | Fish, dried, salted, smoked..... \$                               | 69,156          | 45,866     | 53,077     | 50,871     |
| 12   | Fish, preserved or canned..... \$                                 | 35,341          | 42,043     | 48,286     | 65,934     |
|  | Totals, Fish <sup>1</sup> ..... \$                                | 105,850         | 89,325     | 116,855    | 117,488    |
| Furs—  |   |                 |            |            |            |
| 13   | Furs, undressed..... \$   | 336,502         | 528,457    | 657,700    | 1,291,863  |
| 14   | Furs, dressed..... \$   | 59,387          | 52,767     | 48,801     | 196,443    |
| 15   | Hatters fur..... \$   | 48,020          | 68,648     | 122,330    | 130,622    |
|  | Totals, Furs <sup>1</sup> ..... \$                                | 455,516         | 608,707    | 845,099    | 1,631,091  |
| 16   | Hair and bristles..... \$   | 11,838          | 13,749     | 23,431     | 37,446     |
| 17   | Hides and skins, raw..... cwt.                                    | 17,768          | 4,167      | 7,140      | 7,399      |
|  | \$  | 146,609         | 44,663     | 80,994     | 85,184     |
| Leather, Unmanufactured—                                 |   |                 |            |            |            |
| 18   | Glove leather..... \$   | 12,804          | 11,991     | 27,550     | 35,528     |
| 19   | Tanned leather..... \$  | 39,926          | 56,721     | 121,992    | 86,336     |
| 20   | Waxed or glazed leather..... \$                                   | 463,577         | 413,746    | 554,511    | 512,723    |
|  | Totals, Leather, Unmanufactured <sup>1</sup> .. \$                | 582,598         | 917,874    | 1,341,983  | 1,357,812  |
| Leather, Manufactured—                                   |   |                 |            |            |            |
| 21   | Boots and shoes..... pair   | 160,947         | 125,177    | 139,288    | 218,248    |
|  | \$  | 256,843         | 237,294    | 260,379    | 331,486    |
| 22   | Gloves and mitts..... \$  | 49,843          | 58,770     | 80,656     | 80,446     |
| 23   | Harness and saddlery..... \$                                      | 44,952          | 64,788     | 56,441     | 64,883     |
|  | Totals, Leather, Manufactured <sup>1</sup> .... \$                | 458,066         | 473,040    | 529,699    | 618,956    |
| Meats—   |   |                 |            |            |            |
| 24   | Canned meats..... lb.   | 86,205          | 18,282     | 43,330     | 557,032    |
|  | \$  | 24,101          | 10,295     | 10,824     | 54,686     |
| 25   | Pork, in brine..... lb.   | Nil             | Nil        | Nil        | Nil        |
|  | \$  | -               | -          | -          | -          |
|  | Totals, Meats <sup>1</sup> ..... \$                               | 127,247         | 87,947     | 219,745    | 254,707    |

<sup>1</sup> Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

| United States. |            |            |            | All Countries. |             |             |             | No. |
|----------------|------------|------------|------------|----------------|-------------|-------------|-------------|-----|
| 1934.          | 1935.      | 1936.      | 1937.      | 1934.          | 1935.       | 1936.       | 1937.       |     |
| 160            | 85         | 141        | 218        | 229,900        | 840,662     | 797,917     | 1,145,166   | 1   |
| 348            | 233        | 352        | 557        | 283,170        | 935,853     | 876,505     | 1,435,637   | 2   |
| 3,807,535      | 2,622,271  | 537,658    | 1,963,881  | 3,653,321      | 2,852,468   | 1,109,759   | 2,290,683   | 3   |
| 224,203        | 226,015    | 62,525     | 136,972    | 230,791        | 257,043     | 111,286     | 177,563     | 4   |
| 466,117        | 644,790    | 312,003    | 388,072    | 1,149,847      | 2,286,168   | 1,780,603   | 2,441,743   | 5   |
| 7,689,377      | 9,091,147  | 5,174,460  | 2,744,710  | 8,129,142      | 9,414,889   | 5,772,638   | 3,006,175   | 6   |
| 1,015,480      | 2,153,105  | 1,555,889  | 838,172    | 2,147,001      | 2,616,637   | 2,069,117   | 1,051,510   | 7   |
| 62,854         | 45,811     | 46,491     | 87,597     | 175,545        | 166,965     | 160,147     | 182,103     | 8   |
| 72,629         | 60,728     | 61,316     | 74,529     | 429,891        | 430,124     | 412,172     | 458,978     | 9   |
| 1,988,109      | 2,213,883  | 1,617,205  | 912,701    | 2,576,802      | 3,046,761   | 2,481,289   | 1,510,485   | 10  |
| 291,876        | 379,676    | 801,504    | 258,041    | 297,590        | 424,012     | 338,546     | 298,880     | 11  |
| 975,377        | 928,073    | 930,809    | 1,177,898  | 975,922        | 928,672     | 931,708     | 1,178,258   | 12  |
| 477,183        | 450,788    | 424,868    | 477,945    | 477,750        | 451,300     | 425,667     | 478,237     | 13  |
| 12,675,531     | 15,999,920 | 11,187,180 | 12,728,055 | 33,732,797     | 41,545,622  | 38,168,631  | 42,794,609  | 14  |
| 30,987,789     | 35,692,473 | 30,989,766 | 38,267,822 | 60,828,816     | 109,418,593 | 110,342,532 | 131,400,217 | 15  |
| 938,582        | 705,919    | 540,394    | 547,565    | 1,030,439      | 931,937     | 696,998     | 812,702     | 16  |
| 183,317        | 137,327    | 136,761    | 163,342    | 323,041        | 357,247     | 374,098     | 388,512     | 17  |
| 32,004         | 36,972     | 55,283     | 72,048     | 130,450        | 121,805     | 128,138     | 101,460     | 18  |
| 232,283        | 342,769    | 298,406    | 336,357    | 382,821        | 570,302     | 462,813     | 623,802     | 19  |
| 28,347         | 81,561     | 41,979     | 41,654     | 225,289        | 332,565     | 307,806     | 293,061     | 20  |
| 165,645        | 168,076    | 153,983    | 207,831    | 673,192        | 763,464     | 965,334     | 1,104,548   | 21  |
| 426,275        | 540,020    | 524,350    | 586,042    | 1,281,299      | 1,671,331   | 1,725,953   | 2,081,411   | 22  |
| 3,147,925      | 1,739,385  | 2,691,503  | 3,481,891  | 3,770,095      | 2,694,578   | 3,965,185   | 5,513,902   | 23  |
| 471,371        | 476,071    | 690,233    | 912,439    | 826,320        | 947,566     | 1,096,830   | 1,672,712   | 24  |
| 52,414         | 76,888     | 241,777    | 220,977    | 381,467        | 429,027     | 886,858     | 915,329     | 25  |
| 3,707,497      | 2,334,148  | 3,674,730  | 4,706,597  | 5,046,441      | 4,135,464   | 6,022,268   | 8,208,740   | 26  |
| 205,107        | 332,737    | 466,095    | 527,528    | 225,807        | 390,357     | 523,570     | 711,151     | 27  |
| 117,859        | 194,101    | 142,021    | 105,894    | 313,432        | 335,013     | 404,708     | 381,121     | 28  |
| 1,126,176      | 1,613,992  | 1,541,251  | 2,105,281  | 3,159,646      | 3,036,107   | 4,519,627   | 5,253,061   | 29  |
| 192,829        | 312,949    | 403,847    | 451,601    | 207,533        | 340,490     | 434,053     | 488,525     | 30  |
| 32,296         | 21,314     | 27,875     | 23,148     | 74,122         | 78,574      | 150,107     | 110,600     | 31  |
| 965,497        | 1,039,571  | 1,159,201  | 930,242    | 1,513,647      | 1,492,682   | 1,782,026   | 1,498,000   | 32  |
| 1,308,349      | 1,486,330  | 1,701,539  | 1,550,896  | 2,289,195      | 2,467,457   | 3,132,509   | 2,992,888   | 33  |
| 89,050         | 98,008     | 117,008    | 134,023    | 218,887        | 301,841     | 318,472     | 475,300     | 34  |
| 251,451        | 291,268    | 348,482    | 372,912    | 593,376        | 612,029     | 677,102     | 856,513     | 35  |
| 3,342          | 3,031      | 6,574      | 11,174     | 728,778        | 790,351     | 771,546     | 755,265     | 36  |
| 27,093         | 38,253     | 37,479     | 43,743     | 74,195         | 106,933     | 95,599      | 110,321     | 37  |
| 479,381        | 537,098    | 594,503    | 643,760    | 1,726,280      | 1,851,392   | 1,893,436   | 2,032,541   | 38  |
| 24,910         | 77,499     | 69,889     | 158,509    | 6,127,263      | 10,451,945  | 12,315,651  | 12,112,526  | 39  |
| 4,527          | 10,075     | 8,587      | 16,083     | 359,323        | 506,038     | 578,249     | 601,422     | 40  |
| 4,133,175      | 3,587,691  | 617,825    | 2,432,158  | 4,133,175      | 3,587,691   | 617,825     | 2,432,158   | 41  |
| 225,575        | 261,983    | 66,376     | 242,847    | 225,575        | 261,983     | 66,376      | 242,847     | 42  |
| 336,907        | 408,030    | 147,957    | 349,533    | 832,644        | 1,018,298   | 964,164     | 1,147,349   | 43  |



## 13.—Principal Imports into Canada for Consumption from United

| No.   | Item.   | United Kingdom. |            |            |            |
|---|---|-----------------|------------|------------|------------|
|   |   | 1934.           | 1935.      | 1936.      | 1937.      |
| <b>II. Animals and Animal Products—concluded.</b> |   |                 |            |            |            |
| Milk and Its Products—                            |   |                 |            |            |            |
| 1   | Butter..... lb.                                       | 1,858,304       | 539,128    | 8,032      | 49,112     |
|   | \$  | 279,701         | 84,401     | 1,345      | 10,082     |
| 2   | Cheese..... lb.                                       | 40,065          | 43,760     | 47,353     | 61,035     |
|   | \$  | 13,277          | 14,035     | 15,026     | 18,883     |
|   | Totals, Milk and Its Products <sup>1</sup> .....      | \$ 294,582      | 100,986    | 21,312     | 35,175     |
| Oils, Fats, Greases—                              |   |                 |            |            |            |
| 3   | Fish oils..... gal.                                   | 4,141           | 7,376      | 16,254     | 51,836     |
|   | \$  | 13,588          | 28,133     | 32,288     | 82,844     |
| 4   | Grease for soap and leather..... cwt.                 | 5,666           | 5,137      | 6,296      | 7,530      |
|   | \$  | 13,926          | 15,886     | 20,915     | 28,045     |
| 5   | Lard and compounds..... lb.                           | 15,340          | 8,871      | 17,516     | 6,551      |
|   | \$  | 1,010           | 409        | 1,022      | 444        |
|   | Totals, Oils, Fats, Greases <sup>1</sup> .....        | \$ 46,009       | 77,095     | 120,860    | 124,775    |
| 6   | Eggs in the shell..... doz.                           | 96              | 48         | 29         | 290        |
|   | \$  | 206             | 149        | 143        | 712        |
| 7   | Eggs, <i>n.o.p.</i> .....                             | \$ 1,604        | 754        | 402        | 232        |
| 8   | Gelatine, edible..... lb.                             | 704,787         | 876,534    | 614,734    | 805,231    |
|   | \$  | 175,708         | 194,113    | 132,707    | 207,248    |
| 9   | Sausage casings.....                                  | \$ 84,448       | 60,734     | 4          | 94,040     |
|   | Totals, Animals and Animal Products <sup>1</sup> . \$ | 3,102,972       | 3,038,530  | 3,792,424  | 5,070,766  |
| <b>III. Fibres and Textiles.</b>                  |   |                 |            |            |            |
| Cotton and Its Products—                          |   |                 |            |            |            |
| 10  | Cotton, raw..... lb.                                  | 14,604          | 453,261    | 73,031     | 138,835    |
|   | \$  | 1,781           | 68,759     | 14,131     | 25,612     |
| 11  | Cotton linters..... lb.                               | 148,092         | Nil        | 43,644     | 55,811     |
|   | \$  | 953             | —          | 3,090      | 1,925      |
| 12  | Cotton yarn..... lb.                                  | 3,596,007       | 4,605,901  | 4,707,644  | 4,741,903  |
|   | \$  | 1,813,997       | 2,235,729  | 2,324,170  | 2,453,341  |
| 13  | Fabrics, bleached..... lb.                            | 1,425,239       | 1,352,332  | 1,397,226  | 1,427,376  |
|   | \$  | 703,349         | 705,652    | 682,013    | 676,661    |
| 14  | Fabrics, unbleached..... lb.                          | 2,621,133       | 2,915,393  | 2,678,185  | 2,780,595  |
|   | \$  | 836,967         | 901,463    | 810,584    | 927,044    |
| 15  | Fabrics, piece dyed..... lb.                          | 2,714,357       | 3,105,587  | 3,380,564  | 3,609,819  |
|   | \$  | 1,431,181       | 1,646,066  | 1,750,219  | 1,829,766  |
| 16  | Fabrics, yarn dyed..... lb.                           | 446,390         | 667,341    | 735,444    | 805,476    |
|   | \$  | 253,461         | 357,830    | 394,902    | 475,338    |
| 17  | Fabrics, printed..... lb.                             | 1,806,002       | 2,033,359  | 2,012,025  | 1,980,099  |
|   | \$  | 1,077,276       | 1,153,768  | 1,105,865  | 1,055,261  |
| 18  | Velvetens and corduroys..... lb.                      | 430,047         | 482,060    | 509,388    | 445,546    |
|   | \$  | 343,181         | 412,062    | 461,114    | 428,285    |
| 19  | Embroideries.....                                     | \$ 15,445       | 30,735     | 144,114    | 131,918    |
| 20  | Handkerchiefs.....                                    | \$ 330,531      | 407,433    | 459,053    | 415,605    |
| 21  | Lace.....   | \$ 366,062      | 456,451    | 452,555    | 409,190    |
| 22  | Wearing apparel.....                                  | \$ 176,846      | 210,767    | 209,294    | 326,802    |
|   | Totals, Cotton and Its Products <sup>1</sup> ....     | \$ 8,373,034    | 10,246,727 | 10,794,963 | 11,253,443 |
| Flax, Hemp and Jute—                              |   |                 |            |            |            |
| 23  | Hemp, dressed or undressed..... cwt.                  | 350             | 224        | Nil        | Nil        |
|   | \$  | 4,104           | 711        | —          | —          |
| 24  | Flax, hemp and jute yarn..... lb.                     | 4,051,419       | 4,310,273  | 4,455,885  | 4,545,503  |
|   | \$  | 407,226         | 458,908    | 514,448    | 539,516    |
| 25  | Linen thread..... lb.                                 | 273,679         | 248,172    | 322,029    | 255,000    |
|   | \$  | 264,742         | 231,458    | 309,784    | 251,122    |
| 26  | Fabrics of flax or hemp.....                          | \$ 930,528      | 910,931    | 1,024,614  | 1,075,495  |
| 27  | Fabrics of jute..... yd.                              | 5,750,887       | 5,509,516  | 5,180,098  | 4,231,855  |
|   | \$  | 418,720         | 451,176    | 445,882    | 418,117    |
| 28  | Handkerchiefs.....                                    | \$ 426,077      | 436,430    | 462,377    | 478,128    |
| 29  | Towels.....   | \$ 142,074      | 197,019    | 180,398    | 157,017    |
|   | Totals, Flax, Hemp and Jute <sup>1</sup> .....        | \$ 3,551,251    | 3,754,909  | 4,066,803  | 4,331,836  |

<sup>1</sup> Totals include other items not specified.

## Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

| United States. |             |             |             | All Countries. |             |             |             | No. |
|----------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|-----|
| 1934.          | 1935.       | 1936.       | 1937.       | 1934.          | 1935.       | 1936.       | 1937.       |     |
| 6,764          | 15,976      | 68,229      | 57,048      | 2,602,744      | 878,586     | 164,923     | 112,745     | 1   |
| 1,700          | 4,731       | 19,686      | 17,409      | 413,949        | 139,398     | 35,746      | 29,368      | 2   |
| 142,631        | 131,795     | 151,962     | 176,472     | 957,478        | 967,472     | 1,292,169   | 1,346,897   |     |
| 52,357         | 39,122      | 53,713      | 53,160      | 271,879        | 262,189     | 326,886     | 331,031     |     |
| 77,888         | 65,340      | 88,748      | 98,631      | 713,583        | 430,690     | 395,864     | 407,324     |     |
| 48,442         | 46,222      | 42,996      | 100,100     | 263,394        | 281,155     | 346,221     | 449,007     | 3   |
| 30,655         | 41,312      | 47,295      | 158,123     | 169,145        | 226,115     | 259,594     | 435,965     |     |
| 242,064        | 120,272     | 69,584      | 46,269      | 259,284        | 138,352     | 111,960     | 80,615      | 4   |
| 841,486        | 486,684     | 488,865     | 287,517     | 891,404        | 549,566     | 702,583     | 444,027     |     |
| 3,424,426      | 1,500,002   | 97,716      | 236,107     | 3,446,086      | 1,755,447   | 728,560     | 485,761     | 5   |
| 169,372        | 63,531      | 3,647       | 18,254      | 170,424        | 70,375      | 59,275      | 33,081      |     |
| 1,106,135      | 827,352     | 627,562     | 564,289     | 1,395,607      | 1,202,552   | 1,493,990   | 1,214,029   |     |
| 13,060         | 21,563      | 94,564      | 37,249      | 23,894         | 31,363      | 101,602     | 51,647      | 6   |
| 7,148          | 11,602      | 29,780      | 18,858      | 11,109         | 15,322      | 32,434      | 24,499      |     |
| 9,970          | 10,805      | 41,262      | 69,206      | 32,918         | 47,220      | 50,716      | 89,377      | 7   |
| 152,989        | 147,605     | 182,601     | 185,642     | 1,736,878      | 2,045,266   | 2,113,026   | 2,221,834   | 8   |
| 85,189         | 100,240     | 89,052      | 96,511      | 443,737        | 523,213     | 501,288     | 519,189     |     |
| 170,544        | 278,119     | 189,465     | 80,873      | 634,342        | 1,161,363   | 1,178,470   | 915,525     | 9   |
| 10,459,740     | 9,827,680   | 10,973,245  | 12,659,575  | 19,841,877     | 19,957,477  | 24,314,226  | 27,863,224  |     |
| 128,289,546    | 131,650,873 | 131,359,641 | 143,748,459 | 132,456,624    | 138,025,066 | 136,555,504 | 147,836,584 | 10  |
| 13,746,851     | 17,096,928  | 16,402,270  | 19,287,365  | 14,343,617     | 18,111,446  | 17,208,589  | 19,905,773  |     |
| 6,502,928      | 5,088,562   | 5,604,362   | 6,889,292   | 6,996,747      | 5,290,302   | 5,849,244   | 6,194,830   | 11  |
| 245,631        | 288,157     | 328,301     | 331,923     | 247,777        | 301,397     | 338,657     | 357,352     |     |
| 1,334,559      | 301,308     | 378,285     | 354,772     | 4,037,167      | 4,917,855   | 5,068,422   | 5,117,518   | 12  |
| 688,621        | 174,898     | 220,619     | 204,322     | 2,511,890      | 2,430,096   | 2,568,673   | 2,679,451   |     |
| 442,508        | 419,608     | 410,704     | 436,183     | 1,049,365      | 1,822,349   | 1,829,750   | 1,897,520   | 13  |
| 243,441        | 232,105     | 217,454     | 211,537     | 1,100,611      | 1,025,520   | 928,676     | 918,998     |     |
| 3,128,128      | 2,372,573   | 2,408,621   | 3,571,267   | 5,773,148      | 5,297,703   | 5,091,807   | 6,360,392   | 14  |
| 821,102        | 687,891     | 682,270     | 971,099     | 1,673,368      | 1,565,676   | 1,398,390   | 1,902,333   |     |
| 549,359        | 549,979     | 831,107     | 1,025,063   | 4,018,583      | 4,217,379   | 5,044,944   | 5,048,255   | 15  |
| 390,283        | 420,612     | 334,197     | 645,983     | 2,193,044      | 2,380,295   | 2,668,480   | 2,910,018   |     |
| 142,106        | 113,324     | 238,833     | 296,605     | 746,931        | 897,590     | 1,240,762   | 1,593,738   |     |
| 79,175         | 73,251      | 131,999     | 180,461     | 415,774        | 494,136     | 659,030     | 842,080     | 16  |
| 416,128        | 387,030     | 394,840     | 565,161     | 2,332,401      | 2,517,800   | 2,528,904   | 2,672,659   |     |
| 404,833        | 360,726     | 311,266     | 424,847     | 1,576,135      | 1,588,190   | 1,488,849   | 1,549,964   | 17  |
| 49,559         | 25,927      | 33,476      | 47,241      | 576,057        | 528,928     | 594,661     | 716,305     | 18  |
| 35,303         | 26,183      | 33,165      | 45,552      | 405,174        | 454,599     | 527,277     | 584,804     |     |
| 6,615          | 4,518       | 17,563      | 59,431      | 77,536         | 83,498      | 242,494     | 231,090     | 19  |
| 2,374          | 2,535       | 8,961       | 15,738      | 477,202        | 513,180     | 599,435     | 609,771     | 20  |
| 22,418         | 22,616      | 24,567      | 22,656      | 631,303        | 635,107     | 545,571     | 519,193     | 21  |
| 176,828        | 198,521     | 242,694     | 391,060     | 978,908        | 1,121,838   | 1,218,638   | 1,341,304   | 22  |
| 17,838,117     | 20,415,256  | 19,986,613  | 23,935,467  | 28,609,455     | 33,514,397  | 33,572,292  | 38,087,820  |     |
| 4,304          | 2,985       | 2,404       | 1,876       | 23,498         | 19,166      | 19,324      | 47,848      | 23  |
| 23,378         | 29,631      | 34,084      | 17,141      | 82,457         | 76,966      | 102,585     | 348,682     |     |
| 52,122         | 80,541      | 90,888      | 234,845     | 4,270,001      | 4,484,477   | 4,692,048   | 4,986,469   | 24  |
| 11,556         | 17,618      | 18,272      | 43,617      | 442,788        | 493,963     | 554,673     | 705,223     |     |
| 1,854          | 2,307       | 932         | 1,476       | 276,061        | 250,455     | 328,145     | 261,280     | 25  |
| 2,285          | 2,625       | 1,137       | 1,950       | 267,525        | 224,164     | 311,231     | 230,800     |     |
| 5,275          | 13,183      | 15,521      | 23,374      | 949,326        | 936,033     | 1,047,646   | 1,107,322   | 26  |
| 445,609        | 348,670     | 477,808     | 332,291     | 72,331,707     | 75,518,443  | 80,514,104  | 99,891,079  | 27  |
| 23,927         | 17,239      | 21,743      | 16,464      | 3,084,921      | 3,255,833   | 3,297,923   | 3,611,946   |     |
| 872            | 2,440       | 2,188       | 2,282       | 513,210        | 514,939     | 582,990     | 613,201     | 28  |
| 1,658          | 1,130       | 950         | 4,639       | 169,499        | 211,043     | 192,704     | 199,243     | 29  |
| 427,222        | 516,838     | 510,733     | 674,244     | 7,310,070      | 7,811,445   | 8,423,237   | 9,526,053   |     |

## 13.—Principal Imports into Canada for Consumption from United

| No.                                 | Item.   | United Kingdom. |            |            |            |
|-------------------------------------|---|-----------------|------------|------------|------------|
|                                     |   | 1934.           | 1935.      | 1936.      | 1937.      |
| III. Fibres and Textiles—concluded. |   |                 |            |            |            |
| Silk and Its Products—              |   |                 |            |            |            |
| 1                                   | Silk, raw..... lb.                                  | Nil             | Nil        | Nil        | Nil        |
|                                     | \$  | —               | —          | —          | —          |
| 2                                   | Velvets and plushes..... \$                         | 16,043          | 20,889     | 34,847     | 24,325     |
| 3                                   | Other silk fabrics..... \$                          | 15,612          | 78,406     | 99,430     | 137,982    |
| 4                                   | Wearing apparel..... \$                             | 84,267          | 108,777    | 134,514    | 154,243    |
|                                     | Totals, Silk and Its Products <sup>1</sup> ..... \$ | 278,639         | 328,903    | 410,080    | 513,988    |
| Wool and Its Products—              |   |                 |            |            |            |
| 5                                   | Wool, raw..... lb.                                  | 7,816,531       | 4,824,587  | 6,617,868  | 6,582,008  |
|                                     | \$  | 1,903,520       | 1,139,922  | 1,624,308  | 1,990,860  |
| 6                                   | Noils..... lb.                                      | 942,606         | 580,854    | 701,616    | 701,923    |
|                                     | \$  | 346,114         | 205,684    | 305,535    | 302,157    |
| 7                                   | Worsted tops..... lb.                               | 9,143,174       | 7,269,135  | 10,290,098 | 10,515,116 |
|                                     | \$  | 4,050,468       | 3,168,297  | 4,585,707  | 5,518,984  |
| 8                                   | Woollen yarn..... lb.                               | 4,334,871       | 2,936,672  | 3,368,525  | 3,423,436  |
|                                     | \$  | 3,212,535       | 2,317,095  | 2,687,173  | 2,840,345  |
| 9                                   | Carpets and rugs..... \$                            | 155,821         | 184,245    | 200,812    | 287,785    |
| 10                                  | Dress goods to be dyed..... lb.                     | 1,114,782       | 1,304,232  | 1,330,830  | 1,334,920  |
|                                     | \$  | 1,157,939       | 1,375,542  | 1,368,568  | 1,437,263  |
| 11                                  | Overcoatings..... lb.                               | 94,074          | 171,730    | 812,028    | 1,180,008  |
|                                     | \$  | 85,696          | 160,878    | 710,011    | 1,065,450  |
| 12                                  | Tweeds..... lb.                                     | 972,272         | 1,500,831  | 1,506,002  | 1,436,403  |
|                                     | \$  | 901,628         | 1,194,655  | 1,227,214  | 1,339,839  |
| 13                                  | Worsted and serges..... lb.                         | 2,055,963       | 2,321,271  | 3,408,409  | 4,087,083  |
|                                     | \$  | 2,542,081       | 2,986,839  | 3,942,509  | 4,814,633  |
| 14                                  | Blankets..... lb.                                   | 160,680         | 396,463    | 548,331    | 790,653    |
|                                     | \$  | 74,324          | 185,379    | 250,127    | 411,740    |
| 15                                  | Socks and stockings..... doz. pr.                   | 87,233          | 84,839     | 91,520     | 109,644    |
| 16                                  | Other wearing apparel..... \$                       | 340,519         | 340,617    | 387,127    | 439,031    |
|                                     | \$  | 642,217         | 791,827    | 900,707    | 1,081,521  |
|                                     | Totals, Wool and Its Products <sup>1</sup> ..... \$ | 18,084,105      | 16,875,396 | 19,785,339 | 23,184,795 |
| Silk, Artificial—                   |   |                 |            |            |            |
| 17                                  | Silk yarn, artificial..... lb.                      | 365,868         | 411,465    | 445,949    | 996,624    |
|                                     | \$  | 314,442         | 317,744    | 337,469    | 685,395    |
| 18                                  | Fabrics, artificial silk..... \$                    | 1,035,973       | 809,469    | 469,951    | 980,985    |
|                                     | Totals, Artificial Silk <sup>1</sup> ..... \$       | 1,411,276       | 1,204,626  | 892,689    | 1,770,466  |
| 19                                  | Fibre, manila..... cwt.                             | Nil             | 604        | Nil        | Nil        |
|                                     | \$  | —               | 1,375      | —          | —          |
| 20                                  | Fibre, sisal, istle, etc..... cwt.                  | 9,208           | 14,665     | 3,595      | 1,330      |
|                                     | \$  | 36,139          | 47,271     | 14,084     | 8,706      |
| 21                                  | Binder twine..... cwt.                              | 72,536          | 79,241     | 90,080     | 111,355    |
|                                     | \$  | 476,831         | 534,084    | 567,701    | 921,127    |
| 22                                  | Fishing lines..... \$                               | 809,713         | 962,024    | 1,004,407  | 1,158,354  |
| 23                                  | Gloves..... \$                                      | 100,874         | 135,507    | 179,616    | 132,670    |
| 24                                  | Hats and caps..... \$                               | 220,374         | 180,987    | 223,512    | 270,871    |
| 25                                  | Oilcloth..... lb.                                   | 824,351         | 1,688,581  | 2,367,755  | 3,010,530  |
|                                     | \$  | 94,810          | 165,975    | 216,713    | 278,350    |
| 26                                  | Rags and waste..... cwt.                            | 44,251          | 38,923     | 54,584     | 62,900     |
|                                     | \$  | 123,745         | 105,136    | 344,682    | 485,480    |
| 27                                  | Surgical dressings..... \$                          | 176,078         | 138,424    | 230,386    | 187,463    |
|                                     | Totals, Fibres and Textiles <sup>1</sup> ..... \$   | 35,123,319      | 36,537,696 | 40,591,719 | 46,633,288 |
| IV. Wood, Wood Products and Paper.  |   |                 |            |            |            |
| Wood, Unmanufactured—               |   |                 |            |            |            |
| 28                                  | Logs..... M ft.                                     | Nil             | Nil        | Nil        | Nil        |
|                                     | \$  | —               | —          | —          | —          |
| 29                                  | Railroad ties..... No.                              | Nil             | Nil        | Nil        | Nil        |
|                                     | \$  | —               | —          | —          | —          |
| 30                                  | Lumber..... M ft.                                   | 7               | 15         | 8          | 24         |
|                                     | \$  | 1,550           | 3,017      | 2,191      | 3,331      |
| 31                                  | Veneers..... \$                                     | 3,656           | 6,270      | 5,862      | 5,374      |
|                                     | Totals, Wood, Unmanufactured <sup>1</sup> ..... \$  | 16,026          | 10,264     | 9,783      | 10,531     |

<sup>1</sup> Totals include other items not specified.

## Kingdom, United States, and All Countries, fiscal years 1931-37—continued.

| United States.  |  |  |  | All Countries.   |  |   |  | No.  |
|---|--|--|--|--|--|---|--|--|
| 1934.   | 1935.  | 1936.  | 1937.  | 1934.  | 1935.  | 1936.   | 1937.  |  |
| 2,411,900<br>4,327,621<br>27,129<br>144,065<br>522,136  | 2,586,181<br>3,655,014<br>292,949<br>359,642<br>521,641  | 2,878,284<br>4,904,668<br>293,921<br>365,168<br>371,934  | 2,191,196<br>4,062,250<br>271,266<br>464,520<br>419,163  | 2,505,200<br>4,534,182<br>664,161<br>763,640<br>778,095  | 2,692,003<br>3,337,406<br>646,731<br>1,235,324<br>810,927  | 3,001,902<br>5,115,544<br>577,322<br>1,237,413<br>649,718   | 2,318,030<br>4,205,726<br>465,319<br>1,281,543<br>732,095  | 1<br>2<br>3<br>4                                   |
| 5,371,147   | 4,990,911  | 6,123,129  | 5,395,986  | 7,535,217  | 6,015,313  | 8,066,547   | 7,311,657  |  |
| 2,011<br>701<br>Nil<br>Nil<br>Nil<br>27,371<br>16,021<br>12,171<br>Nil<br>509<br>904<br>1,100<br>2,374<br>5,976<br>10,100<br>2,214<br>2,283<br>57<br>343<br>103,107 | 1,042<br>869<br>215<br>114<br>1,012<br>704<br>4,014<br>7,784<br>11,064<br>Nil<br>245<br>588<br>1,710<br>4,252<br>2,992<br>8,473<br>2,072<br>2,446<br>89<br>499<br>99,580 | 3,274<br>2,306<br>Nil<br>873<br>777<br>4,333<br>7,927<br>21,631<br>Nil<br>380<br>647<br>739<br>1,835<br>3,207<br>3,207<br>8,544<br>2,147<br>2,931<br>193<br>794<br>119,397 | 3,336<br>1,839<br>438<br>233<br>6,615<br>6,207<br>5,817<br>13,690<br>57,106<br>Nil<br>488<br>750<br>189<br>599<br>3,047<br>10,318<br>2,132<br>2,006<br>259<br>1,060<br>141,329 | 17,215,256<br>3,747,155<br>1,211,721<br>406,158<br>10,719,961<br>4,849,898<br>4,870,770<br>3,275,695<br>481,212<br>1,168,032<br>1,203,979<br>99,804<br>97,033<br>984,215<br>921,627<br>2,115,045<br>2,644,730<br>108,266<br>79,916<br>88,860<br>349,705<br>818,095 | 12,012,265<br>2,765,921<br>630,471<br>278,665<br>8,459,877<br>3,845,209<br>2,956,751<br>2,308,902<br>575,072<br>1,329,555<br>1,401,720<br>180,243<br>183,737<br>1,311,757<br>1,214,775<br>2,356,906<br>3,060,219<br>398,920<br>135,064<br>85,911<br>343,323<br>968,625 | 19,219,073<br>3,069,519<br>780,671<br>326,624<br>12,966,686<br>5,844,162<br>3,350,525<br>2,637,326<br>557,486<br>1,943,716<br>1,376,227<br>830,557<br>733,315<br>1,383,123<br>1,254,583<br>3,441,186<br>4,057,717<br>551,002<br>253,543<br>92,749<br>364,090<br>1,101,207 | 23,771,230<br>6,476,705<br>999,193<br>485,704<br>12,480,068<br>6,016,207<br>3,449,483<br>2,339,089<br>709,740<br>1,339,889<br>1,443,330<br>1,188,439<br>1,073,369<br>1,480,000<br>1,248,461<br>4,129,775<br>4,962,740<br>793,099<br>414,498<br>119,871<br>445,280<br>1,303,831 |  |
| 259,064   | 261,075  | 270,674  | 381,279  | 21,920,547   | 20,301,393   | 24,460,624  | 30,152,054   |  |
| 23,712<br>32,680<br>191,765   | 128,668<br>108,841<br>200,302  | 300,550<br>195,671<br>247,714  | 127,785<br>112,051<br>309,445  | 2,082,202<br>1,323,782<br>1,402,724  | 965,341<br>662,553<br>1,171,302  | 1,078,504<br>670,349<br>863,328   | 1,410,756<br>919,544<br>1,670,480  | 17<br>18   |
| 302,854   | 419,979  | 650,127  | 870,219  | 3,003,250  | 2,141,230  | 1,945,377   | 3,186,546  |  |
| 75,835<br>268,908<br>873,090<br>1,301,593<br>14<br>80<br>283,141<br>2,280<br>217,007<br>64,546<br>17,872<br>220,618<br>1,034,682<br>55,531                          | 48,977<br>187,025<br>152,740<br>518,714<br>400<br>2,950<br>274,315<br>4,355<br>212,241<br>79,083<br>20,211<br>232,416<br>1,133,652<br>31,907                             | 10,718<br>38,509<br>226,320<br>765,502<br>8,632<br>59,389<br>274,148<br>7,800<br>19,170<br>347,063<br>60,368<br>317,708<br>1,344,854<br>34,823                             | 2,315<br>14,039<br>251,211<br>1,243,910<br>500<br>3,947<br>297,375<br>14,597<br>237,664<br>1,497,435<br>200,927<br>366,282<br>1,712,602<br>36,792                              | 126,119<br>440,248<br>573,538<br>1,938,887<br>201,470<br>1,163,819<br>1,183,091<br>191,980<br>560,789<br>890,784<br>113,365<br>313,160<br>1,385,510<br>233,371   | 134,334<br>464,907<br>290,245<br>972,958<br>196,904<br>1,244,504<br>1,869,252<br>280,942<br>505,013<br>1,768,278<br>186,433<br>372,882<br>1,592,444<br>173,120   | 99,525<br>407,341<br>524,171<br>1,950,718<br>266,363<br>1,654,697<br>1,379,865<br>400,313<br>515,013<br>2,716,534<br>277,370<br>443,112<br>2,041,364<br>263,518   | 33,823<br>214,422<br>2,511,985<br>2,885,450<br>266,692<br>2,019,374<br>1,562,467<br>527,426<br>505,071<br>4,511,565<br>479,418<br>523,558<br>2,814,478<br>227,400  | 19<br>20<br>21<br>22<br>23<br>24<br>25<br>26<br>27 |
| 28,553,731  | 30,562,261   | 32,091,435   | 37,176,512   | 79,372,479   | 81,798,290   | 89,814,161  | 104,811,304  |  |
| 25,762<br>379,408<br>85,540<br>128,470<br>48,510<br>2,051,059<br>231,454  | 23,615<br>385,792<br>160,948<br>211,051<br>57,705<br>2,376,311<br>281,707  | 8,973<br>158,531<br>197,064<br>251,294<br>73,153<br>2,865,014<br>512,844   | 4,861<br>88,425<br>188,521<br>256,368<br>100,205<br>3,964,469<br>512,670   | 25,762<br>379,408<br>85,540<br>128,470<br>48,761<br>2,071,345<br>278,425   | 29,143<br>389,274<br>160,948<br>211,051<br>58,370<br>2,407,248<br>323,796  | 9,075<br>160,796<br>187,064<br>251,294<br>73,630<br>2,897,853<br>546,166  | 4,865<br>88,571<br>188,521<br>256,368<br>100,661<br>3,995,014<br>563,230   | 28<br>29<br>30<br>31                               |
| 3,086,108   | 3,701,915  | 4,169,457  | 5,204,280  | 3,172,025  | 3,829,144  | 4,307,124   | 5,408,587  |  |

## 13.—Principal Imports into Canada for Consumption from United

| No.   | Item.   | United Kingdom.  |                  |                  |                  |
|---|---|------------------|------------------|------------------|------------------|
|   |   | 1934.            | 1935.            | 1936.            | 1937.            |
| <b>IV. Wood, Wood Products and Paper—concl.</b> |   |                  |                  |                  |                  |
|   | Wood, Manufactured—   |                  |                  |                  |                  |
| 1   | Cork manufactures..... \$                                   | 61,864           | 59,748           | 64,823           | 72,220           |
| 2   | Furniture..... \$   | 75,504           | 99,180           | 104,085          | 140,713          |
| 3   | Staves..... \$  | 122              | Nil              | Nil              | Nil              |
| 4   | Wood-pulp..... cwt. \$                                      | Nil              | Nil              | 200              | Nil              |
|   |   | —                | —                | 809              | —                |
|   | Totals, Wood, Manufactured <sup>1</sup> ..... \$            | 215,885          | 235,417          | 247,255          | 288,206          |
|   | Paper—  |                  |                  |                  |                  |
| 5   | Boxes and containers..... \$                                | 22,761           | 26,544           | 31,136           | 45,081           |
| 6   | Paper board..... lb. \$                                     | 458,160          | 394,925          | 601,511          | 526,596          |
|   |   | 29,782           | 30,838           | 46,589           | 53,334           |
| 7   | Printing paper..... lb. \$                                  | 2,417,376        | 1,945,134        | 2,049,729        | 1,924,999        |
|   |   | 177,379          | 148,777          | 153,961          | 145,921          |
| 8   | Wrapping paper..... lb. \$                                  | 971,711          | 455,582          | 547,809          | 443,692          |
|   |   | 45,770           | 26,301           | 33,009           | 23,090           |
|   | Totals, Paper <sup>1</sup> ..... \$                         | 1,067,682        | 1,010,268        | 1,101,114        | 1,208,352        |
|   | Books and Printed Matter—                                   |                  |                  |                  |                  |
| 9   | Advertising pamphlets, etc..... lb. \$                      | 429,716          | 365,795          | 384,537          | 446,526          |
|   |   | 191,538          | 140,470          | 150,995          | 160,200          |
| 10  | Bibles, prayer books, etc..... \$                           | 108,925          | 115,759          | 121,627          | 106,078          |
| 11  | Newspapers and magazines..... \$                            | 198,889          | 254,397          | 340,083          | 394,465          |
| 12  | Photographs, chromos, etc..... \$                           | 37,238           | 49,526           | 55,556           | 65,373           |
| 13  | Text books..... \$  | 388,416          | 404,685          | 408,839          | 498,430          |
|   | Totals, Books and Printed Matter <sup>1</sup> .. \$         | 1,944,312        | 1,995,836        | 2,155,244        | 2,254,729        |
|   | <b>Totals, Wood, Wood Products and Paper<sup>1</sup> \$</b> | <b>3,243,905</b> | <b>3,251,785</b> | <b>3,513,396</b> | <b>3,761,818</b> |
| <b>V. Iron and Its Products.</b>                |   |                  |                  |                  |                  |
| 14  | Iron ore..... ton \$  | Nil              | 33               | 288              | Nil              |
|   |   | —                | 424              | 8,837            | —                |
| 15  | Pigs, ingots, etc..... cwt. \$                              | 60,953           | 142,316          | 106,422          | 182,801          |
|   |   | 77,109           | 152,154          | 115,129          | 236,497          |
| 16  | Scrap iron or steel..... ton \$                             | 5                | 32               | 15               | 3                |
|   |   | 75               | 80               | 41               | 15               |
| 17  | Castings and forgings..... \$                               | 225,185          | 421,706          | 512,606          | 502,614          |
|   | Rolling-mill Products—                                      |                  |                  |                  |                  |
| 18  | Band and hoop..... cwt. \$                                  | 42,025           | 34,467           | 43,703           | 43,588           |
|   |   | 178,553          | 208,511          | 251,189          | 343,727          |
| 19  | Bars, including rails..... cwt. \$                          | 90,292           | 84,675           | 91,697           | 104,296          |
|   |   | 389,332          | 529,097          | 585,755          | 719,366          |
|   | Plates and Sheets—  |                  |                  |                  |                  |
| 20  | Plates..... cwt. \$   | 110,015          | 100,826          | 157,302          | 194,867          |
|   |   | 230,046          | 204,278          | 326,901          | 421,950          |
| 21  | Sheets, galvanized..... cwt. \$                             | 62,915           | 101,320          | 153,553          | 175,348          |
|   |   | 202,054          | 325,828          | 530,182          | 586,059          |
| 22  | Sheets for galvanizing..... cwt. \$                         | 263,705          | 240,380          | 130,955          | 175,547          |
|   |   | 593,381          | 596,088          | 319,528          | 496,253          |
| 23  | Sheets for tinning..... cwt. \$                             | 38,910           | 178,190          | 204,401          | 219,060          |
|   |   | 117,898          | 538,163          | 602,033          | 644,396          |
| 24  | Sheets, other..... cwt. \$                                  | 254,771          | 293,528          | 476,889          | 340,533          |
|   |   | 674,231          | 814,402          | 1,285,702        | 977,970          |
| 25  | Skelp..... cwt. \$  | 16,402           | 10,941           | 21,818           | 21,816           |
|   |   | 43,602           | 23,074           | 47,228           | 41,830           |
| 26  | Tin plate..... cwt. \$                                      | 1,663,436        | 1,594,349        | 1,537,085        | 1,642,049        |
|   |   | 7,347,131        | 7,350,346        | 7,511,760        | 8,001,612        |
|   | Totals, Plates and Sheets <sup>1</sup> ..... cwt. \$        | 2,410,154        | 2,519,534        | 2,692,203        | 2,768,720        |
|   |   | 9,208,343        | 9,852,179        | 10,623,395       | 11,170,070       |
| 27  | Structural iron and steel..... ton \$                       | 6,190            | 8,810            | 14,234           | 6,152            |
|   |   | 217,858          | 310,094          | 502,149          | 247,743          |
|   | Totals, Rolling-Mill Products <sup>1</sup> ..... \$         | 9,999,037        | 10,899,881       | 11,962,488       | 12,480,906       |

<sup>1</sup> Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

| United States. |            |            |            | All Countries. |            |            |            | No. |
|----------------|------------|------------|------------|----------------|------------|------------|------------|-----|
| 1934.          | 1935.      | 1936.      | 1937.      | 1934.          | 1935.      | 1936.      | 1937.      |     |
| 178,255        | 168,378    | 192,007    | 286,667    | 407,285        | 468,477    | 456,646    | 650,013    | 1   |
| 272,303        | 299,924    | 364,021    | 746,446    | 435,482        | 487,909    | 564,988    | 971,243    | 2   |
| 520,544        | 201,332    | 200,222    | 223,338    | 520,666        | 201,332    | 200,222    | 223,338    | 3   |
| 75,713         | 226,606    | 314,561    | 403,264    | 75,713         | 226,730    | 325,737    | 403,222    | 4   |
| 115,710        | 359,554    | 510,459    | 660,385    | 115,710        | 361,574    | 529,926    | 651,070    |     |
| 1,994,217      | 2,050,518  | 2,394,086  | 3,296,132  | 2,570,567      | 2,736,176  | 3,092,684  | 4,128,282  |     |
| 284,421        | 252,818    | 222,312    | 377,071    | 321,063        | 292,890    | 265,142    | 437,366    | 5   |
| 9,828,236      | 10,917,078 | 13,476,995 | 16,881,417 | 10,500,020     | 11,630,383 | 14,753,408 | 18,336,454 | 6   |
| 392,990        | 491,939    | 563,254    | 756,658    | 431,658        | 468,380    | 635,130    | 843,300    |     |
| 5,016,182      | 4,241,286  | 4,676,017  | 4,505,604  | 9,211,787      | 7,178,007  | 7,957,532  | 7,968,828  | 7   |
| 407,266        | 398,904    | 434,276    | 489,078    | 637,540        | 634,855    | 680,012    | 745,919    |     |
| 3,189,048      | 3,724,951  | 2,931,551  | 2,423,378  | 5,020,117      | 5,031,587  | 4,199,465  | 4,073,765  | 8   |
| 302,789        | 293,382    | 263,596    | 259,126    | 393,227        | 358,304    | 335,291    | 347,620    |     |
| 3,456,092      | 3,699,850  | 4,015,053  | 4,955,607  | 5,242,168      | 5,600,024  | 5,989,251  | 7,060,499  |     |
| 1,577,728      | 2,104,678  | 2,298,716  | 3,113,735  | 2,065,936      | 2,529,310  | 2,743,154  | 3,625,522  | 9   |
| 649,217        | 826,171    | 942,706    | 1,323,319  | 869,556        | 995,239    | 1,130,453  | 1,511,322  |     |
| 122,443        | 108,927    | 135,169    | 131,889    | 329,560        | 338,811    | 365,260    | 362,783    | 10  |
| 2,469,639      | 2,539,724  | 2,927,171  | 4,507,233  | 2,675,982      | 2,808,524  | 3,275,745  | 4,910,045  | 11  |
| 193,341        | 206,941    | 249,964    | 284,141    | 243,636        | 267,952    | 321,304    | 365,431    | 12  |
| 462,469        | 455,670    | 478,909    | 576,309    | 944,508        | 954,198    | 977,527    | 1,128,442  | 13  |
| 6,010,010      | 6,593,535  | 7,284,803  | 9,604,884  | 8,372,027      | 9,034,343  | 9,882,572  | 12,380,352 |     |
| 14,547,027     | 16,045,818 | 17,893,399 | 23,060,903 | 19,357,987     | 21,199,687 | 23,271,631 | 28,927,720 |     |
| 176,369        | 680,857    | 764,262    | 751,182    | 205,811        | 1,060,843  | 1,431,111  | 1,325,195  | 14  |
| 344,682        | 1,260,015  | 1,572,932  | 1,584,701  | 402,034        | 1,975,532  | 2,829,987  | 2,638,731  |     |
| 118,197        | 355,941    | 238,019    | 136,940    | 194,116        | 506,382    | 395,364    | 328,963    | 15  |
| 298,935        | 674,022    | 474,392    | 411,028    | 445,326        | 857,459    | 661,854    | 662,095    |     |
| 62,427         | 60,558     | 101,051    | 70,062     | 52,576         | 67,453     | 101,997    | 72,070     | 16  |
| 359,690        | 435,984    | 600,822    | 613,129    | 360,442        | 470,444    | 607,406    | 629,739    |     |
| 1,215,591      | 1,834,155  | 1,818,246  | 1,557,108  | 1,443,221      | 2,257,687  | 2,381,413  | 2,065,465  | 17  |
| 253,915        | 377,450    | 538,405    | 691,539    | 314,063        | 429,593    | 603,394    | 759,575    | 18  |
| 887,031        | 1,396,536  | 1,913,025  | 2,492,730  | 1,175,442      | 1,712,246  | 2,283,478  | 2,989,961  |     |
| 361,201        | 629,465    | 548,595    | 801,335    | 503,951        | 773,189    | 737,996    | 1,025,690  | 19  |
| 947,922        | 1,578,975  | 1,487,210  | 2,092,887  | 1,488,562      | 2,319,202  | 2,358,703  | 3,211,601  |     |
| 74,412         | 138,947    | 187,632    | 328,079    | 194,402        | 260,265    | 360,910    | 537,815    | 20  |
| 163,717        | 304,330    | 422,781    | 760,650    | 409,254        | 544,160    | 774,994    | 1,209,709  |     |
| 34,018         | 34,700     | 87,032     | 74,713     | 103,030        | 137,290    | 235,504    | 278,976    | 21  |
| 119,865        | 135,864    | 333,015    | 305,255    | 338,762        | 406,810    | 839,923    | 969,651    |     |
| 6,650          | 23,675     | 5,767      | 334        | 270,365        | 263,955    | 136,722    | 175,891    | 22  |
| 14,719         | 22,678     | 15,001     | 1,970      | 608,100        | 648,766    | 333,429    | 498,223    |     |
| 18,427         | 35,550     | 13,115     | 1,077      | 57,337         | 213,740    | 217,516    | 220,137    | 23  |
| 66,058         | 135,888    | 45,854     | 3,674      | 183,956        | 674,051    | 647,587    | 648,070    |     |
| 619,896        | 906,877    | 1,261,847  | 1,616,725  | 905,189        | 1,227,068  | 1,788,689  | 2,015,705  | 24  |
| 1,097,910      | 2,694,776  | 3,633,281  | 4,785,758  | 2,430,957      | 3,567,175  | 5,017,865  | 5,886,562  |     |
| 612,634        | 1,270,477  | 1,450,979  | 1,669,658  | 992,542        | 1,372,652  | 1,738,994  | 1,971,208  | 25  |
| 1,051,717      | 2,298,927  | 2,590,297  | 3,089,089  | 1,523,062      | 2,431,917  | 2,955,046  | 3,452,541  |     |
| 56,637         | 55,543     | 64,220     | 399,027    | 1,721,472      | 1,649,952  | 1,603,517  | 2,042,112  | 26  |
| 262,824        | 280,309    | 313,755    | 1,974,405  | 7,614,023      | 7,631,123  | 7,840,011  | 9,980,990  |     |
| 1,422,684      | 2,465,669  | 3,070,592  | 4,089,013  | 4,244,397      | 5,124,953  | 6,098,852  | 7,241,834  |     |
| 3,376,310      | 5,902,765  | 7,352,883  | 10,920,801 | 13,108,114     | 15,063,502 | 18,439,155 | 22,645,846 |     |
| 11,303         | 24,588     | 26,519     | 48,408     | 19,913         | 35,600     | 44,466     | 59,727     | 27  |
| 438,239        | 1,003,741  | 1,075,819  | 2,055,484  | 733,333        | 1,379,288  | 1,674,505  | 2,441,041  |     |
| 5,670,922      | 9,917,874  | 11,851,580 | 17,567,625 | 16,533,843     | 21,412,574 | 24,808,933 | 31,351,440 |     |

## 13.—Principal Imports into Canada for Consumption from United

| No.   | Item.   | United Kingdom. |            |            |            |
|---|---|-----------------|------------|------------|------------|
|   |   | 1934.           | 1935.      | 1936.      | 1937.      |
| V. Iron and Its Products—concluded.                 |   |                 |            |            |            |
| Tubes and Pipes—                                    |   |                 |            |            |            |
| 1   | Boiler tubes..... \$                          | 135,741         | 170,191    | 183,113    | 171,047    |
| 2   | Seamless tubing, 5c. per lb. and over..... \$ | 53,319          | 53,007     | 111,211    | 148,494    |
| 3   | Wrought or seamless tubing..... \$            | 81,123          | 47,221     | 61,679     | 289,949    |
| 4   | Fittings for pipe..... \$                     | 1,799           | 533        | 251        | 961        |
| Totals, Tubes and Pipes <sup>1</sup> ..... \$       |   | 293,575         | 310,584    | 362,708    | 617,087    |
| Wire..... \$  |   |                 |            |            |            |
| 5   | ..... \$                                      | 652,672         | 982,810    | 1,057,495  | 1,308,138  |
| Chains..... \$                                      |   | 63,065          | 106,324    | 120,056    | 134,008    |
| Engines and Boilers—                                |   |                 |            |            |            |
| 7   | Automobile engines..... No.                   | 43              | 109        | 5          | 22         |
|   | ..... \$                                      | 17,815          | 36,053     | 5,489      | 14,067     |
| 8   | Marine engines..... No.                       | 4               | 16         | 9          | 4          |
|   | ..... \$                                      | 3,227           | 42,571     | 5,875      | 3,821      |
| 9   | Engines, diesel and parts..... No.            | 102             | 196        | 424        | 422        |
|   | ..... \$                                      | 186,242         | 302,982    | 500,714    | 734,359    |
| 10  | Other internal combustion engines..... No.    | 32              | 428        | 485        | 745        |
|   | ..... \$                                      | 42,873          | 51,403     | 23,549     | 27,319     |
| Totals, Engines and Boilers <sup>1</sup> ..... \$   |   | 304,476         | 501,102    | 759,976    | 1,005,447  |
| Farm Implements—                                    |   |                 |            |            |            |
| 11  | Traction engines (farm)..... No.              | 1               | 3          | 23         | 94         |
|   | ..... \$                                      | 1,384           | 3,199      | 12,271     | 47,407     |
| 12  | Traction engine parts..... \$                 | 10,578          | 20,561     | 15,632     | 27,133     |
| Totals, Farm Implements <sup>1</sup> ..... \$       |   | 131,992         | 148,807    | 214,607    | 293,160    |
| Hardware and Cutlery—                               |   |                 |            |            |            |
| 13  | Cutlery..... \$                               | 571,250         | 503,212    | 591,724    | 598,043    |
| 14  | Needles and pins..... \$                      | 232,045         | 242,208    | 209,369    | 279,140    |
| 15  | Nuts and washers..... \$                      | 12,979          | 13,082     | 7,949      | 11,675     |
| Totals, Hardware and Cutlery <sup>1</sup> ..... \$  |   | 856,619         | 811,709    | 928,544    | 938,615    |
| Machinery—  |   |                 |            |            |            |
| 16  | Adding machines..... \$                       | 1,569           | 239        | 34         | Nil        |
| 17  | Air-compressing machinery..... \$             | 23,359          | 55,026     | 66,914     | 67,138     |
| 18  | Cranes and derricks..... \$                   | 7,336           | 3,294      | 5,805      | 45,728     |
| 19  | Logging equipment..... \$                     | 1,499           | 1,222      | 181        | 2,630      |
| 20  | Metal-working machinery..... \$               | 94,261          | 147,328    | 170,452    | 228,982    |
| 21  | Mining machinery..... \$                      | 490,894         | 543,408    | 548,317    | 462,741    |
| 22  | Paper-mill machines..... \$                   | 19,559          | 8,215      | 26,516     | 27,728     |
| 23  | Printing presses..... \$                      | 140,964         | 186,963    | 119,635    | 169,532    |
| 24  | Pumps, power..... \$                          | 16,695          | 44,574     | 26,901     | 40,324     |
| 25  | Sewing machines..... \$                       | 59,128          | 81,317     | 118,054    | 98,584     |
| 26  | Textile machinery..... \$                     | 627,790         | 694,832    | 554,384    | 511,088    |
| 27  | Typewriting machines..... \$                  | 3,594           | 7,767      | 6,408      | 5,974      |
| 28  | Washing machines..... \$                      | 10              | 149        | Nil        | 218        |
| Totals, Machinery <sup>1</sup> ..... \$             |   | 2,271,846       | 2,571,652  | 2,476,531  | 2,776,280  |
| Stamped and coated products..... \$                 |   |                 |            |            |            |
| 29  | ..... \$                                      | 178,464         | 160,593    | 184,073    | 169,244    |
| Tools..... \$                                       |   | 221,217         | 298,759    | 346,401    | 368,079    |
| Automobiles and Parts—                              |   |                 |            |            |            |
| 31  | Freight..... No.                              | 162             | 81         | 94         | 123        |
|   | ..... \$                                      | 106,863         | 51,198     | 95,022     | 149,277    |
| 32  | Passenger..... No.                            | 293             | 162        | 394        | 1,003      |
|   | ..... \$                                      | 273,643         | 175,867    | 257,735    | 622,624    |
| 33  | Parts of..... \$                              | 69,122          | 76,885     | 125,734    | 185,386    |
| Totals, Automobiles and Parts <sup>1</sup> ..... \$ |   | 449,628         | 313,950    | 478,491    | 957,287    |
| 34  | Railway cars and parts..... \$                | 31,737          | 17,837     | 14,274     | 14,524     |
| Drums, tanks, cylinders..... \$                     |   |                 |            |            |            |
| 35  | ..... \$                                      | 38,972          | 38,033     | 26,256     | 11,516     |
| 36  | Furniture..... \$                             | 4,554           | 7,911      | 6,461      | 13,972     |
| 37  | Stoves (except electric)..... \$              | 3,196           | 4,430      | 2,614      | 12,656     |
| 38  | Stoves and furnaces, electric..... \$         | 7,378           | 12,526     | 5,321      | 8,373      |
| 39  | Valves..... \$                                | 18,480          | 18,778     | 26,370     | 54,887     |
| Totals, Iron and Its Products <sup>1</sup> ..... \$ |   | 16,711,935      | 18,600,768 | 20,551,388 | 23,033,333 |

<sup>1</sup> Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

| United States. |            |            |             | All Countries. |             |             |             | No. |
|----------------|------------|------------|-------------|----------------|-------------|-------------|-------------|-----|
| 1934.          | 1935.      | 1936.      | 1937.       | 1934.          | 1935.       | 1936.       | 1937.       |     |
| 110,045        | 200,233    | 274,421    | 302,653     | 280,018        | 386,433     | 476,289     | 494,873     | 1   |
| 128,444        | 218,738    | 239,435    | 255,099     | 184,272        | 304,233     | 350,942     | 436,030     | 2   |
| 82,180         | 192,465    | 232,170    | 285,816     | 167,574        | 240,044     | 204,048     | 577,224     | 3   |
| 130,609        | 226,736    | 213,487    | 297,688     | 134,798        | 227,209     | 213,830     | 299,537     | 4   |
| 515,070        | 939,983    | 1,058,793  | 1,273,788   | 855,444        | 1,270,185   | 1,446,251   | 1,928,253   |     |
| 232,721        | 367,020    | 273,741    | 354,759     | 923,493        | 1,380,577   | 1,363,451   | 1,744,961   | 5   |
| 105,468        | 172,734    | 258,065    | 273,709     | 174,690        | 239,290     | 389,502     | 442,870     | 6   |
| 20,664         | 24,543     | 27,389     | 46,234      | 20,727         | 24,662      | 27,394      | 46,287      | 7   |
| 3,706,151      | 5,364,021  | 5,242,396  | 4,530,159   | 3,724,272      | 5,400,582   | 5,249,292   | 4,544,889   |     |
| 103            | 303        | 529        | 676         | 210            | 323         | 553         | 686         | 8   |
| 81,097         | 118,008    | 190,512    | 221,095     | 89,028         | 163,315     | 202,523     | 227,221     |     |
| 24             | 99         | 107        | 159         | 208            | 341         | 606         | 637         | 9   |
| 121,790        | 376,076    | 365,099    | 543,311     | 463,421        | 844,925     | 1,120,397   | 1,424,374   |     |
| 1,288          | 3,511      | 6,405      | 8,946       | 1,371          | 3,940       | 6,894       | 9,692       | 10  |
| 208,648        | 410,978    | 525,131    | 679,397     | 251,802        | 403,793     | 551,179     | 707,989     |     |
| 4,948,596      | 7,105,113  | 7,272,560  | 7,502,600   | 5,417,082      | 7,781,902   | 8,240,278   | 8,603,262   |     |
| 207            | 815        | 2,664      | 6,148       | 208            | 818         | 2,704       | 6,255       | 11  |
| 139,604        | 633,099    | 2,192,178  | 5,573,081   | 140,988        | 636,298     | 2,216,719   | 5,633,049   |     |
| 620,473        | 1,163,198  | 1,580,654  | 2,090,350   | 632,273        | 1,190,922   | 1,602,687   | 2,124,630   | 12  |
| 2,017,568      | 3,341,370  | 5,712,752  | 10,141,308  | 2,283,771      | 3,710,319   | 6,182,218   | 10,803,750  |     |
| 151,334        | 225,254    | 207,813    | 268,733     | 929,400        | 982,432     | 1,055,404   | 1,145,193   | 13  |
| 108,264        | 80,011     | 88,092     | 103,215     | 374,506        | 354,952     | 382,681     | 413,489     | 14  |
| 211,049        | 313,897    | 351,311    | 241,044     | 224,872        | 327,029     | 360,490     | 258,210     | 15  |
| 843,278        | 1,117,330  | 1,155,711  | 1,119,692   | 1,996,244      | 2,272,406   | 2,412,822   | 2,437,226   |     |
| 482,804        | 652,931    | 876,876    | 1,173,922   | 487,612        | 664,740     | 892,734     | 1,189,215   | 16  |
| 133,487        | 233,883    | 310,982    | 461,690     | 188,633        | 349,045     | 378,279     | 519,012     | 17  |
| 20,472         | 41,304     | 88,367     | 305,420     | 27,808         | 44,568      | 98,544      | 351,148     | 18  |
| 173,271        | 361,116    | 458,472    | 628,666     | 191,648        | 401,896     | 473,572     | 638,066     | 19  |
| 654,707        | 1,060,169  | 2,196,866  | 3,845,379   | 768,732        | 1,824,931   | 2,397,248   | 4,128,244   | 20  |
| 1,127,118      | 1,683,812  | 1,715,217  | 3,088,289   | 1,633,433      | 2,284,069   | 2,301,847   | 3,615,410   | 21  |
| 246,443        | 214,105    | 292,399    | 398,290     | 293,625        | 257,580     | 363,931     | 473,887     | 22  |
| 317,163        | 893,082    | 736,367    | 1,115,996   | 495,409        | 1,116,478   | 903,287     | 1,362,674   | 23  |
| 191,168        | 336,779    | 360,622    | 547,804     | 208,548        | 381,817     | 392,108     | 569,224     | 24  |
| 100,462        | 217,352    | 320,634    | 410,563     | 237,014        | 304,246     | 452,815     | 595,726     | 25  |
| 2,245,528      | 2,222,840  | 2,371,642  | 2,691,075   | 3,095,688      | 3,063,288   | 3,216,411   | 3,376,720   | 26  |
| 139,188        | 249,908    | 147,390    | 163,686     | 142,880        | 257,607     | 155,240     | 178,765     | 27  |
| 183,228        | 210,922    | 272,814    | 520,675     | 183,238        | 211,071     | 272,354     | 520,793     | 28  |
| 10,760,912     | 15,808,013 | 18,562,224 | 27,408,682  | 13,847,326     | 19,127,704  | 21,914,192  | 31,066,819  |     |
| 750,575        | 887,657    | 949,891    | 1,243,829   | 984,413        | 1,091,240   | 1,181,796   | 1,478,720   | 29  |
| 537,705        | 835,631    | 960,631    | 1,393,074   | 967,225        | 1,422,119   | 1,645,416   | 2,166,538   | 30  |
| 683            | 856        | 994        | 2,228       | 848            | 940         | 1,091       | 2,354       | 31  |
| 433,586        | 624,579    | 837,026    | 1,912,250   | 554,334        | 679,130     | 939,896     | 2,063,583   |     |
| 949            | 2,285      | 3,055      | 9,950       | 1,245          | 2,447       | 3,451       | 10,953      | 32  |
| 563,539        | 1,451,318  | 2,106,130  | 7,723,805   | 841,932        | 1,627,185   | 2,304,952   | 8,346,519   |     |
| 13,677,398     | 22,100,263 | 22,580,553 | 27,180,371  | 13,760,242     | 22,178,231  | 23,706,931  | 27,379,705  | 33  |
| 14,680,023     | 24,176,100 | 25,523,709 | 36,816,522  | 15,155,861     | 24,484,546  | 26,011,759  | 37,789,807  |     |
| 174,431        | 230,933    | 323,313    | 359,756     | 206,168        | 250,953     | 339,152     | 374,280     | 34  |
| 155,299        | 304,716    | 197,145    | 335,046     | 235,796        | 382,907     | 244,580     | 383,168     | 35  |
| 119,880        | 170,894    | 208,990    | 470,763     | 130,734        | 182,983     | 221,647     | 496,305     | 36  |
| 269,631        | 396,868    | 493,514    | 820,375     | 278,791        | 405,903     | 500,461     | 840,688     | 37  |
| 162,842        | 203,845    | 254,335    | 389,115     | 171,639        | 216,799     | 259,919     | 393,313     | 38  |
| 164,531        | 315,669    | 231,108    | 391,176     | 183,281        | 334,447     | 307,699     | 446,070     | 39  |
| 49,098,932     | 77,477,564 | 88,428,437 | 121,742,147 | 69,126,641     | 100,056,145 | 114,253,715 | 150,239,139 |     |



### 13.—Principal Imports into Canada for Consumption from United

| No.                         | Item.   | United Kingdom. |                 |                 |                 |
|-----------------------------|---|-----------------|-----------------|-----------------|-----------------|
|                             |   | 1934.           | 1935.           | 1936.           | 1937.           |
| VI. Non-Ferrous Metals.     |   |                 |                 |                 |                 |
| 1                           | Aluminium—<br>Alumina, bauxite and cryolite..... cwt. | 224,538<br>\$   | 315,104<br>\$   | 337,436<br>\$   | 189,342<br>\$   |
| 2                           | Aluminium ingots, bars, rods, plates, etc.. cwt.      | 430,348<br>\$   | 817,606<br>\$   | 861,254<br>\$   | 381,354<br>\$   |
| 3                           | Aluminium kitchen-ware..... \$                        | 10,862<br>\$    | 11,979<br>\$    | 14,397<br>\$    | 16,018<br>\$    |
|                             |   | 306,429<br>\$   | 326,717<br>\$   | 392,888<br>\$   | 469,740<br>\$   |
|                             |   | 4,811<br>\$     | 8,826<br>\$     | 2,026<br>\$     | 4,036<br>\$     |
|                             | Totals, Aluminium¹..... \$                            | 780,643         | 1,221,603       | 1,389,096       | 1,121,371       |
| 4                           | Brass and manufactures..... \$                        | 302,845         | 294,808         | 361,238         | 336,788         |
| 5                           | Copper and manufactures..... \$                       | 115,884         | 127,322         | 150,879         | 139,487         |
| 6                           | Lead and manufactures..... \$                         | 41,784          | 43,306          | 53,070          | 65,749          |
| 7                           | Nickel and manufactures..... \$                       | 84,465          | 104,424         | 109,645         | 102,788         |
|                             | Precious Metals and Manufactures—                     |                 |                 |                 |                 |
| 8                           | Electro-plated ware..... \$                           | 207,036         | 244,453         | 259,583         | 279,446         |
| 9                           | Silver, unmanufactured..... \$                        | 71,489          | 588,966         | 893,711         | 661,554         |
|                             | Totals, Precious Metals¹..... \$                      | 411,237         | 899,039         | 1,355,098       | 1,363,152       |
| 10                          | Tin (totals)..... \$                                  | 290,788         | 626,421         | 894,062         | 1,113,286       |
| 11                          | Tin in blocks, pigs, etc..... cwt.                    | 5,808<br>\$     | 12,180<br>\$    | 18,015<br>\$    | 23,745<br>\$    |
|                             |   | 255,977<br>\$   | 612,065<br>\$   | 878,509<br>\$   | 1,089,737<br>\$ |
| 12                          | Zinc..... \$  | 7,705<br>\$     | 8,177<br>\$     | 9,377<br>\$     | 9,300<br>\$     |
| 13                          | Alloys..... \$  | 95,833<br>\$    | 76,958<br>\$    | 83,444<br>\$    | 127,854<br>\$   |
| 14                          | Clocks and watches..... \$                            | 17,299<br>\$    | 45,075<br>\$    | 48,526<br>\$    | 39,725<br>\$    |
|                             | Electrical Apparatus—                                 |                 |                 |                 |                 |
| 15                          | Batteries, storage..... \$                            | 29,242<br>\$    | 38,829<br>\$    | 48,119<br>\$    | 95,298<br>\$    |
| 16                          | Dynamoes, generators..... \$                          | 21,385<br>\$    | 33,041<br>\$    | 65,089<br>\$    | 157,356<br>\$   |
| 17                          | Fixtures, electric light..... \$                      | 12,912<br>\$    | 9,338<br>\$     | 9,823<br>\$     | 12,360<br>\$    |
| 18                          | Lamps, incandescent..... \$                           | 1,021<br>\$     | 1,090<br>\$     | 1,472<br>\$     | 37,554<br>\$    |
| 19                          | Motors..... \$  | 128,244<br>\$   | 190,675<br>\$   | 239,300<br>\$   | 243,268<br>\$   |
| 20                          | Spark plugs, etc..... \$                              | 14,191<br>\$    | 9,865<br>\$     | 4,376<br>\$     | 1,619<br>\$     |
| 21                          | Switches, etc..... \$                                 | 40,139<br>\$    | 42,292<br>\$    | 47,828<br>\$    | 67,537<br>\$    |
| 22                          | Telephones..... \$                                    | 29,759<br>\$    | 33,780<br>\$    | 84,091<br>\$    | 46,875<br>\$    |
| 23                          | Transformers..... \$                                  | 12,113<br>\$    | 39,597<br>\$    | 15,786<br>\$    | 24,922<br>\$    |
| 24                          | Tubes, radio..... \$                                  | 223<br>\$       | 1,001<br>\$     | 12,225<br>\$    | 24,061<br>\$    |
| 25                          | Wireless apparatus..... \$                            | 63,009<br>\$    | 82,278<br>\$    | 77,742<br>\$    | 131,350<br>\$   |
|                             | Totals, Electrical Apparatus¹..... \$                 | 537,963         | 699,970         | 1,022,964       | 1,279,542       |
| 26                          | Gas apparatus..... \$                                 | 4,294<br>\$     | 4,885<br>\$     | 3,589<br>\$     | 5,398<br>\$     |
| 27                          | Metallic articles for agr. implements, n.o.p..... \$  | 7,215<br>\$     | 16,097<br>\$    | 11,437<br>\$    | 9,337<br>\$     |
| 28                          | Manganese oxide..... cwt.                             | 22<br>\$        | 83<br>\$        | 72<br>\$        | 254<br>\$       |
|                             |   | 68<br>\$        | 212<br>\$       | 199<br>\$       | 598<br>\$       |
| 29                          | Ores of metals, n.o.p..... \$                         | 2,202<br>\$     | 1,598<br>\$     | 5,998<br>\$     | 12<br>\$        |
| 30                          | Printing materials..... \$                            | 20,324<br>\$    | 22,050<br>\$    | 20,900<br>\$    | 22,794<br>\$    |
| 31                          | Vessels, equipment for..... \$                        | 61,870<br>\$    | 181,499<br>\$   | 115,053<br>\$   | 106,808<br>\$   |
|                             | Totals, Non-Ferrous Metals¹..... \$                   | 2,967,635       | 4,581,470       | 5,829,425       | 6,062,639       |
| VII. Non-Metallic Minerals. |   |                 |                 |                 |                 |
| 32                          | Asbestos..... \$                                      | 180,217<br>\$   | 220,218<br>\$   | 241,362<br>\$   | 327,950<br>\$   |
|                             | Clay and Clay Products—                               |                 |                 |                 |                 |
| 33                          | Bricks, fire..... \$                                  | 112,636<br>\$   | 141,150<br>\$   | 193,583<br>\$   | 149,486<br>\$   |
| 34                          | China clay..... cwt.                                  | 263,912<br>\$   | 400,021<br>\$   | 369,276<br>\$   | 565,551<br>\$   |
|                             |   | 108,700<br>\$   | 158,365<br>\$   | 161,367<br>\$   | 236,948<br>\$   |
| 35                          | Tableware of china..... \$                            | 2,090,897<br>\$ | 2,214,922<br>\$ | 2,536,470<br>\$ | 2,871,083<br>\$ |
|                             | Totals, Clay and Clay Products¹.... \$                | 2,618,084       | 2,846,934       | 3,173,324       | 3,633,362       |
|                             | Coal and Coal Products—                               |                 |                 |                 |                 |
| 36                          | Anthracite coal..... ton                              | 1,576,562<br>\$ | 1,608,620<br>\$ | 1,487,490<br>\$ | 1,320,681<br>\$ |
|                             |   | 7,939,706<br>\$ | 8,044,628<br>\$ | 6,745,004<br>\$ | 6,302,934<br>\$ |
| 37                          | Bituminous coal..... ton                              | 357,680<br>\$   | 330,646<br>\$   | 347,894<br>\$   | 147,080<br>\$   |
|                             |   | 880,758<br>\$   | 867,623<br>\$   | 961,765<br>\$   | 445,606<br>\$   |
| 38                          | Coal for ships..... ton                               | —<br>\$         | —<br>\$         | —<br>\$         | 1,061<br>\$     |
|                             |   | —<br>\$         | —<br>\$         | —<br>\$         | 2,787<br>\$     |
| 39                          | Coke for fuel..... ton                                | 22,120<br>\$    | 27,890<br>\$    | 8,643<br>\$     | 7,234<br>\$     |
|                             |   | 76,143<br>\$    | 114,974<br>\$   | 40,022<br>\$    | 32,094<br>\$    |
|                             | Totals, Coal and Coal Products¹.... \$                | 8,901,363       | 8,420,489       | 7,754,952       | 6,834,368       |

<sup>1</sup> Totals include other items not specified.

<sup>2</sup> None reported.

DETAILED IMPORTS FOR CONSUMPTION

565

Kingdom, United States, and All Countries, fiscal years 1931-37—continued.

| United States. |            |            |            | All Countries. |            |            |            | No. |
|----------------|------------|------------|------------|----------------|------------|------------|------------|-----|
| 1934.          | 1935.      | 1936.      | 1937.      | 1934.          | 1935.      | 1936.      | 1937.      |     |
| 635,244        | 1,363,339  | 1,745,761  | 1,875,106  | 1,241,609      | 1,856,059  | 2,578,380  | 3,550,911  | 1   |
| 738,152        | 1,398,212  | 1,911,057  | 2,056,835  | 2,026,589      | 2,553,076  | 2,902,275  | 3,040,061  | 2   |
| 715            | 2,251      | 1,960      | 1,578      | 11,758         | 14,234     | 18,146     | 17,985     | 3   |
| 26,671         | 77,009     | 129,481    | 75,200     | 333,149        | 403,828    | 522,369    | 545,416    |     |
| 61,356         | 84,376     | 76,366     | 60,430     | 68,788         | 92,639     | 80,747     | 68,564     |     |
| 1,251,550      | 2,032,171  | 2,046,866  | 2,944,919  | 2,967,437      | 3,655,202  | 4,224,716  | 4,751,819  |     |
| 1,231,806      | 1,640,781  | 1,891,077  | 2,391,090  | 1,699,857      | 2,082,637  | 2,369,300  | 2,855,381  | 4   |
| 361,196        | 432,299    | 530,805    | 724,025    | 497,919        | 575,028    | 716,743    | 906,088    | 5   |
| 47,081         | 60,620     | 66,660     | 66,189     | 105,112        | 115,876    | 135,443    | 163,974    | 6   |
| 914,775        | 897,267    | 899,085    | 958,399    | 1,159,760      | 1,180,239  | 1,176,315  | 1,222,067  | 7   |
| 68,714         | 132,402    | 280,888    | 855,142    | 288,608        | 393,208    | 558,753    | 1,183,407  | 8   |
| 714,558        | 2,917,262  | 3,454,885  | 1,211,189  | 786,027        | 3,420,228  | 4,937,115  | 1,872,745  | 9   |
| 1,060,524      | 3,252,437  | 3,948,805  | 2,240,625  | 1,545,244      | 4,200,135  | 5,943,967  | 3,691,414  |     |
| 1,215,244      | 1,248,147  | 473,601    | 281,385    | 1,581,483      | 2,206,062  | 2,307,535  | 2,496,821  | 10  |
| 23,942         | 23,631     | 8,423      | 3,436      | 31,322         | 42,283     | 45,577     | 51,876     | 11  |
| 1,198,970      | 1,210,654  | 418,638    | 156,629    | 1,499,613      | 2,133,515  | 2,236,476  | 2,408,521  |     |
| 309,341        | 372,978    | 465,995    | 493,438    | 408,525        | 473,214    | 506,026    | 658,600    | 12  |
| 38,082         | 51,940     | 64,422     | 115,168    | 184,748        | 260,196    | 283,239    | 410,978    | 13  |
| 202,006        | 395,758    | 589,213    | 725,104    | 1,024,092      | 1,300,852  | 1,748,170  | 2,037,278  | 14  |
| 80,738         | 117,715    | 86,346     | 56,463     | 110,114        | 156,770    | 134,550    | 152,254    | 15  |
| 150,551        | 200,143    | 209,950    | 348,075    | 429,093        | 247,896    | 284,058    | 544,312    | 16  |
| 149,768        | 207,607    | 219,788    | 622,371    | 176,764        | 232,519    | 251,484    | 664,586    | 17  |
| 63,946         | 132,949    | 127,335    | 153,634    | 81,982         | 155,997    | 155,554    | 252,691    | 18  |
| 543,039        | 878,186    | 925,880    | 1,353,530  | 682,806        | 1,116,480  | 1,184,353  | 1,650,394  | 19  |
| 303,546        | 303,720    | 213,948    | 55,830     | 218,915        | 316,888    | 220,937    | 58,679     | 20  |
| 202,488        | 405,709    | 508,300    | 574,122    | 343,803        | 452,989    | 555,917    | 656,054    | 21  |
| 177,458        | 375,006    | 332,297    | 689,948    | 207,908        | 411,969    | 417,668    | 736,367    | 22  |
| 34,518         | 52,623     | 65,084     | 110,495    | 47,440         | 94,166     | 81,401     | 142,442    | 23  |
| 97,400         | 153,926    | 264,811    | 311,752    | 97,667         | 154,977    | 277,089    | 335,813    | 24  |
| 1,244,416      | 1,518,552  | 1,649,208  | 2,381,553  | 1,808,472      | 1,603,330  | 1,729,153  | 2,514,195  | 25  |
| 5,036,487      | 7,076,653  | 7,597,602  | 10,361,262 | 5,918,024      | 7,943,639  | 8,757,837  | 11,991,038 |     |
| 79,943         | 104,746    | 118,502    | 129,245    | 90,677         | 115,433    | 125,465    | 143,540    | 26  |
| 577,807        | 1,045,897  | 1,593,060  | 1,382,075  | 589,469        | 1,070,395  | 1,646,082  | 1,421,643  | 27  |
| 28,090         | 27,853     | 36,633     | 39,841     | 679,454        | 619,709    | 737,754    | 1,285,065  | 28  |
| 96,219         | 63,675     | 82,862     | 82,957     | 291,645        | 235,453    | 357,566    | 683,945    | 29  |
| 151,638        | 208,709    | 182,404    | 273,999    | 182,377        | 256,287    | 438,780    | 434,731    | 30  |
| 560,534        | 730,177    | 639,504    | 571,548    | 585,448        | 755,757    | 664,260    | 599,589    | 31  |
| 102,034        | 183,445    | 200,509    | 230,438    | 178,638        | 387,273    | 330,450    | 375,707    |     |
| 14,142,239     | 20,858,178 | 23,303,389 | 25,400,426 | 20,171,000     | 28,496,629 | 33,685,919 | 37,037,954 |     |
| 328,085        | 465,075    | 480,995    | 617,244    | 518,965        | 695,323    | 733,499    | 954,487    | 32  |
| 967,045        | 1,346,821  | 1,417,685  | 2,041,293  | 1,079,884      | 1,488,587  | 1,612,408  | 2,190,930  | 33  |
| 203,912        | 245,495    | 345,872    | 305,247    | 560,248        | 646,613    | 715,664    | 870,820    | 34  |
| 117,715        | 94,600     | 127,916    | 114,765    | 229,525        | 254,424    | 288,753    | 351,721    | 35  |
| 16,058         | 18,072     | 25,565     | 29,158     | 2,538,943      | 2,694,906  | 3,042,463  | 3,320,207  |     |
| 1,877,971      | 2,532,232  | 2,711,582  | 3,400,560  | 5,178,938      | 6,094,940  | 6,593,645  | 7,744,156  |     |
| 1,558,781      | 1,750,853  | 1,701,101  | 1,607,410  | 3,135,351      | 3,449,139  | 3,499,857  | 3,374,854  | 36  |
| 9,937,742      | 10,431,064 | 9,959,785  | 9,291,075  | 17,877,489     | 18,112,854 | 17,788,829 | 17,310,207 | 37  |
| 7,811,916      | 8,782,949  | 8,250,148  | 9,462,616  | 8,169,740      | 9,093,959  | 8,598,046  | 9,618,618  |     |
| 9,887,474      | 16,087,803 | 14,476,215 | 16,392,562 | 10,808,735     | 16,956,561 | 15,438,050 | 16,870,090 |     |
| 347,023        | 280,366    | 306,099    | 355,243    | 347,625        | 280,366    | 306,099    | 357,894    | 38  |
| 445,972        | 539,174    | 586,511    | 660,612    | 445,972        | 539,174    | 586,511    | 660,612    |     |
| 590,660        | 598,283    | 476,474    | 377,196    | 622,034        | 626,333    | 490,708    | 398,524    | 39  |
| 2,844,505      | 3,370,983  | 2,639,016  | 2,202,248  | 2,921,707      | 3,487,284  | 2,730,925  | 2,291,338  |     |
| 28,971,756     | 31,708,568 | 29,306,212 | 30,335,051 | 32,874,722     | 40,420,524 | 38,197,232 | 38,971,240 |     |

## 13.—Principal Imports into Canada for Consumption from United

| No.  | Item.   | United Kingdom. |            |            |            |
|--|---|-----------------|------------|------------|------------|
|  |   | 1934.           | 1935.      | 1936.      | 1937.      |
| <b>VII. Non-Metallic Minerals—concluded.</b> |   |                 |            |            |            |
| Glass—                                       |   |                 |            |            |            |
| 1  | Carboys, bottles, jars, etc.....                | \$ 65,161       | 45,378     | 52,570     | 52,241     |
| 2  | Common window glass..... sq. ft.                | 7,247,061       | 8,125,061  | 9,561,316  | 12,304,701 |
|  | \$  | 232,600         | 264,910    | 330,884    | 430,754    |
| 3  | Plate glass..... sq. ft.                        | 810,902         | 833,928    | 700,683    | 1,780,233  |
|  | \$  | 298,016         | 324,618    | 256,391    | 571,252    |
| 4  | Tableware of glass.....                         | \$ 47,260       | 56,079     | 68,302     | 96,509     |
|  | Totals, Glass <sup>1</sup> .....                | \$ 845,266      | 947,902    | 925,033    | 1,429,446  |
| 5  | Graphite and its products.....                  | \$ 35,517       | 48,019     | 52,552     | 51,629     |
| Petroleum and Asphalt—                       |   |                 |            |            |            |
| 6  | Asphalt.....                                    | \$ 41           | 119        | 54         | 1          |
| 7  | Crude petroleum..... gal.                       | 27,194          | 34,259     | 19,833     | 5,398      |
|  | \$  | 2,938           | 5,254      | 3,168      | 928        |
| 8  | Fuel oil for ships..... gal.                    | —               | —          | —          | —          |
|  | \$  | —               | —          | 450        | 6,802      |
| 9  | Gasolene..... gal.                              | —               | —          | 180        | 653        |
|  | \$  | —               | —          | 4,640      | Nil        |
| 10   | Kerosene, refined..... gal.                     | —               | —          | 887        | —          |
|  | \$  | 97,872          | 88,529     | 94,820     | 91,142     |
| 11   | Lubricating oils..... gal.                      | 50,909          | 36,609     | 34,674     | 31,135     |
|  | \$  | 66,791          | 63,889     | 55,701     | 63,974     |
|  | Totals, Petroleum and Asphalt <sup>1</sup> .... | \$ 66,791       | 63,889     | 55,701     | 63,974     |
| 12   | Diamond dust or bort.....                       | \$ 10,888       | 23,891     | 122,170    | 74,922     |
|  | \$  | 441             | Nil        | Nil        | 3,900      |
| 13   | Sand, silica..... cwt.                          | 799             | 1,552      | 726        | 737        |
|  | \$  | 1,939           | 98,378     | 103,261    | 96,562     |
| 14   | Carbons, electric.....                          | \$ 62,399       | 63,179     | 574,482    | 683,086    |
| 15   | Diamonds, unset..... cwt.                       | 599,631         | 208,935    | 108,680    | 205,469    |
|  | \$  | 244,413         | 770        | 1,337      | 45,324     |
| 16   | Salt..... cwt.                                  | 196             | 1,270      | 2,671      | 37,116     |
|  | \$  | 666             | 1,270      | 2,671      | 37,116     |
| 17   | Sulphur..... cwt.                               | 666             | 1,270      | 2,671      | 37,116     |
|  | Totals, Non-Metallic Minerals <sup>1</sup> .... | \$ 13,229,645   | 13,163,008 | 12,932,069 | 13,102,638 |
| <b>VIII. Chemicals and Allied Products.</b>  |   |                 |            |            |            |
| 18   | Acids.....                                      | \$ 371,149      | 325,940    | 448,848    | 550,949    |
| 19   | Cellulose products (totals).....                | \$ 100,659      | 121,842    | 137,749    | 132,882    |
| Drugs and Medicines—                         |   |                 |            |            |            |
| 20   | Medicinal preparations.....                     | \$ 585,168      | 597,425    | 584,963    | 539,082    |
| 21   | Preparations for spraying.....                  | \$ 99,492       | 92,224     | 86,171     | 104,562    |
|  | Totals, Drugs and Medicines <sup>1</sup> .....  | \$ 684,660      | 689,649    | 671,134    | 643,644    |
| Dyeing and Tanning—                          |   |                 |            |            |            |
| 22   | Aniline and coal-tar dyes..... lb.              | 575,199         | 534,987    | 565,619    | 707,555    |
|  | \$  | 326,831         | 369,820    | 357,470    | 455,397    |
| 23   | Oak, quebracho and similar extracts..... lb.    | 172,118         | 255,465    | 534,175    | 250,101    |
|  | \$  | 6,179           | 7,255      | 18,089     | 9,582      |
|  | Totals, Dyeing and Tanning <sup>1</sup> .....   | \$ 637,291      | 608,011    | 603,024    | 683,293    |
| 24   | Explosives.....                                 | \$ 20,700       | 12,464     | 19,795     | 40,681     |
| 25   | Fertilizers.....                                | \$ 12,508       | 8,628      | 3,396      | 51,675     |
| 26   | Glycerine..... lb.                              | 114,010         | 1,740,018  | 101,964    | 675,984    |
|  | \$  | 12,655          | 190,001    | 10,270     | 106,969    |
| Paints and Varnishes—                        |   |                 |            |            |            |
| 27   | Carbon black..... lb.                           | 1,110           | 239        | 56,784     | 65,524     |
|  | \$  | 189             | 27         | 3,098      | 3,543      |
| 28   | Lithopone..... lb.                              | 6,557,250       | 6,587,943  | 7,417,130  | 8,367,912  |
|  | \$  | 218,938         | 228,728    | 256,732    | 301,419    |
| 29   | Oxides..... lb.                                 | 1,051,392       | 1,158,317  | 1,204,888  | 1,491,019  |
|  | \$  | 138,778         | 160,769    | 170,418    | 187,885    |
| 30   | Ready-mixed paints..... gal.                    | 26,493          | 25,287     | 27,483     | 28,052     |
|  | \$  | 33,845          | 35,141     | 38,374     | 41,080     |
| 31   | Varnish..... gal.                               | 10,849          | 10,595     | 5,332      | 8,425      |
|  | \$  | 19,323          | 20,013     | 11,021     | 14,624     |
| 32   | Zinc white..... lb.                             | 9,805,232       | 10,449,275 | 10,410,360 | 10,587,291 |
|  | \$  | 414,988         | 408,608    | 398,292    | 408,730    |
|  | Totals, Paints and Varnishes <sup>1</sup> ..... | \$ 1,108,280    | 1,196,499  | 1,346,596  | 1,555,349  |

<sup>1</sup> Totals include other items not specified.<sup>2</sup> None reported.

Kingdom, United States, and All Countries, fiscal years 1931-37—continued.

| United States. |             |             |             | All Countries. |               |               |               | No. |
|----------------|-------------|-------------|-------------|----------------|---------------|---------------|---------------|-----|
| 1934.          | 1935.       | 1936.       | 1937.       | 1934.          | 1935.         | 1936.         | 1937.         |     |
| 374,740        | 365,947     | 505,911     | 770,408     | 563,000        | 560,255       | 702,119       | 1,019,011     | 1   |
| 30,194         | 117,380     | 74,637      | 16,498      | 23,243,659     | 28,988,021    | 33,622,574    | 45,418,196    | 2   |
| 2,163          | 6,203       | 4,127       | 1,076       | 623,700        | 873,637       | 903,983       | 1,180,394     | 3   |
| 2,045,794      | 2,183,837   | 2,315,312   | 1,985,646   | 3,067,502      | 3,186,661     | 3,510,746     | 6,052,604     | 4   |
| 652,203        | 637,551     | 649,814     | 573,158     | 1,031,661      | 1,039,801     | 1,046,885     | 1,763,318     | 5   |
| 275,801        | 488,063     | 558,913     | 572,298     | 493,834        | 751,519       | 884,789       | 991,839       | 6   |
| 2,440,371      | 2,967,887   | 3,318,732   | 3,747,325   | 4,365,249      | 5,341,828     | 5,798,850     | 7,583,043     | 7   |
| 73,056         | 91,935      | 78,828      | 92,475      | 109,822        | 141,878       | 135,731       | 147,365       | 8   |
| 114,284        | 134,655     | 133,405     | 164,902     | 114,589        | 136,422       | 137,330       | 168,815       | 9   |
| 732,182,095    | 815,897,638 | 698,699,739 | 924,396,420 | 1,003,629,697  | 1,091,352,582 | 1,198,116,475 | 1,246,881,266 | 10  |
| 16,660,110     | 24,960,947  | 27,408,732  | 30,755,321  | 25,010,663     | 32,500,727    | 35,564,978    | 39,562,633    | 11  |
| 24,339,038     | 23,981,591  | 18,643,709  | 20,379,589  | 27,360,216     | 24,170,241    | 18,643,709    | 20,379,589    | 12  |
| 662,338        | 605,132     | 540,300     | 577,554     | 714,768        | 608,773       | 540,300       | 577,554       | 13  |
| 54,358,251     | 52,133,131  | 44,081,047  | 37,420,852  | 59,524,173     | 64,616,691    | 64,587,580    | 59,339,454    | 14  |
| 3,847,984      | 3,434,206   | 3,111,080   | 2,796,800   | 4,119,509      | 4,063,635     | 4,401,377     | 4,146,709     | 15  |
| 1,674,799      | 2,085,210   | 1,383,973   | 2,917,945   | 1,976,075      | 2,039,950     | 1,292,271     | 2,918,700     | 16  |
| 121,880        | 188,243     | 114,532     | 232,079     | 121,777        | 153,508       | 116,807       | 232,166       | 17  |
| 9,846,227      | 10,604,832  | 13,877,569  | 14,689,866  | 9,954,828      | 10,708,468    | 13,489,156    | 14,794,269    | 18  |
| 2,537,721      | 2,332,997   | 2,643,633   | 3,034,666   | 2,593,587      | 2,376,752     | 2,686,733     | 3,071,582     | 19  |
| 24,504,063     | 32,337,858  | 34,778,301  | 39,086,041  | 33,368,473     | 40,855,283    | 44,469,337    | 49,775,547    | 20  |
| 602,643        | 1,511,318   | 1,024,119   | 2,024,807   | 613,038        | 1,537,809     | 1,785,554     | 2,772,146     | 21  |
| 1,287,004      | 1,803,097   | 2,830,445   | 2,884,684   | 1,423,947      | 1,944,581     | 2,633,959     | 2,977,679     | 22  |
| 153,335        | 216,902     | 227,536     | 270,183     | 172,049        | 235,638       | 251,228       | 335,006       | 23  |
| 283,001        | 368,552     | 398,279     | 373,490     | 287,868        | 371,217       | 401,169       | 374,939       | 24  |
| 65,581         | 40,221      | 49,637      | 36,228      | 388,126        | 649,474       | 865,700       | 1,046,076     | 25  |
| 1,067,296      | 913,960     | 931,597     | 797,233     | 2,786,338      | 2,809,141     | 2,532,358     | 2,188,525     | 26  |
| 259,723        | 213,758     | 205,742     | 169,279     | 659,535        | 596,113       | 508,792       | 453,655       | 27  |
| 2,853,896      | 3,070,292   | 2,118,426   | 3,417,255   | 2,858,749      | 3,072,115     | 2,717,959     | 3,463,507     | 28  |
| 2,551,591      | 2,496,926   | 2,286,191   | 2,835,461   | 2,559,159      | 2,500,514     | 2,290,127     | 2,874,357     | 29  |
| 58,923,811     | 77,256,933  | 78,988,621  | 86,809,009  | 83,396,761     | 102,428,637   | 105,421,236   | 116,948,261   | 30  |
| 538,873        | 552,832     | 571,064     | 606,692     | 1,115,116      | 1,096,667     | 1,138,389     | 1,473,684     | 31  |
| 1,460,430      | 1,589,756   | 1,642,216   | 1,673,527   | 1,655,043      | 1,871,289     | 1,864,591     | 1,880,260     | 32  |
| 675,921        | 757,856     | 885,474     | 1,089,734   | 1,673,709      | 1,763,031     | 1,925,168     | 2,026,348     | 33  |
| 321,496        | 330,183     | 300,371     | 502,768     | 545,745        | 510,738       | 412,901       | 671,582       | 34  |
| 1,067,087      | 1,186,447   | 1,345,613   | 1,731,710   | 2,621,563      | 2,715,920     | 2,968,389     | 3,274,066     | 35  |
| 1,545,102      | 2,138,001   | 2,387,013   | 2,504,405   | 3,944,647      | 4,267,888     | 4,585,390     | 5,148,175     | 36  |
| 886,993        | 1,083,803   | 1,226,588   | 1,366,026   | 2,823,456      | 3,211,123     | 3,536,124     | 4,036,984     | 37  |
| 25,451,433     | 22,629,774  | 19,993,995  | 13,284,861  | 31,758,810     | 25,282,050    | 30,129,002    | 26,753,741    | 38  |
| 614,834        | 606,091     | 672,465     | 386,561     | 775,920        | 681,006       | 909,427       | 869,452       | 39  |
| 2,018,283      | 2,141,493   | 2,289,751   | 2,254,144   | 4,853,532      | 4,853,908     | 5,486,921     | 5,975,440     | 40  |
| 280,171        | 386,653     | 283,997     | 374,769     | 318,017        | 420,263       | 324,828       | 445,157       | 41  |
| 1,037,800      | 1,549,394   | 1,233,863   | 1,691,603   | 1,989,498      | 2,484,724     | 2,147,182     | 2,643,245     | 42  |
| 21,170         | 337,986     | 1,602,639   | 148,751     | 762,059        | 2,681,659     | 2,004,996     | 2,172,323     | 43  |
| 1,827          | 84,142      | 212,371     | 30,368      | 49,564         | 267,435       | 246,172       | 306,336       | 44  |
| 10,750,945     | 12,789,237  | 12,748,100  | 14,826,222  | 10,755,975     | 12,789,570    | 12,808,870    | 14,915,659    | 45  |
| 350,695        | 612,895     | 600,567     | 655,621     | 351,168        | 612,927       | 603,919       | 690,276       | 46  |
| 2,208,571      | 3,451,009   | 3,092,544   | 3,476,222   | 12,071,365     | 10,570,385    | 15,377,070    | 19,699,846    | 47  |
| 95,074         | 141,131     | 137,594     | 149,601     | 432,008        | 577,817       | 558,114       | 696,303       | 48  |
| 4,103,534      | 4,547,800   | 3,275,005   | 4,248,593   | 5,477,309      | 6,538,997     | 6,458,497     | 6,608,193     | 49  |
| 457,830        | 443,167     | 409,356     | 542,238     | 641,426        | 636,198       | 616,793       | 788,527       | 50  |
| 61,405         | 97,782      | 100,817     | 148,110     | 89,435         | 125,792       | 137,285       | 180,142       | 51  |
| 94,096         | 156,432     | 172,870     | 258,147     | 130,328        | 198,412       | 217,575       | 304,934       | 52  |
| 63,366         | 64,802      | 83,925      | 100,166     | 75,933         | 76,022        | 90,507        | 109,690       | 53  |
| 100,824        | 117,583     | 171,735     | 172,735     | 124,917        | 139,542       | 174,704       | 190,250       | 54  |
| 924,489        | 1,255,138   | 1,136,212   | 3,058,829   | 11,130,960     | 12,168,705    | 11,976,847    | 14,836,366    | 55  |
| 41,886         | 85,518      | 66,680      | 159,410     | 489,178        | 520,877       | 475,356       | 591,279       | 56  |
| 1,353,655      | 1,954,822   | 1,987,443   | 2,622,492   | 2,723,858      | 3,484,897     | 3,620,464     | 4,497,644     | 57  |

## 13.—Principal Imports into Canada for Consumption from United

| No.   | Item.  | United Kingdom. |             |             |             |
|---|--|-----------------|-------------|-------------|-------------|
|   |  | 1934.           | 1935.       | 1936.       | 1937.       |
| <b>VIII. Chemicals and Allied Products—concl.</b> |  |                 |             |             |             |
| 1   | Perfumery..... \$  | 101,686         | 101,677     | 105,145     | 142,587     |
| 2   | Soap—<br>Laundry soap..... lb.                                     | 395,247         | 198,785     | 258,247     | 319,045     |
| 3   | Toilet soap..... \$  | 26,683          | 14,504      | 17,200      | 21,762      |
|   |  | 42,084          | 39,255      | 51,500      | 64,612      |
|   | Totals, Soap <sup>1</sup> ..... \$                                 | 80,601          | 69,655      | 85,044      | 108,529     |
| <b>Chemicals, Inorganic, n.o.p.—</b>              |  |                 |             |             |             |
| 4   | Sulphate of alumina..... cwt.                                      | 57,873          | 75,735      | 82,885      | 105,325     |
|   |  | 54,627          | 63,052      | 64,638      | 83,797      |
| 5   | Ammonia and its compounds..... \$                                  | 102,820         | 192,256     | 146,750     | 254,104     |
| 6   | Compounds of tetra-ethyl lead..... lb.                             | 2               | 2           | 2           | 2           |
| 7   | Chlorine, liquid..... lb.  | 2               | 2           | 2           | 2           |
| 8   | Calcium chloride..... cwt.   | 48,055          | 61,225      | 1,171       | 300         |
|   |  | 63,352          | 99,556      | 1,289       | 326         |
| 9   | Potash and potassium compounds..... \$                             | 78,271          | 128,833     | 97,509      | 87,185      |
| 10  | Soda and sodium compounds..... \$                                  | 787,604         | 836,544     | 935,842     | 1,017,527   |
|   | Totals, Chemicals, Inorganic, n.o.p. <sup>1</sup> .... \$          | 1,589,730       | 1,875,509   | 1,725,016   | 1,722,021   |
|   | Totals, Chemicals and Allied Products <sup>1</sup> . \$            | 5,662,584       | 6,210,239   | 6,336,345   | 6,987,434   |
| <b>IX. Miscellaneous Commodities.</b>             |  |                 |             |             |             |
| <b>Amusement and Sporting Goods—</b>              |  |                 |             |             |             |
| 11  | Films..... \$  | 131,717         | 65,448      | 57,257      | 77,154      |
| 12  | Dolls..... \$  | 1,133           | 2,144       | 5,548       | 3,994       |
| 13  | Toys..... \$   | 142,785         | 155,382     | 189,825     | 200,756     |
|   | Totals, Amusem't and Sporting Goods <sup>1</sup> . \$              | 504,481         | 468,032     | 540,510     | 572,211     |
| 14  | Brushes..... \$  | 105,405         | 125,751     | 129,438     | 140,858     |
| 15  | Containers (outside coverings)..... \$                             | 1,155,568       | 1,151,079   | 1,234,653   | 1,174,090   |
| <b>Household and Personal Equipment—</b>          |  |                 |             |             |             |
| 16  | Buttons..... \$  | 13,150          | 10,823      | 14,457      | 13,528      |
| 17  | Cases and boxes, fancy..... \$                                     | 74,987          | 100,159     | 114,688     | 146,746     |
| 18  | Jewellery, n.o.p..... \$   | 52,580          | 33,411      | 40,010      | 35,444      |
| 19  | Pocket books, etc..... \$  | 126,726         | 144,265     | 158,102     | 170,506     |
| 20  | Refrigerators..... \$  | 863             | 925         | 1,099       | 1,589       |
| 21  | Tobacco pipes, etc..... \$   | 103,114         | 128,125     | 121,711     | 147,108     |
|   | Totals, Household, etc., Equipment <sup>1</sup> .... \$            | 736,091         | 746,114     | 794,512     | 879,827     |
| 22  | Musical instruments..... \$  | 31,531          | 46,210      | 57,731      | 88,507      |
| <b>Scientific and Educational Equipment—</b>      |  |                 |             |             |             |
| 23  | Philosophical and scientific apparatus..... \$                     | 178,777         | 54,712      | 99,175      | 54,512      |
| 24  | Surgical instruments, etc..... \$                                  | 171,735         | 270,107     | 302,107     | 255,996     |
|   | Totals, Scientific and Educational Equipment <sup>1</sup> ..... \$ | 464,368         | 440,015     | 565,617     | 475,934     |
| 25  | Ships and vessels..... \$  | 5,469           | 7,998       | 23,343      | 24,653      |
| 26  | Vehicles, n.o.p..... \$  | 69,212          | 58,764      | 147,475     | 493,595     |
| 27  | Works of art..... \$   | 177,650         | 177,679     | 218,518     | 385,255     |
| 28  | Special imports..... \$  | 722,107         | 2,099,535   | 1,647,293   | 1,766,993   |
| 29  | Cartridges..... \$   | 12,061          | 36,226      | 21,442      | 68,202      |
| 30  | Electric energy..... k.w.h.  | Nil             | Nil         | Nil         | Nil         |
| 31  | Express parcels..... \$  | 1,336           | 5,958       | 7,426       | 8,078       |
| 32  | Pencils, lead..... \$  | 48,472          | 56,209      | 72,875      | 74,695      |
| 33  | Post Office parcels..... \$  | 290,042         | 311,653     | 373,231     | 290,911     |
| 34  | Precious stones..... \$  | 35,318          | 68,078      | 68,026      | 122,164     |
| 35  | Settlers' effects..... \$  | 175,687         | 214,810     | 179,705     | 202,024     |
| 36  | Waste paper clippings..... cwt.                                    | 25,564          | 23,429      | 40,809      | 29,799      |
|   |  | 15,869          | 15,933      | 26,410      | 18,942      |
|   | Totals, Miscellaneous Commodities <sup>1</sup> .... \$             | 4,717,973       | 6,194,730   | 6,317,717   | 6,962,416   |
|   | Grand Totals, Imports for Consumption \$                           | 105,106,764     | 111,682,490 | 117,874,822 | 129,507,885 |

<sup>1</sup> Totals include other items not specified.<sup>2</sup> None reported.

## DETAILED IMPORTS FOR CONSUMPTION

569

## Kingdom, United States, and All Countries, fiscal years 1934-37—concluded.

| United States. |             |             |             | All Countries. |             |             |             | No. |
|----------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|-----|
| 1934.          | 1935.       | 1936.       | 1937.       | 1934.          | 1935.       | 1936.       | 1937.       |     |
| 201,958        | 233,641     | 231,622     | 215,964     | 436,309        | 429,737     | 418,560     | 433,096     | 1   |
| 2,135,729      | 3,640,759   | 4,087,338   | 4,472,234   | 2,593,412      | 3,910,635   | 4,599,156   | 4,904,170   | 2   |
| 142,156        | 232,320     | 252,255     | 274,927     | 172,773        | 240,948     | 284,214     | 303,211     | 3   |
| 19,220         | 19,641      | 19,692      | 24,368      | 78,740         | 70,951      | 85,015      | 108,717     |     |
| 219,355        | 294,470     | 349,230     | 379,772     | 381,189        | 437,597     | 505,797     | 561,482     |     |
| 465,852        | 452,701     | 491,048     | 549,666     | 530,400        | 534,053     | 582,492     | 725,323     | 4   |
| 509,290        | 473,573     | 532,925     | 573,622     | 569,675        | 540,634     | 604,813     | 701,714     | 5   |
| 43,149         | 41,727      | 45,928      | 51,735      | 167,410        | 272,069     | 233,965     | 351,264     | 6   |
| 1,398,928      | 1,866,148   | 2,545,346   | 3,172,675   | 1,398,028      | 1,866,148   | 2,545,346   | 3,172,675   | 5   |
| 881,064        | 1,062,182   | 1,522,283   | 1,464,848   | 881,064        | 1,062,182   | 1,522,283   | 1,464,848   | 6   |
| 12,581,630     | 10,683,705  | 10,405,676  | 6,268,319   | 12,581,630     | 10,683,705  | 10,405,676  | 6,268,319   | 7   |
| 235,204        | 219,230     | 225,668     | 181,563     | 235,204        | 219,230     | 225,668     | 181,563     | 8   |
| 292,617        | 427,935     | 285,419     | 241,465     | 354,540        | 493,761     | 289,939     | 245,331     | 8   |
| 328,754        | 423,335     | 273,665     | 228,527     | 391,973        | 526,057     | 277,109     | 231,805     | 9   |
| 42,890         | 46,719      | 56,918      | 54,039      | 404,861        | 373,128     | 415,103     | 374,244     | 9   |
| 1,342,584      | 1,428,008   | 1,201,329   | 1,252,923   | 2,179,827      | 2,409,537   | 2,304,046   | 2,423,785   | 10  |
| 4,285,590      | 4,213,696   | 3,993,864   | 4,266,807   | 6,377,070      | 6,661,127   | 6,373,544   | 6,571,205   |     |
| 14,492,671     | 17,117,656  | 17,500,123  | 19,388,229  | 25,583,675     | 28,572,653  | 29,919,921  | 33,105,448  |     |
| 313,027        | 304,424     | 284,826     | 244,561     | 504,622        | 453,480     | 440,356     | 416,095     | 11  |
| 9,912          | 21,839      | 21,383      | 29,795      | 114,568        | 92,090      | 124,727     | 134,534     | 12  |
| 289,413        | 428,994     | 489,374     | 632,872     | 955,967        | 1,072,175   | 1,217,758   | 1,395,885   | 13  |
| 1,049,866      | 1,402,079   | 1,749,221   | 2,167,279   | 2,317,166      | 2,593,797   | 3,078,753   | 3,565,472   |     |
| 66,208         | 85,182      | 112,404     | 156,143     | 266,242        | 305,217     | 302,832     | 396,707     | 14  |
| 580,189        | 569,701     | 350,252     | 410,147     | 2,339,708      | 2,391,737   | 2,282,950   | 2,278,666   | 15  |
| 86,942         | 118,017     | 139,306     | 199,435     | 186,391        | 251,623     | 228,353     | 311,506     | 16  |
| 116,790        | 145,740     | 160,095     | 322,626     | 302,284        | 351,880     | 396,157     | 642,421     | 17  |
| 270,582        | 390,660     | 415,494     | 461,320     | 685,516        | 636,290     | 621,921     | 653,080     | 18  |
| 157,879        | 207,407     | 256,258     | 400,118     | 437,570        | 488,770     | 552,395     | 726,707     | 19  |
| 123,806        | 210,092     | 330,250     | 898,132     | 124,666        | 217,017     | 331,349     | 869,016     | 20  |
| 6,901          | 21,174      | 44,915      | 64,992      | 292,212        | 397,349     | 426,584     | 421,964     | 21  |
| 1,685,372      | 2,133,355   | 2,557,102   | 3,084,842   | 3,603,445      | 4,300,384   | 4,485,086   | 5,737,375   |     |
| 198,057        | 249,459     | 331,998     | 479,909     | 347,596        | 446,878     | 578,121     | 806,985     | 22  |
| 238,780        | 328,654     | 351,247     | 424,330     | 468,477        | 455,408     | 541,392     | 560,404     | 23  |
| 575,909        | 744,135     | 841,806     | 933,168     | 913,269        | 1,173,795   | 1,295,050   | 1,364,473   | 24  |
| 1,478,688      | 2,000,594   | 2,219,488   | 2,464,478   | 2,282,103      | 2,844,583   | 3,229,656   | 3,443,750   |     |
| 201,801        | 416,748     | 198,817     | 315,524     | 209,837        | 425,151     | 256,736     | 380,857     | 25  |
| 155,560        | 401,461     | 328,446     | 908,978     | 221,759        | 463,399     | 478,516     | 1,375,572   | 26  |
| 137,862        | 276,251     | 210,648     | 833,208     | 457,502        | 673,636     | 675,458     | 1,363,915   | 27  |
| 4,320,699      | 4,604,538   | 5,204,711   | 9,532,942   | 5,602,388      | 7,501,915   | 7,768,446   | 12,151,393  | 28  |
| 58,984         | 97,564      | 126,966     | 123,698     | 71,196         | 134,652     | 148,905     | 192,743     | 29  |
| 3,319,689      | 3,665,151   | 4,940,659   | 4,832,973   | 3,319,689      | 3,665,151   | 4,940,659   | 4,832,973   | 30  |
| 65,880         | 88,110      | 75,292      | 80,785      | 69,890         | 88,110      | 75,292      | 80,785      | 31  |
| 1,014,412      | 1,198,575   | 1,327,653   | 1,684,880   | 1,025,572      | 1,185,592   | 1,347,768   | 1,703,750   | 32  |
| 39,171         | 41,432      | 63,905      | 81,660      | 148,176        | 152,004     | 193,649     | 230,877     | 33  |
| 1,633,731      | 1,764,823   | 1,843,415   | 2,412,888   | 1,923,933      | 2,076,582   | 2,217,027   | 2,710,643   | 34  |
| 42,088         | 81,427      | 50,937      | 83,034      | 143,175        | 208,153     | 210,191     | 290,158     | 35  |
| 3,370,667      | 2,535,465   | 2,454,626   | 2,255,406   | 3,714,401      | 2,915,858   | 2,803,068   | 2,641,324   | 36  |
| 541,308        | 736,008     | 607,857     | 586,862     | 667,222        | 769,802     | 709,330     | 617,303     | 35  |
| 351,973        | 339,449     | 301,489     | 406,379     | 398,872        | 355,632     | 328,837     | 427,029     | 36  |
| 16,892,841     | 18,591,409  | 20,266,185  | 29,216,009  | 26,119,404     | 30,204,250  | 31,695,725  | 41,542,299  |     |
| 238,157,681    | 303,639,972 | 319,479,594 | 393,720,662 | 433,798,625    | 523,431,153 | 562,719,063 | 671,875,566 |     |

**14.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, and Totals of Duties Collected during the fiscal years ended Mar. 31, 1933-37.**

| Class.   | 1933.       | 1934.       | 1935.       | 1936.       | 1937.       |
|--|-------------|-------------|-------------|-------------|-------------|
|  | \$          | \$          | \$          | \$          | \$          |
| <b>IMPORTS.</b>  |             |             |             |             |             |
| Agricultural and Vegetable Products (except chemicals, fibres and wood)— |             |             |             |             |             |
| Dutiable.....  | 64,429,763  | 64,731,623  | 74,225,634  | 68,478,004  | 78,995,471  |
| Free.....  | 23,859,203  | 26,097,187  | 35,192,961  | 41,864,528  | 52,404,746  |
| Totals for Group.....  | 88,288,966  | 90,828,810  | 109,418,595 | 110,342,532 | 131,400,217 |
| Animals and Animal Products (except chemicals and fibres)—               |             |             |             |             |             |
| Dutiable.....  | 8,274,423   | 8,986,263   | 9,796,173   | 10,477,850  | 11,274,570  |
| Free.....  | 7,164,211   | 10,855,614  | 10,161,304  | 13,836,370  | 16,588,654  |
| Totals for Group.....  | 15,438,634  | 19,841,877  | 19,957,477  | 24,314,220  | 27,863,224  |
| Fibres, Textiles and Textile Products—                                   |             |             |             |             |             |
| Dutiable.....  | 33,039,457  | 35,918,439  | 36,788,973  | 38,575,440  | 44,807,865  |
| Free.....  | 28,175,367  | 43,454,031  | 45,009,307  | 51,238,724  | 60,003,439  |
| Totals for Group.....  | 61,214,824  | 79,372,470  | 81,798,280  | 89,814,164  | 104,811,304 |
| Wood, Wood Products and Paper—   |             |             |             |             |             |
| Dutiable.....  | 14,197,304  | 11,570,874  | 12,933,798  | 13,948,545  | 15,653,143  |
| Free.....  | 8,308,830   | 7,787,113   | 8,260,839   | 9,323,086   | 13,274,577  |
| Totals for Group.....  | 22,506,134  | 19,357,987  | 21,199,637  | 23,271,631  | 28,927,720  |
| Iron and Its Products—   |             |             |             |             |             |
| Dutiable.....  | 48,280,297  | 49,509,704  | 71,529,016  | 79,531,376  | 105,174,728 |
| Free.....  | 10,637,537  | 19,616,937  | 28,627,129  | 34,722,339  | 45,004,411  |
| Totals for Group.....  | 58,917,834  | 69,126,641  | 100,056,145 | 114,253,715 | 150,239,139 |
| Non-Ferrous Metals and Their Products—                                   |             |             |             |             |             |
| Dutiable.....  | 13,307,378  | 12,940,794  | 17,171,874  | 19,684,599  | 24,759,332  |
| Free.....  | 4,788,026   | 7,230,206   | 11,324,755  | 14,001,320  | 12,278,622  |
| Totals for Group.....  | 18,095,404  | 20,171,000  | 28,496,629  | 33,685,919  | 37,037,954  |
| Non-Metallic Minerals and Their Products (except chemicals)—             |             |             |             |             |             |
| Dutiable.....  | 45,599,875  | 38,522,548  | 46,902,200  | 45,951,658  | 50,015,913  |
| Free.....  | 42,058,130  | 44,874,213  | 55,525,837  | 59,469,578  | 69,822,348  |
| Totals for Group.....  | 87,658,005  | 83,396,761  | 102,428,037 | 105,421,236 | 119,838,261 |
| Chemicals and Allied Products—   |             |             |             |             |             |
| Dutiable.....  | 15,207,419  | 15,314,270  | 16,264,427  | 16,538,065  | 18,342,091  |
| Free.....  | 10,248,013  | 10,269,405  | 12,607,626  | 13,351,856  | 14,763,357  |
| Totals for Group.....  | 25,455,432  | 25,583,675  | 28,872,053  | 29,919,921  | 33,105,448  |
| Miscellaneous Commodities—   |             |             |             |             |             |
| Dutiable.....  | 14,041,184  | 12,981,897  | 15,023,827  | 16,717,559  | 20,910,521  |
| Free.....  | 16,767,327  | 13,137,507  | 14,575,423  | 14,978,166  | 20,831,778  |
| Totals for Group.....  | 30,808,511  | 26,119,404  | 30,204,250  | 31,695,725  | 41,742,299  |
| Total Imports—   |             |             |             |             |             |
| Dutiable.....  | 256,377,100 | 250,476,412 | 301,245,922 | 309,933,096 | 399,933,634 |
| Free.....  | 150,006,644 | 183,322,213 | 221,185,231 | 252,785,967 | 301,941,932 |
| Totals, Imports.....   | 406,383,744 | 433,798,625 | 522,431,153 | 562,719,063 | 671,875,566 |
| Totals, Duties Collected.....  | 77,271,965  | 73,154,472  | 84,627,473  | 82,784,317  | 92,282,059  |

<sup>1</sup> Includes the following additional and special duties which cannot be apportioned by groups of commodities: 1933, \$4,983,735; 1934, \$2,342,895; 1935, \$1,903,554; 1936, \$2,058,956; 1937, \$2,096,414.

13.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, and Totals of Duties Collected during the fiscal years ended Mar. 31, 1933-37—concluded.

| Class.   | 1933.              | 1934.                | 1935.                | 1936.                | 1937.                |
|--|--------------------|----------------------|----------------------|----------------------|----------------------|
|  | \$                 | \$                   | \$                   | \$                   | \$                   |
| <b>EXPORTS.</b>  |                    |                      |                      |                      |                      |
| Agricultural and Vegetable Products (except chemicals, fibres and wood)— |                    |                      |                      |                      |                      |
| Canadian produce.....  | 203,370,418        | 205,804,526          | 236,233,097          | 242,861,877          | 348,450,628          |
| Foreign produce.....   | 1,027,989          | 760,655              | 893,613              | 1,192,224            | 3,140,134            |
| <b>Totals for Group.....</b>   | <b>204,398,407</b> | <b>206,565,181</b>   | <b>237,071,710</b>   | <b>244,054,101</b>   | <b>349,596,762</b>   |
| Animals and Animal Products (except chemicals and fibres)—               |                    |                      |                      |                      |                      |
| Canadian produce.....  | 54,333,047         | 75,151,480           | 86,848,144           | 100,932,110          | 133,940,776          |
| Foreign produce.....   | 433,305            | 402,675              | 401,058              | 604,061              | 945,469              |
| <b>Totals for Group.....</b>   | <b>54,766,352</b>  | <b>75,644,155</b>    | <b>87,249,202</b>    | <b>101,536,171</b>   | <b>134,886,245</b>   |
| Fibres, Textiles and Textile Products—                                   |                    |                      |                      |                      |                      |
| Canadian produce.....  | 4,731,094          | 7,828,684            | 7,523,144            | 10,273,607           | 12,830,212           |
| Foreign produce.....   | 367,207            | 383,167              | 414,579              | 788,925              | 1,409,399            |
| <b>Totals for Group.....</b>   | <b>5,098,301</b>   | <b>8,211,851</b>     | <b>7,937,723</b>     | <b>11,062,532</b>    | <b>14,239,611</b>    |
| Wood, Wood Products and Paper—   |                    |                      |                      |                      |                      |
| Canadian produce.....  | 120,886,796        | 143,142,398          | 160,932,709          | 181,831,743          | 223,018,470          |
| Foreign produce.....   | 236,628            | 101,127              | 288,701              | 242,904              | 280,848              |
| <b>Totals for Group.....</b>   | <b>121,123,424</b> | <b>143,243,525</b>   | <b>161,221,410</b>   | <b>182,074,647</b>   | <b>223,199,318</b>   |
| Iron and Its Products—   |                    |                      |                      |                      |                      |
| Canadian produce.....  | 17,277,099         | 20,641,482           | 40,736,038           | 52,368,057           | 53,173,175           |
| Foreign produce.....   | 1,894,056          | 1,702,969            | 2,042,729            | 2,465,602            | 1,849,469            |
| <b>Totals for Group.....</b>   | <b>19,171,155</b>  | <b>22,344,451</b>    | <b>42,778,767</b>    | <b>54,833,659</b>    | <b>55,022,644</b>    |
| Non-Ferrous Metals and Their Products—                                   |                    |                      |                      |                      |                      |
| Canadian produce.....  | 96,906,641         | 168,375,134          | 191,345,386          | 212,547,372          | 230,152,314          |
| Foreign produce.....   | 413,991            | 329,235              | 682,250              | 5,003,508            | 1,811,984            |
| <b>Totals for Group.....</b>   | <b>97,320,632</b>  | <b>168,704,369</b>   | <b>192,027,636</b>   | <b>217,550,880</b>   | <b>231,964,298</b>   |
| Non-Metallic Minerals and Their Products (except chemicals)—             |                    |                      |                      |                      |                      |
| Canadian produce.....  | 9,215,537          | 14,808,912           | 15,654,323           | 19,083,643           | 26,081,028           |
| Foreign produce.....   | 294,292            | 468,557              | 302,786              | 711,448              | 954,319              |
| <b>Totals for Group.....</b>   | <b>9,510,129</b>   | <b>15,277,469</b>    | <b>15,957,109</b>    | <b>19,795,091</b>    | <b>27,035,347</b>    |
| Chemicals and Allied Products—   |                    |                      |                      |                      |                      |
| Canadian produce.....  | 11,099,814         | 13,843,820           | 15,270,064           | 16,018,391           | 19,237,687           |
| Foreign produce.....   | 270,542            | 279,267              | 187,373              | 414,342              | 287,169              |
| <b>Totals for Group.....</b>   | <b>11,370,356</b>  | <b>14,123,086</b>    | <b>15,457,437</b>    | <b>16,432,733</b>    | <b>19,524,856</b>    |
| Miscellaneous Commodities—   |                    |                      |                      |                      |                      |
| Canadian produce.....  | 10,243,532         | 10,357,626           | 12,083,020           | 13,113,527           | 15,897,000           |
| Foreign produce.....   | 1,975,532          | 1,703,072            | 2,200,509            | 2,018,145            | 2,507,593            |
| <b>Totals for Group.....</b>   | <b>12,219,064</b>  | <b>12,060,698</b>    | <b>14,283,529</b>    | <b>15,131,672</b>    | <b>17,765,193</b>    |
| Total Exports—   |                    |                      |                      |                      |                      |
| Canadian produce.....  | 528,064,278        | 665,954,071          | 756,625,925          | 849,030,417          | 1,061,181,906        |
| Foreign produce.....   | 6,913,842          | 6,311,324            | 7,658,963            | 13,441,059           | 13,062,314           |
| <b>Totals, Exports.....</b>  | <b>534,978,120</b> | <b>672,265,395</b>   | <b>764,284,888</b>   | <b>862,472,076</b>   | <b>1,074,244,220</b> |
| Total Trade—   |                    |                      |                      |                      |                      |
| Imports, merchandise.....  | 406,383,744        | 433,798,625          | 522,431,153          | 562,719,063          | 671,875,565          |
| Exports, merchandise.....  | 534,978,120        | 672,265,395          | 764,284,888          | 862,472,076          | 1,074,244,220        |
| <b>Totals, External Trade.....</b>                                       | <b>941,361,864</b> | <b>1,106,064,020</b> | <b>1,286,716,041</b> | <b>1,425,191,139</b> | <b>1,746,119,786</b> |



**15.—External Trade of Canada, by Main Groups and Degree of Manufacture,  
According to Origin, fiscal year ended Mar. 31, 1937.**

| Origin.                                       | Imports for Consumption. |                   |                    | Exports of Canadian Produce. |                    |                    |
|---|--------------------------|-------------------|--------------------|------------------------------|--------------------|--------------------|
|   | United Kingdom.          | United States.    | Total.             | United Kingdom.              | United States.     | Total.             |
|   | \$                       | \$                | \$                 | \$                           | \$                 | \$                 |
| <b>Farm Origin—</b>                           |                          |                   |                    |                              |                    |                    |
| <b>1.—Canadian Farm Products—<sup>1</sup></b> |                          |                   |                    |                              |                    |                    |
| Field Crops—                                  |                          |                   |                    |                              |                    |                    |
| Raw materials.....                            | 676,942                  | 11,023,504        | 25,933,192         | 169,267,527                  | 42,712,310         | 265,019,733        |
| Partly manufactured.....                      | 19,893                   | 308,266           | 849,597            | 69,994                       | 2,115,631          | 2,321,237          |
| Fully or chiefly manufactured.....            | 8,275,770                | 3,576,363         | 14,421,148         | 22,992,510                   | 28,087,987         | 64,002,833         |
| <b>Totals, Canadian Field Crops</b>           | <b>8,972,605</b>         | <b>14,908,133</b> | <b>41,203,937</b>  | <b>192,330,037</b>           | <b>72,916,428</b>  | <b>331,343,803</b> |
| Animal Husbandry—                             |                          |                   |                    |                              |                    |                    |
| Raw materials.....                            | 2,283,559                | 3,577,191         | 14,132,327         | 5,980,683                    | 22,486,778         | 31,560,955         |
| Partly manufactured.....                      | 7,581,642                | 2,255,885         | 12,896,633         | 5,349,657                    | 1,178,012          | 7,023,496          |
| Fully or chiefly manufactured.....            | 16,923,456               | 2,030,934         | 21,991,182         | 45,514,161                   | 3,560,788          | 52,235,341         |
| <b>Totals, Canadian Animal Husbandry.....</b> | <b>26,788,657</b>        | <b>7,864,010</b>  | <b>49,020,192</b>  | <b>56,844,501</b>            | <b>27,225,578</b>  | <b>90,819,792</b>  |
| <b>All Canadian Farm Products—</b>            |                          |                   |                    |                              |                    |                    |
| Raw materials.....                            | 2,960,501                | 14,600,695        | 40,065,519         | 175,248,210                  | 65,199,588         | 296,580,688        |
| Partly manufactured.....                      | 7,601,535                | 2,564,151         | 13,746,280         | 5,419,651                    | 3,293,643          | 9,344,733          |
| Fully or chiefly manufactured.....            | 25,199,226               | 5,607,297         | 36,412,330         | 68,506,877                   | 31,648,775         | 116,238,174        |
| <b>Totals, Canadian Farm Products.....</b>    | <b>35,761,262</b>        | <b>22,772,143</b> | <b>96,224,129</b>  | <b>219,174,538</b>           | <b>100,142,006</b> | <b>422,163,595</b> |
| <b>2.—Foreign Farm Products—<sup>1</sup></b>  |                          |                   |                    |                              |                    |                    |
| Field Crops—                                  |                          |                   |                    |                              |                    |                    |
| Raw materials.....                            | 739,453                  | 35,129,315        | 57,213,730         | Nil                          | 67,332             | 68,226             |
| Partly manufactured.....                      | 3,814,034                | 2,641,886         | 28,596,337         | 9,394                        | 281,233            | 311,737            |
| Fully or chiefly manufactured.....            | 23,473,534               | 11,684,807        | 60,755,417         | 5,701,404                    | 906,615            | 18,147,777         |
| <b>Totals, Foreign Field Crops.</b>           | <b>28,027,021</b>        | <b>49,456,008</b> | <b>146,565,484</b> | <b>5,710,798</b>             | <b>1,255,180</b>   | <b>18,527,740</b>  |
| Animal Husbandry—                             |                          |                   |                    |                              |                    |                    |
| Raw materials.....                            | 430,430                  | 4,577,630         | 5,333,622          | Nil                          | Nil                | Nil                |
| Partly manufactured.....                      | 105,000                  | 72,534            | 218,087            | Nil                          | Nil                | Nil                |
| Fully or chiefly manufactured.....            | 578,321                  | 1,352,402         | 3,095,496          | 386,078                      | 58,831             | 2,945,334          |
| <b>Totals, Foreign Animal Husbandry.....</b>  | <b>1,113,751</b>         | <b>6,002,566</b>  | <b>8,647,205</b>   | <b>386,078</b>               | <b>58,831</b>      | <b>2,945,334</b>   |
| <b>All Foreign Farm Products—</b>             |                          |                   |                    |                              |                    |                    |
| Raw materials.....                            | 1,169,883                | 39,706,945        | 62,547,352         | Nil                          | 67,332             | 68,226             |
| Partly manufactured.....                      | 3,919,034                | 2,714,420         | 28,814,424         | 9,394                        | 281,233            | 311,737            |
| Fully or chiefly manufactured.....            | 24,051,855               | 13,037,209        | 63,850,913         | 6,087,482                    | 965,446            | 21,093,111         |
| <b>Totals, Foreign Farm Products.....</b>     | <b>29,140,772</b>        | <b>55,458,574</b> | <b>155,212,689</b> | <b>6,096,876</b>             | <b>1,314,011</b>   | <b>21,473,074</b>  |
| <b>3.—All Farm Products—</b>                  |                          |                   |                    |                              |                    |                    |
| All Field Crops—                              |                          |                   |                    |                              |                    |                    |
| Raw materials.....                            | 1,416,395                | 46,152,819        | 83,146,922         | 169,267,527                  | 42,780,142         | 265,087,959        |
| Partly manufactured.....                      | 3,833,927                | 2,950,152         | 29,445,934         | 79,388                       | 2,396,864          | 2,632,974          |
| Fully or chiefly manufactured.....            | 31,749,304               | 15,261,170        | 75,176,565         | 28,693,920                   | 28,994,602         | 82,150,610         |
| <b>Totals, All Field Crops.....</b>           | <b>36,999,626</b>        | <b>64,364,141</b> | <b>187,769,421</b> | <b>198,040,835</b>           | <b>74,171,608</b>  | <b>349,871,543</b> |

<sup>1</sup> In this classification the expression "Canadian Farm Products" refers, in the case of exports, to commodities actually produced, in their original state, on Canadian farms. In the case of imports, it covers all commodities of which the basic raw materials are such as Canadian farms produce. "Foreign Farm Products" covers, in both imports and exports, materials or commodities such as Canada does not produce in their original forms, e.g., cane sugar, tea, rubber, cotton, silk, etc.

15.—External Trade of Canada, by Main Groups and Degree of Manufacture,  
According to Origin, fiscal year ended Mar. 31, 1937—concluded.

| Origin.                                  | Imports for Consumption. |                    |                    | Exports of Canadian Produce. |                    |                      |
|--|--------------------------|--------------------|--------------------|------------------------------|--------------------|----------------------|
|  | United Kingdom.          | United States.     | Total.             | United Kingdom.              | United States.     | Total.               |
|  | \$                       | \$                 | \$                 | \$                           | \$                 | \$                   |
| <b>Farm Origin—concluded.</b>            |                          |                    |                    |                              |                    |                      |
| <b>3.—All Farm Products—concluded.</b>   |                          |                    |                    |                              |                    |                      |
| All Animal Husbandry—                    |                          |                    |                    |                              |                    |                      |
| Raw materials.....                       | 2,713,989                | 8,154,821          | 10,868,810         | 5,980,633                    | 22,488,778         | 31,500,955           |
| Partly manufactured.....                 | 7,680,642                | 2,328,419          | 10,009,061         | 5,949,657                    | 1,178,012          | 7,023,496            |
| Fully or chiefly manufactured.....       | 17,501,777               | 3,383,336          | 20,885,113         | 45,900,239                   | 3,619,619          | 55,150,675           |
| <b>Totals, All Animal Husbandry.....</b> | <b>27,902,408</b>        | <b>13,866,576</b>  | <b>41,768,984</b>  | <b>57,230,579</b>            | <b>27,284,409</b>  | <b>84,765,126</b>    |
| All Farm Products—                       |                          |                    |                    |                              |                    |                      |
| Raw materials.....                       | 4,130,384                | 54,307,640         | 58,438,024         | 175,248,210                  | 65,266,920         | 296,648,914          |
| Partly manufactured.....                 | 11,520,569               | 5,278,571          | 16,799,140         | 5,429,045                    | 3,574,876          | 9,056,470            |
| Fully or chiefly manufactured.....       | 49,251,081               | 18,644,506         | 67,895,587         | 74,594,150                   | 32,614,221         | 137,331,285          |
| <b>Totals, Farm Origin.....</b>          | <b>64,902,034</b>        | <b>78,230,717</b>  | <b>143,132,751</b> | <b>255,271,414</b>           | <b>101,456,017</b> | <b>443,636,669</b>   |
| <b>Wild Life Origin—</b>                 |                          |                    |                    |                              |                    |                      |
| Raw materials.....                       | 873,214                  | 2,745,081          | 3,618,295          | 10,127,657                   | 7,465,389          | 18,520,730           |
| Partly manufactured.....                 | 194,227                  | 831,487            | 1,025,714          | 603,103                      | 35,851             | 747,363              |
| Fully or chiefly manufactured.....       | 79,867                   | 105,317            | 185,184            | 5,421                        | 124,722            | 145,032              |
| <b>Totals, Wild Life Origin..</b>        | <b>1,147,308</b>         | <b>3,781,885</b>   | <b>4,929,193</b>   | <b>10,736,181</b>            | <b>7,625,962</b>   | <b>19,419,125</b>    |
| <b>Marine Origin—</b>                    |                          |                    |                    |                              |                    |                      |
| Raw materials.....                       | 15,423                   | 418,116            | 433,539            | 918,871                      | 10,347,822         | 11,538,371           |
| Partly manufactured.....                 | 414                      | Nil                | 414                | Nil                          | Nil                | Nil                  |
| Fully or chiefly manufactured.....       | 203,232                  | 491,338            | 694,570            | 5,119,452                    | 2,616,817          | 15,178,210           |
| <b>Totals, Marine Origin .....</b>       | <b>219,069</b>           | <b>909,454</b>     | <b>1,128,523</b>   | <b>6,038,323</b>             | <b>12,964,639</b>  | <b>26,716,581</b>    |
| <b>Forest Origin—</b>                    |                          |                    |                    |                              |                    |                      |
| Raw materials.....                       | 1,826                    | 312,280            | 314,106            | 298,833                      | 11,300,171         | 14,692,804           |
| Partly manufactured.....                 | 17,540                   | 6,754,344          | 6,771,884          | 25,448,453                   | 43,330,801         | 78,615,862           |
| Fully or chiefly manufactured.....       | 3,773,181                | 18,291,967         | 22,065,148         | 10,446,000                   | 99,091,372         | 130,785,448          |
| <b>Totals, Forest Origin.....</b>        | <b>3,792,547</b>         | <b>25,358,591</b>  | <b>31,841,827</b>  | <b>36,193,286</b>            | <b>153,722,344</b> | <b>204,094,114</b>   |
| <b>Mineral Origin—</b>                   |                          |                    |                    |                              |                    |                      |
| Raw materials.....                       | 7,533,773                | 66,430,539         | 73,964,312         | 6,523,855                    | 22,383,447         | 39,119,453           |
| Partly manufactured.....                 | 2,572,948                | 7,394,245          | 9,967,193          | 68,011,576                   | 112,313,876        | 206,389,581          |
| Fully or chiefly manufactured.....       | 35,913,264               | 170,633,785        | 206,547,049        | 18,859,418                   | 12,802,188         | 77,131,525           |
| <b>Totals, Mineral Origin.....</b>       | <b>46,019,985</b>        | <b>244,458,569</b> | <b>290,478,554</b> | <b>93,394,849</b>            | <b>147,499,511</b> | <b>322,640,559</b>   |
| <b>Mixed Origin—</b>                     |                          |                    |                    |                              |                    |                      |
| Raw materials.....                       | 16,243                   | 124,338            | 140,581            | Nil                          | Nil                | Nil                  |
| Partly manufactured.....                 | 574,459                  | 1,887,065          | 2,461,524          | 43,737                       | 920,063            | 1,012,139            |
| Fully or chiefly manufactured.....       | 12,836,240               | 39,041,043         | 51,877,283         | 6,318,908                    | 10,826,008         | 23,662,719           |
| <b>Totals, Mixed Origin.....</b>         | <b>13,426,942</b>        | <b>41,052,446</b>  | <b>54,479,388</b>  | <b>6,362,645</b>             | <b>11,746,071</b>  | <b>24,674,558</b>    |
| <b>Recapitulation—</b>                   |                          |                    |                    |                              |                    |                      |
| Raw materials.....                       | 12,570,863               | 124,346,994        | 136,917,857        | 193,117,426                  | 116,763,749        | 380,526,272          |
| Partly manufactured.....                 | 14,880,157               | 22,165,712         | 37,045,869         | 99,535,914                   | 160,175,497        | 296,421,415          |
| Fully or chiefly manufactured.....       | 102,056,865              | 247,207,956        | 349,264,821        | 115,343,358                  | 158,075,328        | 384,234,219          |
| <b>Grand Totals.....</b>                 | <b>129,507,885</b>       | <b>393,720,662</b> | <b>523,228,547</b> | <b>407,996,698</b>           | <b>435,014,544</b> | <b>1,061,181,906</b> |

# 16.—Summary of the External Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended Mar. 31, 1937.

NOTE.—An analysis of external trade upon the purpose classification in greater detail for the fiscal year ended Mar. 31, 1937, will be found at pp. 824-826 of the Annual Report on the Trade of Canada, 1937, published by the Dominion Bureau of Statistics. Grand totals correspond with those of Table 15, p. 573.

| Group and Purpose.  | Imports for Consumption. |                    |                    | Exports of Canadian Produce. |                    |                    |
|---|--------------------------|--------------------|--------------------|------------------------------|--------------------|--------------------|
|   | United Kingdom.          | United States.     | Total.             | United Kingdom.              | United States.     | Total.             |
| <b>Foods, Beverages, and Smokers Supplies (ready for consumption or not)...</b> | <b>\$</b>                | <b>\$</b>          | <b>\$</b>          | <b>\$</b>                    | <b>\$</b>          | <b>\$</b>          |
| <b>Foods<sup>1</sup>.....</b>   | <b>16,282,713</b>        | <b>26,735,282</b>  | <b>106,196,976</b> | <b>240,177,010</b>           | <b>77,185,481</b>  | <b>392,847,498</b> |
| Animals for food.....   | 6,197,854                | 25,743,653         | 82,512,365         | 239,323,808                  | 55,594,616         | 370,559,536        |
| Breadstuffs.....  | Nil                      | 2,468              | 2,504              | 2,765,507                    | 11,230,529         | 14,207,376         |
| Chocolate.....  | 512,093                  | 1,387,743          | 12,182,345         | 174,254,401                  | 24,000,588         | 259,401,599        |
| Fish.....   | 534,575                  | 1,311,996          | 3,594,598          | Nil                          | Nil                | Nil                |
| Fruits.....   | 117,449                  | 570,068            | 2,043,078          | 5,364,510                    | 12,125,344         | 25,092,024         |
| Meats.....  | 233,188                  | 15,199,652         | 24,300,486         | 6,045,979                    | 402,732            | 7,483,587          |
| Land, substitutes, etc.....   | 254,707                  | 349,533            | 1,147,349          | 31,330,280                   | 3,033,399          | 36,114,497         |
| Milk and its products.....  | 18,254                   | 97,154             | 3,841,468          | 3,841,468                    | 26,807             | 3,913,141          |
| Nuts.....   | 33,759                   | 755,730            | 3,748,241          | 11,164,860                   | 1,691,364          | 14,447,544         |
| Oils.....   | 88,681                   | 121,726            | 5,023,121          | 1,350                        | 84                 | 1,840              |
| Sugar and its products.....   | 2,638,970                | 500,540            | 20,440,887         | 220,511                      | 1,107,292          | 1,683,217          |
| Vegetables.....   | 244,213                  | 4,439,492          | 5,900,979          | 3,563,209                    | 1,404,927          | 5,809,174          |
| Beverages and infusions <sup>1</sup> .....                                      | 0,339,651                | 846,648            | 22,147,318         | 352,722                      | 21,555,020         | 22,692,716         |
| Beverages, alcoholic.....   | 5,987,186                | 21,145             | 8,094,533          | 96,706                       | 21,546,890         | 21,913,616         |
| Infusions.....  | 3,320,087                | 465,706            | 13,469,852         | 21,304                       | 10,005             | 50,188             |
| Smokers supplies.....   | 745,208                  | 144,981            | 1,531,287          | 480                          | 5,839              | 25,246             |
| <b>Personal and Household Utilities (finished goods).....</b>                   | <b>18,348,057</b>        | <b>31,447,513</b>  | <b>66,798,112</b>  | <b>9,810,451</b>             | <b>3,146,189</b>   | <b>24,425,135</b>  |
| Books, stationery, etc.....   | 2,903,313                | 11,128,095         | 14,855,963         | 849,753                      | 587,215            | 1,980,203          |
| Clothing.....   | 5,111,106                | 4,766,850          | 12,645,612         | 5,356,081                    | 424,098            | 11,108,506         |
| Household utilities.....  | 8,356,139                | 9,820,618          | 21,220,519         | 1,740,933                    | 180,030            | 6,351,691          |
| Jewellery, timepieces, etc.....   | 336,892                  | 1,512,155          | 4,391,423          | 110,950                      | 4,062              | 494,293            |
| Personal utilities.....   | 881,307                  | 1,270,031          | 2,988,826          | 8,481                        | 187                | 87,729             |
| Recreation equipment, etc.....  | 754,300                  | 2,949,864          | 4,039,773          | 1,743,653                    | 1,949,997          | 4,342,605          |
| <b>Electric Energy.....</b>   | <b>Nil</b>               | <b>80,785</b>      | <b>80,785</b>      | <b>Nil</b>                   | <b>3,760,966</b>   | <b>3,764,881</b>   |
| <b>Electrical Equipment.....</b>  | <b>1,294,732</b>         | <b>10,691,621</b>  | <b>12,363,492</b>  | <b>1,109,138</b>             | <b>836,641</b>     | <b>4,559,632</b>   |
| <b>Producers Equipment.....</b>   | <b>15,638,353</b>        | <b>86,751,411</b>  | <b>108,869,131</b> | <b>6,776,247</b>             | <b>13,233,552</b>  | <b>32,072,291</b>  |
| Abrsives.....   | 120,232                  | 3,755,372          | 3,971,649          | 1,129,287                    | 4,421,462          | 5,724,891          |
| Containers, packing, etc.....   | 1,810,170                | 4,015,635          | 7,236,698          | 111,742                      | 981,490            | 3,230,552          |
| Farm equipment <sup>1</sup> .....   | 693,406                  | 10,962,752         | 12,761,055         | 1,241,043                    | 5,560,188          | 10,320,862         |
| Agricultural implements.....  | 209,303                  | 10,189,739         | 10,859,033         | 1,036,598                    | 1,937,598          | 6,291,423          |
| Animals (except for food).....  | 169,398                  | 385,204            | 650,228            | 51,701                       | 3,452,359          | 3,639,116          |
| Industrial equipment <sup>1</sup> .....   | 5,405,597                | 30,970,655         | 38,023,401         | 3,980,068                    | 326,787            | 7,918,147          |
| Fisheries equipment.....  | 1,243,940                | 418,285            | 1,846,322          | Nil                          | 2,941              | 5,241              |
| Metal-working machinery.....  | 444,849                  | 4,172,188          | 4,474,713          | 18,400                       | 1,677              | 27,163             |
| Mining and metallurgical.....   | 550,263                  | 3,361,749          | 3,976,793          | Nil                          | Nil                | Nil                |
| Office and business.....  | 123,435                  | 2,850,725          | 3,099,922          | 1,181,983                    | 3,063              | 1,769,792          |
| Printing.....   | 266,370                  | 3,085,536          | 3,619,405          | 4,081                        | 11,264             | 17,901             |
| Textile and cordage.....  | 567,929                  | 2,710,514          | 3,478,017          | Nil                          | Nil                | Nil                |
| Tools, n.e.p.....   | 368,078                  | 1,393,874          | 2,156,538          | 394,118                      | 27,945             | 1,291,200          |
| Fuel.....   | 0,787,633                | 31,091,761         | 40,408,127         | 167,917                      | 1,954,824          | 3,723,427          |
| Lubricating oils and greases.....   | 35,420                   | 3,311,808          | 3,355,601          | 67,802                       | 26,104             | 209,087            |
| <b>Producers Materials (except unmtfd. foods).....</b>                          | <b>65,730,116</b>        | <b>155,038,144</b> | <b>286,774,191</b> | <b>140,368,259</b>           | <b>255,613,290</b> | <b>479,544,602</b> |
| Construction materials.....   | 3,407,014                | 12,710,448         | 18,131,592         | 26,308,242                   | 27,719,322         | 59,763,973         |
| Farm materials.....   | 1,314,417                | 3,131,559          | 8,375,022          | 5,273,873                    | 57,828,859         | 36,359,467         |
| Manufacturers materials <sup>1</sup> .....                                      | 64,008,635               | 139,196,137        | 260,267,577        | 108,786,144                  | 205,365,109        | 383,421,162        |
| Textiles, clothing, etc.....  | 35,119,164               | 31,808,740         | 83,781,421         | 499,603                      | 1,073,210          | 3,958,609          |
| Dyeing and tanning.....   | 713,163                  | 2,337,570          | 6,116,018          | Nil                          | 3,627              | 3,627              |
| Fur and leather goods.....  | 2,961,086                | 8,241,500          | 15,690,256         | 16,306,412                   | 11,469,155         | 29,582,735         |
| Metals, raw or refined.....   | 1,268,834                | 5,204,263          | 9,035,383          | 52,817,682                   | 18,257,901         | 95,264,881         |
| For furniture and wooden wares.....   | 38,537                   | 2,176,222          | 2,356,469          | 1,169,546                    | 274,061            | 2,196,386          |
| Pulp, paper, etc.....   | 428,767                  | 4,859,538          | 5,443,669          | 7,899,998                    | 128,445,892        | 157,021,051        |
| Rubber.....   | 275,795                  | 2,763,478          | 11,355,418         | Nil                          | 102,424            | 107,632            |
| <b>Transportation.....</b>  | <b>2,126,708</b>         | <b>45,549,176</b>  | <b>47,757,029</b>  | <b>2,346,206</b>             | <b>344,934</b>     | <b>30,781,120</b>  |
| Vehicles.....   | 2,066,593                | 44,880,298         | 47,023,650         | 2,342,308                    | 322,559            | 30,575,906         |
| Vessels.....  | 60,115                   | 669,878            | 733,379            | 3,892                        | 22,375             | 205,214            |
| <b>Medical Supplies.....</b>  | <b>1,511,150</b>         | <b>3,776,493</b>   | <b>6,526,784</b>   | <b>712,102</b>               | <b>159,399</b>     | <b>1,521,148</b>   |
| <b>Arms, Explosives, and War Stores.....</b>                                    | <b>267,321</b>           | <b>680,527</b>     | <b>1,021,630</b>   | <b>3,409</b>                 | <b>1,283</b>       | <b>267,484</b>     |
| <b>Goods for Exhibition.....</b>  | <b>323,511</b>           | <b>2,339,233</b>   | <b>2,687,571</b>   | <b>Nil</b>                   | <b>206,919</b>     | <b>207,259</b>     |
| <b>Non-Monetary Gold.....</b>   | <b>Nil</b>               | <b>Nil</b>         | <b>Nil</b>         | <b>1,876,500</b>             | <b>74,790,769</b>  | <b>76,667,269</b>  |

<sup>1</sup> Includes minor items not shown.

17.—Values of Total Exports, Imports Entered for Consumption, and Duties Collected Thereon, at Certain Ports and by Provinces, fiscal years ended Mar. 31, 1936 and 1937.

Note.—The values of imports and exports at the several ports of entry given in the following table indicate that merchandise of the value stated was entered inwards, or passed outwards, at the ports mentioned, but it is not to be inferred that the imports were all for consumption at such ports or that the exports originated there.

| Province and Port.          | 1936.          |                          |                 | 1937.          |                          |                 |
|-----------------------------|----------------|--------------------------|-----------------|----------------|--------------------------|-----------------|
|                             | Total Exports. | Imports for Consumption. | Duty Collected. | Total Exports. | Imports for Consumption. | Duty Collected. |
|                             | \$             | \$                       | \$              | \$             | \$                       | \$              |
| <b>P.E. Island.</b>         |                |                          |                 |                |                          |                 |
| Totals, P.E. Island .....   | 579,033        | 626,225                  | 70,440          | 1,262,913      | 758,929                  | 68,859          |
| <b>Nova Scotia.</b>         |                |                          |                 |                |                          |                 |
| Halifax.....                | 50,152,483     | 13,267,517               | 1,123,232       | 57,350,279     | 16,220,280               | 1,377,062       |
| Liverpool.....              | 3,226,757      | 117,861                  | 9,461           | 3,490,938      | 158,997                  | 7,282           |
| North Sydney.....           | 2,107,284      | 206,637                  | 11,437          | 2,335,044      | 334,226                  | 11,532          |
| Sydney.....                 | 5,418,528      | 2,197,789                | 112,133         | 6,182,335      | 2,157,218                | 118,322         |
| Yarmouth.....               | 1,708,806      | 856,713                  | 28,906          | 2,052,254      | 726,035                  | 24,207          |
| Totals, Nova Scotia.....    | 67,834,971     | 18,592,197               | 1,567,219       | 77,580,182     | 21,658,469               | 1,733,495       |
| <b>New Brunswick.</b>       |                |                          |                 |                |                          |                 |
| Campbellton.....            | 4,148,003      | 420,430                  | 18,808          | 4,980,225      | 535,958                  | 35,388          |
| Fredericton.....            | Nil            | 594,234                  | 174,835         | Nil            | 986,488                  | 336,073         |
| McAdam Junction.....        | 2,993,464      | 31,959                   | 2,237           | 4,001,752      | 80,738                   | 9,442           |
| Moncton.....                | 304,237        | 868,795                  | 169,471         | 827,899        | 1,008,469                | 166,338         |
| Saint John.....             | 53,346,876     | 9,327,545                | 1,096,687       | 61,757,499     | 11,577,373               | 1,232,406       |
| Woodstock.....              | 4,791,111      | 230,487                  | 27,181          | 6,371,295      | 327,878                  | 36,386          |
| Totals, New Brunswick.....  | 67,325,392     | 12,499,336               | 1,594,510       | 79,818,915     | 16,064,784               | 1,975,338       |
| <b>Quebec.</b>              |                |                          |                 |                |                          |                 |
| Chicoutimi.....             | 11,540,796     | 2,373,428                | 58,839          | 13,334,960     | 2,143,746                | 66,780          |
| Coaticook.....              | 2,024,866      | 191,564                  | 17,502          | 2,604,123      | 252,611                  | 20,841          |
| Drummondville.....          | 53,865         | 2,625,753                | 167,114         | 40,686         | 2,741,062                | 132,961         |
| Granby.....                 | 4,257          | 690,008                  | 87,948          | 5,817          | 1,023,791                | 296,754         |
| Hull.....                   | Nil            | 1,281,313                | 87,599          | Nil            | 1,095,537                | 103,632         |
| Huntingdon (Athelstan)..... | 7,725,085      | 665,173                  | 75,767          | 10,746,145     | 684,201                  | 94,028          |
| Montreal.....               | 150,034,457    | 137,328,953              | 18,490,208      | 209,550,018    | 157,326,945              | 21,956,293      |
| Quebec.....                 | 13,811,891     | 7,468,434                | 369,087         | 15,081,063     | 9,146,332                | 863,861         |
| Rock Island.....            | 2,939,690      | 1,184,450                | 60,785          | 3,440,529      | 1,230,973                | 50,908          |
| St. Armand.....             | 11,090,767     | 128,630                  | 12,853          | 15,907,979     | 297,802                  | 10,579          |
| St. Hyacinthe.....          | 248            | 2,450,637                | 73,415          | 3,182,755      | 101,583                  | 101,583         |
| St. Johns.....              | 121,341,145    | 4,579,087                | 643,730         | 114,743,670    | 5,723,229                | 691,142         |
| Shawinigan Falls.....       | Nil            | 1,824,356                | 109,477         | Nil            | 2,596,067                | 113,971         |
| Sherbrooke.....             | 325,364        | 4,017,010                | 332,529         | 367,833        | 4,443,394                | 397,117         |
| Sorel.....                  | 3,476,885      | 914,156                  | 44,494          | 22,172,090     | 940,806                  | 41,330          |
| Sutton.....                 | 6,686,561      | 116,692                  | 23,635          | 7,475,416      | 163,772                  | 23,196          |
| Three Rivers.....           | 6,680,597      | 3,493,542                | 175,341         | 12,192,118     | 5,848,518                | 196,490         |
| Totals, Quebec.....         | 339,038,748    | 174,000,329              | 21,339,542      | 430,043,015    | 202,027,078              | 25,219,713      |
| <b>Ontario.</b>             |                |                          |                 |                |                          |                 |
| Amherstburg.....            | 54,676         | 704,379                  | 135,153         | 67,402         | 700,705                  | 189,375         |
| Belleville.....             | 131            | 975,459                  | 234,962         | Nil            | 1,199,393                | 225,604         |
| Brantford.....              | 10,300         | 3,306,764                | 331,628         | 9,745          | 4,133,538                | 349,325         |
| Brookville.....             | 117,851        | 742,765                  | 85,843          | 134,506        | 911,937                  | 117,781         |
| Chatham.....                | 30,673         | 2,833,770                | 634,631         | 45,870         | 2,945,404                | 658,175         |
| Cobourg.....                | 855,374        | 1,004,708                | 170,813         | 869,272        | 1,125,222                | 174,061         |
| Cornwall.....               | 987,241        | 1,204,908                | 140,951         | 1,240,351      | 2,489,282                | 108,037         |
| Fort Erie (Bridgeburg)..... | 40,228,195     | 3,011,286                | 441,006         | 50,244,502     | 4,682,091                | 535,807         |
| Fort Frances.....           | 9,403,169      | 936,411                  | 193,234         | 13,135,749     | 1,241,173                | 246,519         |
| Fort William.....           | 20,952,831     | 2,149,185                | 561,732         | 31,900,670     | 2,383,845                | 941,141         |
| Galt.....                   | 2,580          | 3,674,139                | 265,401         | 1,897          | 4,355,455                | 293,708         |
| Georgetown.....             | 17,958         | 2,771,645                | 185,903         | 30,817         | 3,145,004                | 184,329         |
| Hamilton.....               | 141,049        | 22,742,424               | 3,049,551       | 360,701        | 27,431,359               | 3,725,613       |
| Kingston.....               | 51,041         | 438,275                  | 119,593         | 328,018        | 1,116,295                | 116,001         |
| Kitchener.....              | 8,011          | 5,233,381                | 515,030         | 6,441          | 6,106,243                | 572,418         |

<sup>1</sup> Totals include other smaller ports.

17.—Values of Total Exports, Imports Entered for Consumption, and Duties Collected Thereon, at Certain Ports and by Provinces, fiscal years ended Mar. 31, 1936 and 1937—concluded.

| Province and Port.   | 1936.              |                          |                   | 1937.                |                          |                   |
|--|--------------------|--------------------------|-------------------|----------------------|--------------------------|-------------------|
|  | Total Exports.     | Imports for Consumption. | Duty Collected.   | Total Exports.       | Imports for Consumption. | Duty Collected.   |
|  | \$                 | \$                       | \$                | \$                   | \$                       | \$                |
| <b>Ontario—concluded.</b>  |                    |                          |                   |                      |                          |                   |
| London.....  | Nil                | 5,152,819                | 969,298           | 112,107              | 5,917,457                | 926,727           |
| Niagara Falls.....   | 42,399,429         | 6,539,347                | 1,080,837         | 48,619,499           | 9,129,544                | 1,359,952         |
| North Bay.....   | Nil                | 2,360,831                | 320,942           | Nil                  | 2,731,738                | 318,622           |
| Oshawa.....  | 1,121              | 7,917,902                | 1,548,072         | 9,798                | 8,876,036                | 1,105,702         |
| Ottawa.....  | 1,392              | 5,492,942                | 951,686           | 1,119                | 6,402,840                | 940,096           |
| Parry Sound.....   | 503,056            | 885,961                  | 356,655           | 878,971              | 956,806                  | 394,496           |
| Peterborough.....  | 358                | 2,134,675                | 382,640           | 481                  | 4,108,298                | 477,041           |
| Port Arthur.....   | 45,013,714         | 636,241                  | 56,574            | 61,159,882           | 1,183,398                | 133,021           |
| Prescott.....  | 3,304,787          | 966,451                  | 375,423           | 4,294,606            | 1,037,415                | 333,526           |
| St. Catharines.....  | 3,776,481          | 3,796,453                | 662,887           | 3,987,976            | 5,200,359                | 769,642           |
| St. Thomas.....  | 2,167              | 1,041,738                | 200,940           | 2,250                | 1,161,213                | 203,578           |
| Sarnia.....  | 20,539,884         | 11,908,847               | 746,418           | 25,969,753           | 13,975,875               | 769,288           |
| Sault Ste. Marie.....  | 5,008,222          | 2,976,790                | 655,683           | 6,916,286            | 2,900,291                | 790,816           |
| Stratford.....   | Nil                | 973,494                  | 187,436           | Nil                  | 1,349,691                | 156,784           |
| Sudbury.....   | Nil                | 2,516,235                | 128,660           | Nil                  | 3,375,276                | 215,047           |
| Tillsonburg.....   | 9,498              | 573,509                  | 217,320           | 6,288                | 823,782                  | 302,992           |
| Toronto.....   | 1,086,782          | 111,640,461              | 19,400,069        | 1,634,012            | 131,066,460              | 20,083,279        |
| Welland.....   | 1,027,425          | 7,578,612                | 463,952           | 2,348,384            | 8,705,238                | 576,832           |
| Windsor.....   | 31,011,622         | 36,820,686               | 7,946,981         | 41,599,200           | 40,113,093               | 8,461,897         |
| Woodstock.....   | 41                 | 998,029                  | 110,727           | 164                  | 1,518,697                | 121,797           |
| <b>Totals, Ontario<sup>1</sup>.....</b>                            | <b>227,369,906</b> | <b>275,376,699</b>       | <b>44,688,598</b> | <b>296,382,743</b>   | <b>330,492,056</b>       | <b>45,321,773</b> |
| <b>Manitoba.</b>   |                    |                          |                   |                      |                          |                   |
| Brandon.....   | 168,304            | 679,987                  | 50,624            | 103,714              | 446,321                  | 59,863            |
| Emerson.....   | 9,723,229          | 930,144                  | 111,904           | 13,407,309           | 1,634,919                | 184,467           |
| Winnipeg.....  | 2,174,596          | 16,488,062               | 3,270,054         | 4,345,475            | 19,529,706               | 3,816,356         |
| <b>Totals, Manitoba<sup>1</sup>.....</b>                           | <b>12,123,307</b>  | <b>18,220,367</b>        | <b>3,442,511</b>  | <b>13,100,670</b>    | <b>21,715,012</b>        | <b>3,769,390</b>  |
| <b>Saskatchewan.</b>   |                    |                          |                   |                      |                          |                   |
| Moose Jaw.....   | 31,100             | 861,477                  | 116,503           | 27,740               | 1,297,642                | 114,139           |
| North Portal.....  | 7,041,777          | 157,968                  | 32,289            | 7,506,971            | 260,059                  | 37,790            |
| Regina.....  | 102,613            | 3,499,638                | 579,079           | 141,885              | 5,506,729                | 684,249           |
| Saskatoon.....   | Nil                | 1,596,279                | 228,140           | Nil                  | 1,879,307                | 208,542           |
| <b>Totals, Saskatchewan<sup>1</sup>.....</b>                       | <b>7,175,490</b>   | <b>6,331,090</b>         | <b>982,332</b>    | <b>7,676,596</b>     | <b>9,133,504</b>         | <b>1,053,462</b>  |
| <b>Alberta.</b>  |                    |                          |                   |                      |                          |                   |
| Calgary.....   | Nil                | 3,488,865                | 628,745           | Nil                  | 5,226,272                | 684,939           |
| Edmonton.....  | 105,809            | 2,871,214                | 798,365           | 68,241               | 3,393,792                | 840,554           |
| Lethbridge.....  | 770,520            | 4,289,437                | 167,052           | 487,179              | 2,035,606                | 117,438           |
| <b>Totals, Alberta<sup>1</sup>.....</b>                            | <b>885,329</b>     | <b>10,865,919</b>        | <b>1,619,442</b>  | <b>1,498,144</b>     | <b>12,797,422</b>        | <b>1,701,552</b>  |
| <b>British Columbia.</b>   |                    |                          |                   |                      |                          |                   |
| Nanaimo.....   | 6,398,931          | 157,421                  | 31,085            | 8,990,338            | 146,337                  | 21,157            |
| Nelson.....  | 202,762            | 1,079,755                | 94,942            | 290,792              | 358,100                  | 45,496            |
| New Westminster.....   | 33,448,837         | 1,702,653                | 241,482           | 43,753,720           | 2,539,358                | 273,883           |
| Prince Rupert.....   | 9,054,898          | 646,405                  | 109,199           | 4,377,745            | 689,121                  | 114,781           |
| Vancouver.....   | 84,924,374         | 38,458,107               | 5,906,176         | 95,466,907           | 47,737,888               | 6,811,522         |
| Victoria.....  | 4,596,531          | 3,297,894                | 744,414           | 5,290,838            | 3,785,816                | 833,800           |
| <b>Totals, British Columbia<sup>1</sup>.....</b>                   | <b>139,984,899</b> | <b>45,980,509</b>        | <b>7,217,767</b>  | <b>161,288,981</b>   | <b>56,816,655</b>        | <b>8,241,013</b>  |
| <b>Yukon.</b>  |                    |                          |                   |                      |                          |                   |
| <b>Totals, Yukon.....</b>  | <b>149,351</b>     | <b>270,427</b>           | <b>63,979</b>     | <b>592,062</b>       | <b>365,886</b>           | <b>55,952</b>     |
| Prepaid postal parcels, duty received through P.O. Department..... | —                  | 15,974                   | 3,483             | —                    | 16,371                   | 3,551             |
| Customs duty stamps.....   | —                  | —                        | 200,282           | —                    | —                        | 137,859           |
| <b>Grand Totals.....</b>   | <b>862,472,976</b> | <b>562,719,063</b>       | <b>82,784,317</b> | <b>1,074,244,220</b> | <b>671,875,566</b>       | <b>92,282,059</b> |

<sup>1</sup> Totals include other smaller ports.

18.—Imports of Canada, by Values Entered for Consumption from British Empire and Foreign Countries, Dutiable and Free, under the General, Preferential, and Treaty Rate Tariffs, fiscal year ended Mar. 31, 1937.

| Country.  | Dutiable under—   |                      |                    | Free under—        |                      |                   | Total Imports.     |
|---|-------------------|----------------------|--------------------|--------------------|----------------------|-------------------|--------------------|
|   | General Tariff.   | Preferential Tariff. | Treaty Tariff.     | General Tariff.    | Preferential Tariff. | Treaty Tariff.    |                    |
|   | \$                | \$                   | \$                 | \$                 | \$                   | \$                | \$                 |
| <b>British Empire.</b>                              |                   |                      |                    |                    |                      |                   |                    |
| United Kingdom.....                                 | 1,197,308         | 58,371,934           | 725,372            | 15,276,506         | 53,936,765           | -                 | 129,507,885        |
| Irish Free State.....                               | 346               | 18,194               | 5,312              | 5,037              | 16,578               | -                 | 46,467             |
| Africa—British East.....                            | 1,664             | 669,409              | 574                | 1,004,165          | 1,152,914            | -                 | 2,828,726          |
| British South.....                                  | 3,059             | 607,800              | 95,915             | 208,277            | 544,178              | -                 | 1,450,220          |
| British West.....                                   | 6,002             | Nil                  | 542,632            | 560,850            | 388,651              | -                 | 1,498,135          |
| Southern Rhodesia.....                              | 182               | Nil                  | Nil                | Nil                | 1,081,916            | -                 | 1,082,098          |
| Australia.....                                      | 3,233             | 1,669,186            | 626,070            | 726,050            | 6,445,378            | -                 | 9,469,823          |
| British East Indies—                                |                   |                      |                    |                    |                      |                   |                    |
| British India.....                                  | 26,578            | 4,147,840            | 1,831              | 690,285            | 3,459,421            | -                 | 8,325,955          |
| Ceylon.....   | 6,605             | 2,454,666            | 1,135              | 622,998            | 877,064              | -                 | 3,962,468          |
| Straits Settlements.....                            | 1,958             | 828,920              | 4,369              | 8,683,521          | 1,021,901            | -                 | 10,540,669         |
| British Guiana.....                                 | 164               | 4,434,373            | 2,670              | 365,758            | 248,383              | -                 | 5,051,357          |
| British West Indies—                                |                   |                      |                    |                    |                      |                   |                    |
| Barbados.....                                       | 177               | 2,139,606            | 542                | 1,599              | 1,568,550            | -                 | 3,710,534          |
| Jamaica.....  | 5,406             | 2,602,855            | 3,393              | 21,150             | 2,540,292            | -                 | 5,172,905          |
| Trinidad and Tobago.....                            | 598               | 2,102,210            | 23,919             | 58,437             | 541,734              | -                 | 2,786,898          |
| Other.....  | 6,405             | 786,354              | 1,322              | 55,005             | 943,619              | -                 | 1,792,765          |
| Fiji.....   | 92                | 2,378,856            | Nil                | Nil                | 20,693               | -                 | 2,394,641          |
| Hong Kong.....                                      | 545,759           | Nil                  | 18,971             | 144,586            | Nil                  | -                 | 709,316            |
| Newfoundland.....                                   | 5,240             | 3,607                | 697                | 2,143,910          | 8,763                | -                 | 2,162,223          |
| New Zealand.....                                    | 4,329             | 13,568               | 35,136             | 1,222,675          | 4,101,158            | -                 | 5,376,866          |
| <b>Totals, British Empire<sup>1</sup></b>           | <b>1,833,251</b>  | <b>83,332,392</b>    | <b>2,161,567</b>   | <b>31,862,396</b>  | <b>79,036,236</b>    | <b>Nil</b>        | <b>198,165,842</b> |
| <b>Foreign Countries.</b>                           |                   |                      |                    |                    |                      |                   |                    |
| Argentina.....                                      | 1,647,687         | -                    | 531,572            | 9,545,010          | -                    | Nil               | 11,724,269         |
| Belgium.....  | 2,144,715         | -                    | 2,178,090          | 2,362,662          | -                    | 10,057            | 6,095,533          |
| China.....  | 3,759,262         | -                    | Nil                | 515,973            | -                    | Nil               | 4,275,235          |
| Colombia.....                                       | 60,308            | -                    | 732,650            | 3,736,064          | -                    | Nil               | 4,529,017          |
| Czechoslovakia.....                                 | 362,350           | -                    | 1,891,406          | 109,806            | -                    | 1,420             | 2,364,982          |
| Denmark.....  | 39,080            | -                    | 75,373             | 45,676             | -                    | Nil               | 160,129            |
| France.....   | 641,172           | -                    | 4,440,010          | 1,253,611          | -                    | 119,368           | 6,454,161          |
| Germany.....  | 4,818,654         | -                    | 4,849,167          | 1,896,997          | -                    | 118,710           | 11,653,528         |
| Italy.....  | 302,142           | -                    | 1,036,959          | 383,294            | -                    | 29                | 1,722,424          |
| Japan.....  | 1,179,377         | -                    | 2,366,302          | 1,168,617          | -                    | 82,212            | 4,796,508          |
| Netherlands.....                                    | 1,181,775         | -                    | 1,030,498          | 2,040,188          | -                    | Nil               | 4,252,461          |
| Norway.....   | 30,861            | -                    | 555,433            | 127,530            | -                    | 181               | 713,955            |
| Peru.....   | 5,216             | -                    | Nil                | 5,266,521          | -                    | Nil               | 5,271,737          |
| Spain.....  | 74,508            | -                    | 826,601            | 260,144            | -                    | Nil               | 1,151,263          |
| Sweden.....   | 570,302           | -                    | 1,046,703          | 219,194            | -                    | 216               | 1,836,415          |
| Switzerland.....                                    | 1,382,812         | -                    | 820,180            | 498,105            | -                    | 158               | 2,701,255          |
| United States.....                                  | 75,779,267        | -                    | 160,956,932        | 145,410,570        | -                    | 11,573,893        | 393,720,662        |
| <b>Totals, Foreign Countries<sup>1</sup></b>        | <b>96,851,115</b> | <b>-</b>             | <b>185,815,369</b> | <b>179,134,261</b> | <b>-</b>             | <b>11,969,039</b> | <b>473,709,724</b> |
| <b>Totals, Imports Entered for Consumption.....</b> | <b>98,684,366</b> | <b>83,332,392</b>    | <b>187,916,876</b> | <b>210,996,657</b> | <b>79,036,236</b>    | <b>11,969,039</b> | <b>671,875,566</b> |

<sup>1</sup> Totals include other minor countries not specified.

19.—Values of Imports into Canada of Merchandise Entered for Consumption, from the British Empire and from Foreign Countries, fiscal years ended Mar. 31, 1933-37.

| Country.                               | 1933.              | 1934.              | 1935.              | 1936.              | 1937.              |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
|  | \$                 | \$                 | \$                 | \$                 | \$                 |
| <b>British Empire.</b>                 |                    |                    |                    |                    |                    |
| United Kingdom.....                    | 86,466,055         | 105,100,764        | 111,082,490        | 117,874,822        | 129,507,885        |
| Irish Free State.....                  | 36,360             | 31,761             | 34,922             | 82,866             | 45,467             |
| Aden.....                              | 3,091              | 8,021              | 6,837              | 2,563              | 490                |
| Africa—British East.....               | 724,978            | 928,543            | 1,330,089          | 3,225,242          | 2,828,726          |
| British South.....                     | 4,907,064          | 3,641,261          | 3,296,780          | 4,769,003          | 1,459,229          |
| British West.....                      | 109,075            | 507,159            | 587,099            | 1,002,774          | 1,498,135          |
| Southern Rhodesia.....                 | Nil                | 936                | 163,431            | Nil                | 1,082,098          |
| Bermuda.....                           | 182,740            | 163,066            | 147,705            | 145,229            | 156,035            |
| British East Indies—British India..... | 4,004,201          | 5,941,863          | 6,414,944          | 7,458,123          | 8,325,955          |
| Ceylon.....                            | 1,081,022          | 1,400,959          | 2,002,812          | 2,917,879          | 3,962,468          |
| Straits Settlements.....               | 886,424            | 1,001,878          | 2,970,415          | 7,198,260          | 10,540,869         |
| Other.....                             | 1,855              | 7,730              | 23,938             | 37,715             | 62,655             |
| British Guiana.....                    | 2,299,814          | 1,389,183          | 2,449,442          | 4,757,937          | 5,051,357          |
| British Honduras.....                  | 50,519             | 144,320            | 48,276             | 131,300            | 31,176             |
| British Sudan.....                     | 5,511              | 5,655              | 12,919             | 28,905             | 19,935             |
| British West Indies—Barbados.....      | 2,856,835          | 3,126,857          | 4,861,468          | 8,430,007          | 3,710,534          |
| Jamaica.....                           | 3,194,364          | 2,640,286          | 4,304,770          | 4,318,329          | 5,172,905          |
| Trinidad and Tobago.....               | 2,428,252          | 1,986,716          | 1,357,030          | 2,569,266          | 2,786,898          |
| Other.....                             | 1,235,476          | 1,357,089          | 1,391,744          | 1,818,095          | 1,792,705          |
| Hong Kong.....                         | 515,014            | 624,350            | 670,248            | 1,185,141          | 709,310            |
| Malta, Cyprus and Goro.....            | 149                | 142                | 801                | 226                | 669                |
| Newfoundland.....                      | 545,527            | 630,070            | 1,588,973          | 2,019,282          | 2,162,223          |
| Oceania—Australia.....                 | 5,902,587          | 5,406,582          | 6,327,175          | 7,277,069          | 9,469,823          |
| Fiji.....                              | 2,218,351          | 1,647,324          | 1,799,959          | 1,770,435          | 2,894,641          |
| New Zealand.....                       | 969,704            | 2,575,158          | 2,534,678          | 3,622,398          | 5,876,866          |
| Palestine.....                         | 108,476            | 126,747            | 91,865             | 59,313             | 15,907             |
| <b>Totals, British Empire.....</b>     | <b>120,384,324</b> | <b>140,463,886</b> | <b>156,186,471</b> | <b>177,721,310</b> | <b>198,165,842</b> |
| <b>Foreign Countries.</b>              |                    |                    |                    |                    |                    |
| Abyssinia.....                         | 7,973              | 11,879             | 12,873             | 5,741              | 7,285              |
| Argentina.....                         | 894,982            | 2,049,563          | 2,760,923          | 3,744,062          | 11,724,269         |
| Austria.....                           | 179,707            | 218,557            | 282,956            | 331,423            | 389,067            |
| Belgium.....                           | 3,642,518          | 3,200,168          | 3,613,538          | 5,093,778          | 1,695,333          |
| Brazil.....                            | 591,141            | 626,586            | 835,546            | 900,877            | 906,092            |
| Chile.....                             | 21,443             | 8,323              | 67,860             | 59,169             | 51,913             |
| China.....                             | 1,605,452          | 2,330,559          | 2,345,570          | 3,717,181          | 4,275,235          |
| Colombia.....                          | 3,365,508          | 3,569,707          | 4,563,821          | 4,202,197          | 4,529,017          |
| Costa Rica.....                        | 43,222             | 35,774             | 47,921             | 60,978             | 62,209             |
| Cuba.....                              | 705,824            | 1,093,239          | 929,267            | 441,942            | 456,614            |
| Czechoslovakia.....                    | 1,769,044          | 1,403,472          | 2,310,315          | 1,969,444          | 2,364,952          |
| Denmark.....                           | 126,605            | 294,470            | 126,383            | 109,977            | 160,129            |
| Greenland.....                         | 1,918              | 185,259            | Nil                | Nil                | 230,235            |
| Ecuador.....                           | 5,024              | 15,715             | 20,765             | 75,418             | 49,432             |
| Egypt.....                             | 407,581            | 701,155            | 956,491            | 814,138            | 612,684            |
| Finland.....                           | 53,976             | 42,088             | 30,315             | 48,374             | 55,126             |
| France.....                            | 7,712,558          | 6,898,411          | 6,443,695          | 6,717,668          | 6,454,161          |
| French Africa.....                     | 52,091             | 85,266             | 35,400             | 63,648             | 67,228             |
| French East Indies.....                | 3,405              | 3,823              | 22,072             | 86,097             | 81,023             |
| St. Pierre and Miquelon.....           | 86,552             | 191,039            | 291,579            | 42,786             | 14,281             |
| Germany.....                           | 9,088,905          | 9,922,704          | 10,014,434         | 9,907,885          | 11,683,528         |
| Greece.....                            | 45,041             | 49,405             | 39,938             | 48,019             | 67,188             |
| Guatemala.....                         | 14,629             | 6,339              | 5,210              | 10,131             | 29,096             |
| Haiti.....                             | 836                | 1,029              | 62,001             | 55,811             | 100,554            |
| Honduras.....                          | 1,256              | 24,990             | 53,711             | 96,055             | 19,995             |
| Hungary.....                           | 24,274             | 56,937             | 67,308             | 45,955             | 134,700            |
| Iraq (Mesopotamia).....                | 156,024            | 189,229            | 254,427            | 345,358            | 306,369            |
| Italy.....                             | 2,806,361          | 2,579,950          | 2,714,878          | 1,943,918          | 1,722,424          |
| Japan.....                             | 3,860,911          | 3,811,687          | 4,424,654          | 3,466,081          | 4,796,508          |
| Latvia.....                            | 4,676              | 12,060             | 4,664              | 10,243             | 12,120             |
| Mexico.....                            | 880,841            | 404,943            | 494,184            | 885,089            | 812,701            |
| Morocco.....                           | 78,642             | 14,780             | 23,237             | 14,867             | 24,902             |
| Netherlands.....                       | 3,715,998          | 3,241,609          | 4,343,945          | 4,258,497          | 4,252,461          |
| Dutch East Indies.....                 | 224,997            | 561,251            | 398,093            | 780,755            | 1,000,030          |
| Dutch West Indies.....                 | 1,587,788          | 867,480            | Nil                | 273,019            | 207,955            |
| Nicaragua.....                         | 586                | Nil                | 668                | Nil                | 140                |
| Norway.....                            | 452,903            | 531,287            | 713,777            | 892,644            | 713,995            |
| Panama.....                            | 3,207              | 9,674              | 91,799             | 42,460             | 9,735              |
| Paraguay.....                          | Nil                | 15                 | 13,307             | 52,082             | 56,937             |
| Persia.....                            | 71,493             | 130,752            | 129,119            | 156,245            | 156,838            |
| Peru.....                              | 2,573,521          | 3,578,726          | 3,430,387          | 4,171,236          | 5,271,787          |
| Poland and Danzig.....                 | 84,861             | 66,094             | 154,309            | 115,818            | 149,826            |
| Portugal.....                          | 175,368            | 129,197            | 199,846            | 154,213            | 270,20             |
| Azores and Madeira.....                | 135,253            | 87,235             | 123,912            | 173,637            | 181,511            |

1 Totals include other minor countries not specified.

19.—Values of Imports into Canada of Merchandise Entered for Consumption, from the British Empire and from Foreign Countries, fiscal years ended Mar. 31, 1933-37—concluded.

| Country.                              | 1933.              | 1934.              | 1935.              | 1936.              | 1937.              |
|---------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                                       | \$                 | \$                 | \$                 | \$                 | \$                 |
| <b>Foreign Countries—concluded.</b>   |                    |                    |                    |                    |                    |
| Roumania.....                         | 4,730              | 4,380              | 5,396              | 144,413            | 177,909            |
| Russia.....                           | 539,419            | 104,760            | 265,039            | 279,441            | 128,721            |
| Santo Domingo.....                    | 101,310            | 189,006            | 1,314,939          | 126                | Nil                |
| Siam.....                             | Nil                | 22,595             | 52,040             | 158,272            | 158,240            |
| Spain.....                            | 1,160,753          | 1,128,755          | 1,374,755          | 1,428,984          | 1,151,253          |
| Caunry Islands.....                   | 10,989             | 2,789              | 1,640              | 15,679             | 8,042              |
| Sweden.....                           | 704,193            | 1,138,443          | 1,704,822          | 1,757,693          | 1,839,415          |
| Switzerland.....                      | 2,399,535          | 2,808,308          | 2,335,297          | 2,573,076          | 2,701,253          |
| Syria.....                            | 4,620              | 2,704              | 4,559              | 4,093              | 2,804              |
| Turkey.....                           | 171,010            | 174,000            | 206,183            | 287,558            | 202,853            |
| United States.....                    | 232,548,055        | 238,187,031        | 303,639,972        | 310,479,594        | 393,720,662        |
| Alaska.....                           | 37,799             | 34,552             | 99,581             | 60,115             | 91,064             |
| Hawaii.....                           | 42,186             | 40,490             | 84,904             | 116,387            | 204,907            |
| Philippines.....                      | 155,787            | 365,472            | 496,105            | 592,465            | 787,617            |
| Puerto Rico.....                      | 1,201              | 1,194              | 1,296              | 22,791             | 24,484             |
| Uruguay.....                          | 7,104              | 19,908             | 106,075            | 206,063            | 63,377             |
| Venezuela.....                        | 861,835            | 390,553            | 834,848            | 1,270,437          | 1,006,627          |
| Yugoslavia.....                       | 7,905              | 35,065             | 98,817             | 87,966             | 90,172             |
| <b>Totals, Foreign Countries.....</b> | <b>285,999,420</b> | <b>293,394,739</b> | <b>366,244,682</b> | <b>384,997,753</b> | <b>473,709,721</b> |
| <b>Grand Totals, Imports.....</b>     | <b>406,353,741</b> | <b>433,798,625</b> | <b>522,431,153</b> | <b>562,719,063</b> | <b>671,875,566</b> |
| <b>Imports, by Continents.</b>        |                    |                    |                    |                    |                    |
| Europe—United Kingdom.....            | 86,466,055         | 105,100,764        | 111,682,490        | 117,874,822        | 129,597,585        |
| Other Europe.....                     | 34,873,026         | 34,000,977         | 37,026,683         | 38,183,205         | 41,420,040         |
| North America.....                    | 240,478,559        | 251,249,768        | 320,732,090        | 335,938,367        | 411,616,495        |
| South America.....                    | 10,620,427         | 11,655,811         | 20,207,035         | 19,465,458         | 28,772,787         |
| Asia.....                             | 12,444,578         | 16,212,647         | 15,610,821         | 28,456,913         | 35,446,077         |
| Oceania.....                          | 9,133,325          | 9,671,789          | 10,746,716         | 12,780,319         | 17,449,842         |
| Africa.....                           | 6,367,174          | 5,906,869          | 6,435,818          | 10,013,880         | 7,062,490          |

<sup>1</sup> Totals include other minor countries not specified.

20.—Values of Exports of Canadian Produce from Canada to the British Empire and to Foreign Countries, fiscal years ended Mar. 31, 1933-37.

| Country.                               | 1933.              | 1934.              | 1935.              | 1936.              | 1937.              |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
|  | \$                 | \$                 | \$                 | \$                 | \$                 |
| <b>British Empire.</b>                 |                    |                    |                    |                    |                    |
| United Kingdom.....                    | 184,361,019        | 288,582,666        | 290,885,237        | 321,556,798        | 407,909,693        |
| Irish Free State.....                  | 2,247,162          | 3,514,785          | 4,120,624          | 3,039,231          | 3,799,710          |
| Aden.....                              | 18,692             | 34,753             | 40,879             | 119,667            | 77,390             |
| Africa—British East.....               | 409,276            | 525,434            | 634,578            | 824,031            | 776,150            |
| British South.....                     | 4,001,538          | 7,286,544          | 12,127,704         | 13,502,138         | 15,573,639         |
| British West.....                      | 303,290            | 348,097            | 348,736            | 610,158            | 800,337            |
| Southern Rhodesia.....                 | Nil                | 393,902            | 528,777            | 789,610            | 843,475            |
| Bermuda.....                           | 1,587,002          | 1,146,065          | 1,121,006          | 1,254,249          | 1,362,919          |
| British East Indies—British India..... | 2,414,596          | 3,749,360          | 4,118,175          | 3,138,869          | 3,221,062          |
| Ceylon.....                            | 62,744             | 109,411            | 237,085            | 225,086            | 136,563            |
| Straits Settlements.....               | 388,438            | 681,682            | 1,493,894          | 1,314,927          | 1,938,514          |
| British Guiana.....                    | 806,550            | 800,578            | 927,198            | 1,098,866          | 1,294,852          |
| British Honduras.....                  | 665,922            | 256,869            | 290,759            | 252,938            | 228,783            |
| British Sudan.....                     | 318                | 52,402             | 1,662              | 70,045             | 90,559             |
| British West Indies—Barbados.....      | 1,049,944          | 1,056,146          | 1,027,173          | 1,009,658          | 1,185,061          |
| Jamaica.....                           | 2,430,410          | 2,633,019          | 3,088,267          | 3,342,343          | 3,327,133          |
| Trinidad and Tobago.....               | 1,773,239          | 1,997,460          | 2,206,914          | 2,313,583          | 3,063,985          |
| Other.....                             | 1,714,122          | 1,353,324          | 1,312,810          | 1,281,720          | 1,670,585          |
| Gibraltar.....                         | 10,272             | 9,935              | 15,375             | 7,311              | 15,215             |
| Hong Kong.....                         | 1,062,343          | 1,253,866          | 1,300,083          | 1,406,955          | 1,372,904          |
| Malta, Cyprus and Goso.....            | 101,540            | 188,871            | 207,134            | 416,210            | 331,513            |
| Newfoundland.....                      | 5,644,225          | 6,130,698          | 6,408,918          | 6,902,882          | 7,728,211          |
| Oceania—Australia.....                 | 7,312,574          | 12,138,869         | 18,081,847         | 23,974,094         | 26,963,810         |
| Fiji.....                              | 101,397            | 176,741            | 197,949            | 288,571            | 363,556            |
| New Zealand.....                       | 3,608,500          | 4,480,219          | 7,344,785          | 10,221,265         | 11,187,118         |
| Palestine.....                         | 35,220             | 99,621             | 135,523            | 274,158            | 315,441            |
| <b>Totals, British Empire.....</b>     | <b>222,118,227</b> | <b>339,006,389</b> | <b>358,199,478</b> | <b>399,311,479</b> | <b>495,598,105</b> |

<sup>1</sup> Totals include other minor countries not specified.



20.—Values of Exports of Canadian Produce from Canada to the British Empire and to Foreign Countries, fiscal years ended Mar. 31, 1933-37—concluded.

| Country.                                   | 1933.              | 1934.              | 1935.              | 1936.              | 1937.                |
|--|--------------------|--------------------|--------------------|--------------------|----------------------|
|  | \$                 | \$                 | \$                 | \$                 | \$                   |
| <b>Foreign Countries.</b>                  |                    |                    |                    |                    |                      |
| Argentina.....                             | 2,509,585          | 2,793,801          | 4,014,974          | 3,981,453          | 3,727,088            |
| Austria.....                               | 6,623              | 31,268             | 25,810             | 44,808             | 40,849               |
| Belgium.....                               | 14,490,939         | 12,538,143         | 11,780,088         | 11,061,400         | 23,436,884           |
| Belgian Congo.....                         | 20,691             | 37,979             | 50,355             | 44,681             | 76,038               |
| Bolivia.....                               | 65,557             | 245,235            | 192,595            | 95,471             | 113,075              |
| Brazil.....                                | 1,394,230          | 1,758,380          | 2,769,578          | 3,711,238          | 3,872,899            |
| Chile.....                                 | 139,551            | 276,533            | 557,303            | 852,292            | 966,036              |
| China.....                                 | 7,698,238          | 5,396,970          | 4,461,465          | 4,555,726          | 4,899,438            |
| Colombia.....                              | 389,266            | 421,184            | 707,370            | 919,192            | 1,148,365            |
| Costa Rica.....                            | 46,442             | 71,219             | 66,322             | 83,640             | 99,786               |
| Cuba.....                                  | 830,177            | 993,019            | 1,203,854          | 1,177,131          | 1,455,352            |
| Czechoslovakia.....                        | 111,891            | 71,910             | 39,015             | 55,278             | 193,978              |
| Denmark.....                               | 2,094,212          | 2,160,467          | 2,012,197          | 1,375,236          | 1,673,355            |
| Ecuador.....                               | 24,753             | 60,300             | 140,461            | 159,550            | 112,211              |
| Egypt.....                                 | 186,008            | 179,578            | 297,984            | 440,085            | 409,044              |
| Finland.....                               | 263,728            | 328,539            | 345,367            | 722,288            | 637,581              |
| France.....                                | 12,730,259         | 11,907,478         | 9,842,294          | 7,648,440          | 11,717,502           |
| French Africa.....                         | 91,199             | 61,223             | 67,114             | 123,567            | 89,529               |
| French Guinea.....                         | 40,369             | 60,620             | 69,085             | 86,588             | 63,092               |
| French Oceania.....                        | 899,806            | 81,940             | 38,857             | 57,676             | 95,524               |
| French West Indies.....                    | 129,409            | 82,151             | 94,496             | 159,104            | 185,156              |
| St. Pierre and Miquelon.....               | 7,593,203          | 4,346,925          | 350,799            | 362,255            | 338,033              |
| Germany.....                               | 8,067,105          | 10,588,450         | 4,474,158          | 4,559,594          | 7,828,525            |
| Greece.....                                | 341,521            | 138,313            | 5,341              | 429,992            | 3,082,065            |
| Guatemala.....                             | 91,596             | 122,975            | 154,157            | 89,488             | 102,173              |
| Haiti.....                                 | 77,637             | 151,528            | 175,093            | 108,750            | 186,015              |
| Honduras.....                              | 108,906            | 115,228            | 108,641            | 130,580            | 153,140              |
| Iraq (Mesopotamia).....                    | 4,239              | 33,578             | 129,231            | 115,907            | 14,356               |
| Italy.....                                 | 4,126,362          | 3,543,815          | 3,630,630          | 2,376,633          | 4,050,016            |
| Japan.....                                 | 10,327,492         | 13,802,760         | 10,935,809         | 14,844,137         | 21,629,690           |
| Korea.....                                 | 2,248              | 112,407            | 9,326              | 1,699              | 2,404                |
| Mexico.....                                | 1,311,236          | 1,680,766          | 1,855,330          | 1,719,634          | 2,854,330            |
| Morocco.....                               | 161,314            | 58,252             | 65,774             | 82,968             | 1,942,079            |
| Netherlands.....                           | 10,457,910         | 19,655,271         | 10,071,978         | 9,445,227          | 10,915,611           |
| Dutch East Indies.....                     | 292,991            | 412,180            | 504,273            | 650,472            | 690,009              |
| Dutch Guinea.....                          | 40,764             | 45,224             | 56,908             | 51,108             | 59,244               |
| Dutch West Indies.....                     | 71,202             | 76,487             | 194,438            | 141,727            | 176,811              |
| Nicaragua.....                             | 18,510             | 20,003             | 34,187             | 57,194             | 78,323               |
| Norway.....                                | 2,695,335          | 3,912,408          | 4,788,736          | 4,576,786          | 6,097,015            |
| Panama.....                                | 113,407            | 233,430            | 239,717            | 312,402            | 396,312              |
| Persia.....                                | 5,393              | 14,225             | 68,493             | 170,561            | 54,750               |
| Peru.....                                  | 721,202            | 926,453            | 744,730            | 1,026,433          | 1,092,274            |
| Poland and Danzig.....                     | 31,340             | 71,343             | 402,067            | 511,929            | 557,196              |
| Portugal.....                              | 141,112            | 30,616             | 95,237             | 184,735            | 165,876              |
| Azores and Madeira.....                    | 26,330             | 27,853             | 17,996             | 7,018              | 15,637               |
| Portuguese Africa.....                     | 842,446            | 952,519            | 1,372,748          | 1,715,147          | 1,759,576            |
| Roumania.....                              | 57,866             | 14,209             | 151,582            | 22,726             | 40,709               |
| Russia.....                                | 1,776,940          | 18,722             | 21,712             | 1,201              | 185,467              |
| Salvador.....                              | 12,673             | 26,061             | 59,090             | 60,195             | 111,060              |
| Santo Domingo.....                         | 180,965            | 178,017            | 261,275            | 131,304            | 190,716              |
| Siam.....                                  | 4,075              | 4,326              | 6,853              | 7,294              | 15,576               |
| Spain.....                                 | 2,481,717          | 1,822,626          | 2,620,954          | 1,540,740          | 178,399              |
| Canary Islands.....                        | 14,017             | 45,151             | 50,159             | 56,870             | 7,483                |
| Sweden.....                                | 2,636,400          | 1,441,030          | 1,637,093          | 2,295,087          | 3,230,854            |
| Switzerland.....                           | 212,267            | 275,539            | 622,204            | 705,265            | 517,618              |
| Syria.....                                 | 35,755             | 33,254             | 33,712             | 101,962            | 107,620              |
| Turkey.....                                | 39,206             | 1,363              | 8,657              | 488                | 1,087                |
| United States.....                         | 197,424,723        | 220,072,810        | 304,721,354        | 360,302,426        | 435,014,544          |
| Alaska.....                                | 173,388            | 114,469            | 146,504            | 148,240            | 215,670              |
| Hawaii.....                                | 434,540            | 620,675            | 600,193            | 626,510            | 1,529,419            |
| Philippines.....                           | 347,368            | 616,979            | 833,623            | 1,123,277          | 1,512,146            |
| Puerto Rico.....                           | 268,045            | 353,809            | 431,296            | 409,365            | 342,450              |
| Uruguay.....                               | 71,721             | 140,273            | 281,445            | 368,506            | 422,837              |
| Venezuela.....                             | 351,777            | 401,396            | 484,510            | 571,687            | 1,016,621            |
| Yugoslavia.....                            | 2,016              | 670                | 1,246              | 6,172              | 42,951               |
| <b>Totals, Foreign Countries.....</b>      | <b>305,945,351</b> | <b>326,947,683</b> | <b>399,426,447</b> | <b>449,718,938</b> | <b>565,583,501</b>   |
| <b>Grand Totals, Canadian Exports.....</b> | <b>528,064,278</b> | <b>665,954,071</b> | <b>756,625,925</b> | <b>849,030,417</b> | <b>1,061,181,906</b> |
| <b>Exports, by Continents.</b>             |                    |                    |                    |                    |                      |
| Europe—United Kingdom.....                 | 184,361,019        | 288,582,666        | 290,885,237        | 321,556,793        | 407,996,698          |
| Other Europe.....                          | 72,712,079         | 72,374,404         | 56,938,021         | 51,096,279         | 80,323,584           |
| North America.....                         | 223,319,965        | 243,225,066        | 325,520,323        | 381,792,744        | 460,382,590          |
| South America.....                         | 6,562,273          | 7,930,034          | 10,938,314         | 12,934,902         | 13,890,794           |
| Asia.....                                  | 22,696,236         | 26,353,284         | 30,379,721         | 28,129,651         | 36,003,895           |
| Oceania.....                               | 12,864,161         | 17,508,431         | 26,279,369         | 35,190,081         | 40,150,716           |
| Africa.....                                | 6,048,495          | 9,979,586          | 15,609,940         | 18,329,992         | 22,467,651           |

Totals include other minor countries not specified.

21.—Values and Percentages of Canadian Imports and Exports, from and to Stated Countries, passing through the United States, fiscal years ended Mar. 31, 1936 and 1937.

| Country whence Imported and to which Exported. | Merchandise Imported through United States. |            |                  |            | Merchandise Exported through United States. |             |                    |             |
|--|---|------------|------------------|------------|---|-------------|--------------------|-------------|
|  | 1936.                                       |            | 1937.            |            | 1936.                                       |             | 1937.              |             |
|  | \$  | p.c.       | \$               | p.c.       | \$  | p.c.        | \$                 | p.c.        |
| <b>British Empire.</b>                         |   |            |                  |            |   |             |                    |             |
| United Kingdom.....                            | 97,126                                      | 0-1        | 128,721          | 0-1        | 53,238,852                                  | 16-6        | 63,283,013         | 15-5        |
| Irish Free State.....                          | Nil   | —          | 1,787            | 3-0        | 12,852                                      | 0-0         | 82,141             | 2-1         |
| Australia.....                                 | 1,032                                       | 0-0        | 95,000           | 1-0        | 7,222,192                                   | 30-1        | 6,556,742          | 24-3        |
| Bermuda.....                                   | 4,177                                       | 2-9        | 5,754            | 0-5        | 84,743                                      | 6-8         | 58,144             | 4-2         |
| British South Africa.....                      | 5,575                                       | 0-1        | 13,623           | 0-0        | 2,319,439                                   | 17-2        | 2,000,508          | 17-3        |
| British East Africa.....                       | 8,205                                       | 0-3        | 9,650            | 0-3        | 397,320                                     | 48-2        | 552,302            | 70-9        |
| British West Africa.....                       | Nil   | —          | 8,935            | 0-6        | 411,519                                     | 07-4        | 656,722            | 70-2        |
| British India.....                             | 19,602                                      | 0-3        | 7,008            | 0-1        | 480,817                                     | 15-3        | 560,729            | 16-8        |
| British Guiana.....                            | 112   | 0-0        | Nil              | —          | 92,840                                      | 8-4         | 39,524             | 3-0         |
| British Honduras.....                          | Nil   | —          | Nil              | —          | 2,777                                       | 1-1         | 2,726              | 1-2         |
| British West Indies.....                       | 14,437                                      | 0-1        | 6,240            | 0-0        | 438,376                                     | 5-5         | 618,283            | 6-7         |
| Ceylon.....                                    | Nil   | —          | Nil              | —          | 65,602                                      | 20-4        | 48,787             | 35-7        |
| Philippines.....                               | Nil   | —          | Nil              | —          | 69,832                                      | 24-2        | 57,929             | 15-9        |
| Hong Kong.....                                 | 3,863                                       | 0-3        | 8,295            | 1-2        | 119,703                                     | 8-2         | 150,674            | 11-6        |
| Newfoundland.....                              | Nil   | —          | Nil              | —          | 15,922                                      | 0-2         | 62,872             | 0-8         |
| New Zealand.....                               | 24,150                                      | 0-7        | Nil              | —          | 1,802,627                                   | 17-6        | 2,866,835          | 25-6        |
| Palestine.....                                 | 7,160                                       | 12-1       | 1,329            | 8-4        | 231,367                                     | 84-4        | 156,106            | 49-6        |
| Southern Rhodesia.....                         | Nil   | —          | Nil              | —          | 155,993                                     | 19-7        | 206,280            | 24-5        |
| Straits Settlements.....                       | 58,635                                      | 0-8        | 5,297            | 0-1        | 819,195                                     | 62-3        | 1,184,526          | 61-0        |
| <b>Totals, British Empire¹..</b>               | <b>245,120</b>                              | <b>0-1</b> | <b>295,696</b>   | <b>0-1</b> | <b>68,229,185</b>                           | <b>17-1</b> | <b>80,092,096</b>  | <b>16-1</b> |
| <b>Foreign Countries.</b>                      |   |            |                  |            |   |             |                    |             |
| Argentina.....                                 | 1,628,196                                   | 43-5       | 1,534,819        | 13-1       | 1,631,399                                   | 41-0        | 1,357,045          | 36-4        |
| Austria.....                                   | 17,584                                      | 5-3        | 36,814           | 9-5        | 32,812                                      | 73-2        | 17,935             | 40-7        |
| Belgium.....                                   | 197,168                                     | 3-9        | 288,396          | 4-3        | 279,832                                     | 3-4         | 349,372            | 1-5         |
| Brazil.....                                    | 268,600                                     | 28-7       | 233,771          | 25-8       | 2,148,309                                   | 57-9        | 2,027,751          | 52-3        |
| Chile.....                                     | 15,845                                      | 26-8       | 12,951           | 25-0       | 437,022                                     | 51-3        | 442,645            | 40-2        |
| China.....                                     | 766,338                                     | 20-6       | 1,242,166        | 29-0       | 482,938                                     | 10-6        | 486,991            | 9-9         |
| Colombia.....                                  | 172,922                                     | 4-1        | 200,501          | 5-8        | 630,752                                     | 68-6        | 745,916            | 64-8        |
| Cuba.....                                      | 255,061                                     | 57-7       | 204,990          | 64-6       | 554,680                                     | 47-1        | 545,036            | 37-4        |
| Czechoslovakia.....                            | 20,382                                      | 1-0        | 159,089          | 6-7        | 15,903                                      | 28-8        | 116,179            | 59-0        |
| Denmark.....                                   | 4,885                                       | 4-4        | 5,418            | 3-4        | 218,640                                     | 15-9        | 301,234            | 18-0        |
| Egypt.....                                     | 30,429                                      | 3-7        | 65,484           | 10-7       | 313,203                                     | 71-2        | 278,212            | 68-0        |
| France.....                                    | 139,309                                     | 2-1        | 112,197          | 1-7        | 1,001,463                                   | 13-1        | 1,308,366          | 11-1        |
| French Africa.....                             | 20,746                                      | 32-6       | 8,295            | 14-5       | 56,513                                      | 45-7        | 75,822             | 03-7        |
| French West Indies.....                        | Nil   | —          | Nil              | —          | 23,674                                      | 14-9        | 21,529             | 11-6        |
| Germany.....                                   | 62,550                                      | 0-6        | 294,975          | 2-5        | 346,079                                     | 7-6         | 1,180,040          | 15-0        |
| Greece.....                                    | 24,057                                      | 50-1       | 99,663           | 59-1       | 136,955                                     | 31-9        | 6,443              | 0-2         |
| Hawaii.....                                    | 6,790                                       | 5-8        | 100              | 0-0        | 9,837                                       | 1-6         | 3,857              | 0-2         |
| Italy.....                                     | 142,935                                     | 7-4        | 375,397          | 21-8       | 1,427,942                                   | 60-1        | 1,382,121          | 29-7        |
| Japan.....                                     | 118,136                                     | 3-4        | 497,091          | 10-4       | 782,507                                     | 5-3         | 1,852,500          | 8-8         |
| Mexico.....                                    | 569,581                                     | 63-2       | 301,949          | 37-2       | 1,618,386                                   | 94-1        | 2,287,698          | 79-6        |
| Netherlands.....                               | 510,231                                     | 12-0       | 423,185          | 10-0       | 2,590,439                                   | 27-4        | 1,428,235          | 13-0        |
| Dutch East Indies.....                         | 234,994                                     | 30-1       | 150,281          | 15-0       | 242,903                                     | 36-8        | 341,040            | 49-4        |
| Norway.....                                    | 1,886                                       | 0-2        | 16,170           | 2-3        | 549,298                                     | 12-0        | 1,107,422          | 16-0        |
| Peru.....                                      | 449   | 0-0        | 2,205            | 0-0        | 376,895                                     | 36-7        | 496,535            | 45-4        |
| Philippine Islands.....                        | 230,415                                     | 38-9       | 288,903          | 36-7       | 229,892                                     | 20-5        | 272,447            | 18-0        |
| Portugal.....                                  | 4,791                                       | 3-1        | 1,559            | 0-6        | 110,817                                     | 8-2         | 149,464            | 90-1        |
| Portuguese Africa.....                         | Nil   | —          | Nil              | —          | 854,554                                     | 49-8        | 685,608            | 38-7        |
| Russia.....                                    | 3,241                                       | 1-2        | 38,387           | 29-8       | 1,201                                       | 100-0       | 185,397            | 99-9        |
| Spain.....                                     | 35,901                                      | 2-5        | 169,717          | 14-8       | 1,371,202                                   | 89-0        | 142,771            | 80-0        |
| Sweden.....                                    | 11,810                                      | 0-7        | 36,874           | 2-0        | 581,079                                     | 25-3        | 772,856            | 23-7        |
| Switzerland.....                               | 42,085                                      | 1-6        | 14,777           | 0-5        | 68,971                                      | 9-0         | 63,805             | 11-8        |
| Turkey.....                                    | 127,942                                     | 44-5       | 101,963          | 50-3       | 339   | 79-7        | 1,255              | 18-7        |
| Uruguay.....                                   | 50,685                                      | 24-5       | 33,104           | 32-2       | 145,142                                     | 40-2        | 126,541            | 30-7        |
| Venezuela.....                                 | 20,070                                      | 1-6        | 8,570            | 0-9        | 533,277                                     | 93-3        | 972,273            | 95-6        |
| <b>Totals Foreign Countries¹</b>               | <b>6,037,144</b>                            | <b>9-2</b> | <b>7,338,120</b> | <b>9-2</b> | <b>21,867,711</b>                           | <b>24-5</b> | <b>23,611,239</b>  | <b>18-0</b> |
| <b>Grand Totals.....</b>                       | <b>6,282,264</b>                            | <b>2-6</b> | <b>7,633,816</b> | <b>2-7</b> | <b>90,096,896</b>                           | <b>18-4</b> | <b>103,703,335</b> | <b>16-5</b> |

¹ Totals include other countries not specified but are exclusive of trade with the United States.

### Subsection 10.—Comparison of the Volume of Imports and Exports.

The statistics of the external trade of Canada are analysed in this subsection to reveal changes in the physical volume of external trade as well as in the dollar value of that trade. Value figures alone may be somewhat misleading when used to show the physical growth of production and external trade. When, for example, Table 1 of this chapter is examined, it seems to show stagnation in our external trade between the early 70's and the middle 90's of last century and a very rapid growth thereafter. Yet we know that the apparent stagnation was partly due to the fall in general prices between the '70's and the middle '90's, while the rapid growth of the later figures is exaggerated by the rise of prices after 1897, especially in the war period, 1914 to 1921. Since 1929 another precipitate decline in prices has exaggerated the actual decrease of trade. Thus the figures as published give us no true measure of the volume of our external trade, yet, of the commodities that satisfy human needs, it is the *volume* rather than the *value* with which the masses of the population are more intimately concerned. Volume is, from many points of view, a more important consideration than value, and it is desirable to secure a record of the fluctuations in the volume of the country's trade as distinguished from the value thereof. This objective is attempted with regard to world trade in Subsection 1 of this chapter in which the internationally familiar term 'quantum' has the same significance as 'volume' here. Table 22 which follows serves the same purpose with regard to Canadian external trade.

The method adopted for ascertaining the fluctuations in volume has been to take a base year—1936—and to revalue the quantities of each commodity imported or exported in any given year at the average import or export value of that commodity in the standard or base year. Where quantities are not available, the values of items are assumed to have moved in the same direction and in the same proportions as closely related commodities. For this reason the results must not be regarded as of great precision but, since the value of goods not returned by quantity and of those not comparable over a limited series of years is small in comparison with the total trade, the amount of error introduced on this account is inconsiderable. By this method it is comparatively easy to compare the volume of the trade in a particular year with that in a recent year and the margin of error is fairly small. When, however, a comparison of the volume of trade in a particular year with that of a more remote year is undertaken, the margin of error is very much greater. Certain new commodities have come into existence in the course of the period, while the qualities of others have been materially changed; further, various new items have been added to the customs classifications, and it is not always possible to say just what customs items at present correspond with those of a year as long past as 1914. For these reasons comparisons with the pre-war fiscal year ended 1914 were discontinued after 1929. This comparison for 1929 and certain previous years appeared on pp. 581-583 of the 1930 Year Book. For similar reasons the retention of 1926 as the base year was tending to lessen the reliability of recent calculations, and, consequently, 1936 has been taken as a new base year in the present edition. Comparisons with 1936 are carried back to 1932.

In Table 22 the values and volumes of imports and exports, respectively, for the years 1932 to 1937 are compared with 1936, for the main groups, as follows: the

imports and exports are first shown at the values at which the trade was recorded; the same imports and exports are then shown at the value they would have had if the average price or unit value had been the same in each year as it was in 1936. In other words, the figures on the basis of 1936 average values enable a comparison to be made of the imports or exports for the given years on the basis of variations in quantity only, variations due to different prices having been eliminated. Index numbers of declared values, that is, the total declared values of the imports or exports in each year expressed as percentages of 1936, are then given. These are followed by the index numbers of average values, which show the prices at which goods were imported or exported in each year expressed as percentages of the prices in 1936. Finally, the index numbers of physical volume show the relative quantity of merchandise imported or exported in each year expressed as a percentage of the quantity of the same merchandise in 1936.

The fiscal year 1937 shows a general increase in the volume of imports under all groups, indicative of the recovery of the purchasing power of the people of Canada. The greatest change since the low period of the depression represented by the fiscal year 1933 is the increase in the imports of iron and its products.

In the latter half of Table 22, dealing with exports, the index numbers show a very encouraging recovery since the fiscal year 1933 in both the volume of exports and in the average values or the prices at which they sold in the world markets. Recovery in volume has been particularly marked in the cases of the wood and paper, iron, and non-metallic mineral groups. These products represent to a large extent capital goods or materials, and the demand for them was very much curtailed during the worst years of the depression.

The index numbers of average values of imports rose from 88.3 in 1933 to 102.1 in 1937, or by about 16 p.c., while the index of average values of exports rose in the same period from 78.6 to 107.0, or by 36 p.c. This greater rise in the prices of exports than in those of imports represents welcome progress toward a betterment in Canada's barter terms in world trade, which suffered so severely during the depression owing to the much greater decline in the prices of primary goods than in those of highly fabricated commodities.

**22.—Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, fiscal years ended Mar. 31, 1932-37.**

**IMPORTS FOR CONSUMPTION.**

| Group.                                   | 1932.          | 1933.          | 1934.          | 1935.          | 1936.          | 1937. <sup>1</sup> |
|--|----------------|----------------|----------------|----------------|----------------|--------------------|
|  | \$'000         | \$'000         | \$'000         | \$'000         | \$'000         | \$'000             |
| <b>Values as Declared.</b>               |                |                |                |                |                |                    |
| Agricultural and Vegetable Products..... | 128,599        | 88,289         | 90,829         | 109,419        | 110,342        | 131,400            |
| Animals and Their Products.....          | 24,563         | 15,439         | 19,842         | 19,557         | 24,314         | 27,803             |
| Fibres and Textiles.....                 | 83,878         | 61,218         | 79,372         | 81,795         | 89,314         | 104,811            |
| Wood and Paper.....                      | 32,030         | 20,506         | 19,368         | 21,209         | 23,272         | 28,928             |
| Iron and Its Products.....               | 98,298         | 58,918         | 69,127         | 100,058        | 114,254        | 150,239            |
| Non-Ferrous Metals.....                  | 34,802         | 18,095         | 20,171         | 28,497         | 33,686         | 37,038             |
| Non-Metallic Minerals.....               | 102,147        | 87,658         | 83,397         | 102,428        | 105,421        | 116,948            |
| Chemicals and Allied Products.....       | 30,731         | 25,455         | 25,584         | 28,872         | 29,920         | 33,105             |
| Miscellaneous.....                       | 43,455         | 30,509         | 26,116         | 30,204         | 31,080         | 41,544             |
| <b>Totals, Declared Values.....</b>      | <b>678,504</b> | <b>406,384</b> | <b>433,799</b> | <b>622,431</b> | <b>652,719</b> | <b>671,876</b>     |

<sup>1</sup> Subject to revision.

22.—Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, fiscal years ended Mar. 31, 1932-37—continued.

IMPORTS FOR CONSUMPTION—concluded.

| Group.  | 1932.                    | 1933.          | 1934.          | 1935.          | 1936.          | 1937. <sup>1</sup> |
|---|--------------------------|----------------|----------------|----------------|----------------|--------------------|
|   | \$'000                   | \$'000         | \$'000         | \$'000         | \$'000         | \$'000             |
| <b>On the Basis of 1936 Average Values.<sup>2</sup></b> |                          |                |                |                |                |                    |
| Agricultural and Vegetable Products.....                | 115,642                  | 88,802         | 93,225         | 105,583        | 110,342        | 126,983            |
| Animals and Their Products.....                         | 22,314                   | 19,579         | 22,705         | 22,404         | 24,314         | 25,900             |
| Fibres and Textiles.....                                | 93,930                   | 113,647        | 86,205         | 82,647         | 89,314         | 98,906             |
| Wood and Paper.....                                     | 25,901                   | 17,760         | 18,210         | 21,728         | 23,272         | 28,934             |
| Iron and Its Products.....                              | 88,132                   | 53,683         | 74,398         | 103,237        | 114,254        | 148,360            |
| Non-Ferrous Metals.....                                 | 39,671                   | 21,031         | 22,712         | 28,781         | 33,686         | 41,584             |
| Non-Metallic Minerals.....                              | 107,414                  | 86,560         | 93,520         | 94,819         | 105,421        | 113,610            |
| Chemicals and Allied Products.....                      | 28,450                   | 25,102         | 25,600         | 28,626         | 29,920         | 32,851             |
| Miscellaneous.....                                      | 43,030                   | 33,950         | 28,700         | 30,328         | 31,696         | 40,070             |
| <b>Totals, at 1936 Average Values.....</b>              | <b>564,384</b>           | <b>469,174</b> | <b>465,335</b> | <b>518,156</b> | <b>562,719</b> | <b>657,798</b>     |
| <b>Index Numbers of Declared Values.</b>                |                          |                |                |                |                |                    |
|   | (1936=100.) <sup>3</sup> |                |                |                |                |                    |
| Agricultural and Vegetable Products.....                | 116.5                    | 80.0           | 82.3           | 99.2           | 100.0          | 119.1              |
| Animals and Their Products.....                         | 101.0                    | 63.5           | 81.6           | 82.1           | 100.0          | 114.6              |
| Fibres and Textiles.....                                | 93.4                     | 68.2           | 88.4           | 91.1           | 100.0          | 116.7              |
| Wood and Paper.....                                     | 137.0                    | 85.1           | 83.2           | 91.1           | 100.0          | 124.3              |
| Iron and Its Products.....                              | 86.0                     | 51.6           | 60.5           | 87.6           | 100.0          | 131.5              |
| Non-Ferrous Metals.....                                 | 103.3                    | 53.7           | 59.9           | 84.6           | 100.0          | 110.0              |
| Non-Metallic Minerals.....                              | 96.9                     | 83.2           | 79.1           | 97.2           | 100.0          | 110.9              |
| Chemicals and Allied Products.....                      | 102.7                    | 85.1           | 85.6           | 96.5           | 100.0          | 110.6              |
| Miscellaneous.....                                      | 137.1                    | 97.2           | 82.4           | 95.3           | 100.0          | 131.6              |
| <b>Total Indexes of Declared Values.....</b>            | <b>102.8</b>             | <b>72.2</b>    | <b>77.1</b>    | <b>92.8</b>    | <b>100.0</b>   | <b>119.4</b>       |
| <b>Index Numbers of Average Values.</b>                 |                          |                |                |                |                |                    |
| Agricultural and Vegetable Products.....                | 111.2                    | 99.4           | 97.4           | 103.6          | 100.0          | 103.5              |
| Animals and Their Products.....                         | 110.6                    | 78.9           | 87.4           | 89.1           | 100.0          | 107.6              |
| Fibres and Textiles.....                                | 89.3                     | 53.9           | 92.1           | 99.0           | 100.0          | 106.0              |
| Wood and Paper.....                                     | 123.7                    | 115.5          | 106.3          | 97.6           | 100.0          | 90.0               |
| Iron and Its Products.....                              | 111.5                    | 100.6          | 92.0           | 96.9           | 100.0          | 101.3              |
| Non-Ferrous Metals.....                                 | 85.2                     | 86.0           | 84.4           | 99.0           | 100.0          | 89.1               |
| Non-Metallic Minerals.....                              | 95.0                     | 101.3          | 89.2           | 108.0          | 100.0          | 102.9              |
| Chemicals and Allied Products.....                      | 108.0                    | 101.4          | 99.9           | 100.8          | 100.0          | 100.8              |
| Miscellaneous.....                                      | 101.0                    | 90.7           | 90.8           | 99.6           | 100.0          | 102.1              |
| <b>Total Indexes of Average Values.....</b>             | <b>102.5</b>             | <b>83.3</b>    | <b>93.0</b>    | <b>109.8</b>   | <b>100.0</b>   | <b>102.1</b>       |
| <b>Index Numbers of Physical Volume.</b>                |                          |                |                |                |                |                    |
| Agricultural and Vegetable Products.....                | 104.8                    | 80.5           | 84.5           | 95.7           | 100.0          | 115.1              |
| Animals and Their Products.....                         | 91.4                     | 80.5           | 93.4           | 92.1           | 100.0          | 106.5              |
| Fibres and Textiles.....                                | 104.6                    | 126.5          | 96.0           | 92.0           | 100.0          | 110.1              |
| Wood and Paper.....                                     | 113.3                    | 76.3           | 78.2           | 93.4           | 100.0          | 124.3              |
| Iron and Its Products.....                              | 77.1                     | 47.0           | 65.1           | 90.0           | 100.0          | 123.9              |
| Non-Ferrous Metals.....                                 | 117.8                    | 59.5           | 67.4           | 85.4           | 100.0          | 123.4              |
| Non-Metallic Minerals.....                              | 101.9                    | 82.1           | 88.7           | 89.9           | 100.0          | 107.8              |
| Chemicals and Allied Products.....                      | 95.1                     | 83.9           | 85.6           | 95.7           | 100.0          | 109.8              |
| Miscellaneous.....                                      | 135.8                    | 107.1          | 90.7           | 95.7           | 100.0          | 128.3              |
| <b>Total Indexes of Physical Volume.....</b>            | <b>100.3</b>             | <b>81.8</b>    | <b>82.7</b>    | <b>92.1</b>    | <b>100.0</b>   | <b>116.9</b>       |

EXPORTS OF CANADIAN PRODUCE.

| Values as Declared.                      | \$'000         | \$'000         | \$'000         | \$'000         | \$'000         | \$'000           |
|--|----------------|----------------|----------------|----------------|----------------|------------------|
| Agricultural and Vegetable Products..... | 204,398        | 203,371        | 205,805        | 226,234        | 242,862        | 346,451          |
| Animals and Their Products.....          | 68,799         | 54,333         | 75,151         | 86,348         | 100,932        | 133,941          |
| Fibres and Textiles.....                 | 5,512          | 4,730          | 7,829          | 7,523          | 10,274         | 12,830           |
| Wood and Paper.....                      | 175,740        | 120,887        | 143,142        | 160,933        | 181,832        | 223,918          |
| Iron and Its Products.....               | 15,403         | 17,277         | 26,641         | 40,739         | 52,368         | 53,173           |
| Non-Ferrous Metals.....                  | 92,761         | 96,906         | 168,375        | 191,345        | 212,347        | 230,152          |
| Non-Metallic Minerals.....               | 13,456         | 9,216          | 14,809         | 15,084         | 19,094         | 20,081           |
| Chemicals and Allied Products.....       | 10,536         | 11,100         | 13,844         | 15,270         | 16,018         | 19,788           |
| Miscellaneous.....                       | 18,367         | 10,244         | 10,358         | 12,083         | 13,119         | 15,398           |
| <b>Totals, Declared Values.....</b>      | <b>600,032</b> | <b>528,064</b> | <b>665,954</b> | <b>756,626</b> | <b>849,030</b> | <b>1,061,182</b> |

For footnotes, see end of table, p. 585.

22.—Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, fiscal years ended Mar. 31, 1932-37—concluded.

EXPORTS OF CANADIAN PRODUCE—concluded.

| Group.  | 1932.                    | 1933.          | 1934.          | 1935.          | 1936.          | 1937. <sup>1</sup> |
|---|--------------------------|----------------|----------------|----------------|----------------|--------------------|
|   | \$'000                   | \$'000         | \$'000         | \$'000         | \$'000         | \$'000             |
| <b>On the Basis of 1936 Average Values.<sup>2</sup></b> |                          |                |                |                |                |                    |
| Agricultural and Vegetable Products.....                | 260,684                  | 285,917        | 238,053        | 237,209        | 242,862        | 306,908            |
| Animals and Their Products.....                         | 74,076                   | 68,824         | 83,932         | 90,031         | 100,932        | 130,634            |
| Fibres and Textiles.....                                | 6,658                    | 6,169          | 8,541          | 7,282          | 10,274         | 11,674             |
| Wood and Paper.....                                     | 132,979                  | 106,264        | 142,565        | 161,416        | 181,832        | 211,784            |
| Iron and Its Products.....                              | 12,065                   | 13,004         | 26,187         | 41,433         | 52,368         | 50,902             |
| Non-Ferrous Metals.....                                 | 146,888                  | 157,881        | 196,725        | 231,099        | 213,547        | 219,611            |
| Non-Metallic Minerals.....                              | 12,446                   | 9,944          | 15,758         | 16,677         | 19,084         | 25,726             |
| Chemicals and Allied Products.....                      | 9,449                    | 9,933          | 14,420         | 15,420         | 16,018         | 19,771             |
| Miscellaneous.....                                      | 15,242                   | 13,824         | 12,363         | 13,528         | 13,113         | 14,813             |
| <b>Totals, at 1936 Average Values.....</b>              | <b>670,487</b>           | <b>671,810</b> | <b>738,544</b> | <b>863,785</b> | <b>819,030</b> | <b>991,823</b>     |
| <b>Index Numbers of Declared Values.</b>                |                          |                |                |                |                |                    |
|   | (1936=100.) <sup>2</sup> |                |                |                |                |                    |
| Agricultural and Vegetable Products.....                | 84.2                     | 83.7           | 84.7           | 93.2           | 100.0          | 142.7              |
| Animals and Their Products.....                         | 68.2                     | 53.8           | 74.5           | 86.0           | 100.0          | 132.7              |
| Fibres and Textiles.....                                | 53.6                     | 46.0           | 76.2           | 73.2           | 100.0          | 124.9              |
| Wood and Paper.....                                     | 96.6                     | 66.5           | 78.7           | 88.5           | 100.0          | 123.1              |
| Iron and Its Products.....                              | 29.5                     | 33.0           | 50.9           | 77.8           | 100.0          | 101.5              |
| Non-Ferrous Metals.....                                 | 43.6                     | 45.6           | 79.2           | 90.0           | 100.0          | 108.3              |
| Non-Metallic Minerals.....                              | 70.5                     | 48.3           | 77.6           | 82.0           | 100.0          | 135.7              |
| Chemicals and Allied Products.....                      | 65.8                     | 69.3           | 86.4           | 95.3           | 100.0          | 120.1              |
| Miscellaneous.....                                      | 101.9                    | 78.1           | 79.0           | 92.1           | 100.0          | 117.4              |
| <b>Total Indexes of Declared Values..</b>               | <b>70.7</b>              | <b>62.2</b>    | <b>78.4</b>    | <b>89.1</b>    | <b>100.0</b>   | <b>125.0</b>       |
| <b>Index Numbers of Average Values.</b>                 |                          |                |                |                |                |                    |
| Agricultural and Vegetable Products.....                | 78.4                     | 71.1           | 86.0           | 99.6           | 100.0          | 112.9              |
| Animals and Their Products.....                         | 92.0                     | 78.9           | 89.5           | 96.5           | 100.0          | 102.5              |
| Fibres and Textiles.....                                | 82.8                     | 76.7           | 91.7           | 103.3          | 100.0          | 109.9              |
| Wood and Paper.....                                     | 132.2                    | 113.8          | 100.4          | 99.7           | 100.0          | 105.7              |
| Iron and Its Products.....                              | 128.2                    | 132.9          | 101.7          | 88.3           | 100.0          | 104.5              |
| Non-Ferrous Metals.....                                 | 63.2                     | 61.4           | 85.6           | 82.8           | 100.0          | 104.8              |
| Non-Metallic Minerals.....                              | 108.1                    | 92.7           | 84.0           | 83.8           | 100.0          | 101.4              |
| Chemicals and Allied Products.....                      | 111.5                    | 111.2          | 96.0           | 101.0          | 100.0          | 97.3               |
| Miscellaneous.....                                      | 87.7                     | 74.1           | 83.8           | 89.3           | 100.0          | 103.9              |
| <b>Total Indexes of Average Values...</b>               | <b>89.5</b>              | <b>78.6</b>    | <b>90.2</b>    | <b>94.1</b>    | <b>100.0</b>   | <b>107.0</b>       |
| <b>Index Numbers of Physical Volume.</b>                |                          |                |                |                |                |                    |
| Agricultural and Vegetable Products.....                | 107.3                    | 117.7          | 98.0           | 93.6           | 100.0          | 126.4              |
| Animals and Their Products.....                         | 73.4                     | 68.2           | 83.2           | 89.1           | 100.0          | 129.4              |
| Fibres and Textiles.....                                | 64.8                     | 60.0           | 83.1           | 70.9           | 100.0          | 113.6              |
| Wood and Paper.....                                     | 73.1                     | 58.4           | 78.4           | 88.8           | 100.0          | 116.5              |
| Iron and Its Products.....                              | 23.0                     | 24.8           | 50.0           | 79.1           | 100.0          | 97.2               |
| Non-Ferrous Metals.....                                 | 59.1                     | 74.3           | 92.6           | 108.7          | 100.0          | 103.3              |
| Non-Metallic Minerals.....                              | 65.2                     | 52.0           | 82.6           | 87.4           | 100.0          | 134.8              |
| Chemicals and Allied Products.....                      | 59.0                     | 62.3           | 90.0           | 94.4           | 100.0          | 123.4              |
| Miscellaneous.....                                      | 116.2                    | 105.4          | 94.3           | 103.2          | 100.0          | 113.0              |
| <b>Total Indexes of Physical Volume.</b>                | <b>79.0</b>              | <b>79.0</b>    | <b>87.0</b>    | <b>94.7</b>    | <b>100.0</b>   | <b>116.8</b>       |

<sup>1</sup> Subject to revision.

<sup>2</sup> Since the publication of the 1937 Year Book the base year for these calculations has been changed from 1928 to 1936.

### Section 4.—The Tourist Trade of Canada.\*

**Tourist Expenditures in Canada.**—In recent years the tourist trade has become an important source of revenue in certain sections of the Dominion, materially affecting the balance of trade. It represents the economic disposition of national assets in which Canada is particularly rich, namely: its picturesque scenery; its invigorating climate; its opportunities for hunting, fishing, and boating, as well as for winter sports—for the exploitation of which a considerable capital expenditure has been made on hotel accommodation, improved highways and other attractions. Those entering from the United States in automobiles are by far the most important class of tourist. The business accruing to the Dominion in this manner represents some return for expenditures on highways which have been very large in the period since the War. In order to attract this traffic, highways have been built through regions of picturesque scenery, such as the Rocky mountains, northern Ontario, and the Laurentians and Gaspé in Quebec. A further asset for Canada arises from the fact that these scenic regions with their invigorating climate are at their best in the summer holiday season when motorists are most ready to travel. The expenditure of travellers coming to Canada from other countries has the same effect, in so far as its influence on the balance of trade is concerned, as the export of additional commodities would have. Indeed, in so far as commodities are sold to tourists travelling in the Dominion, our exportable surplus of such commodities is reduced.

It is impossible to obtain a direct record of expenditures of this kind. Moreover, even a rough estimate of the total is extremely difficult to make, visitors to Canada being of all classes, engaging in widely different activities or forms of recreation, remaining for varying periods, with expenditures undoubtedly ranging from very small to very large amounts.

Tourists who enter Canada may be divided into two broad classes: (1) those coming in *via* ocean ports; (2) those entering from the United States, the latter subdivided into entries by (a) automobile, (b) rail or steamer, (c) other modes of travel as bus, aeroplane, ferry, etc. In 1937 these classes are estimated to have expended in Canada (1) \$16,972,000, and (2) \$277,710,000, respectively, with entries under (a) \$181,332,000, (b) \$69,751,000, and (c) \$26,627,000.

The Department of National Revenue records the number of tourists entering Canada in automobiles from the United States through each of the ports of entry along the border. Estimates of the expenditures of tourists of this class in 1937, according to the provinces by which they entered, are as follows: Maritime Provinces, \$12,390,000; Quebec, \$36,033,000; Ontario, \$117,029,000; Manitoba, \$2,321,000; Saskatchewan, \$946,000; Alberta, \$1,115,000; and British Columbia, \$11,498,000.

**Expenditures of Canadian Tourists Abroad.**—Canadian tourists visiting other countries travel in the main to the British Isles and other European countries on visits home, or as sightseers. Again, many of them, especially elderly or delicate persons, go to Florida, Bermuda or the West Indies. These tourists may be classified in the same way as those entering Canada. The total expenditures of such Canadian tourists to other countries were estimated in 1937 to be as follows: to overseas countries, \$22,335,000; to the United States by automobile, \$48,893,000; to the United States by rail or steamer, \$24,194,000; and to the United States by other modes of travel, \$29,000,000; a total of \$124,422,000.

\* Abridged from "The Tourist Trade in Canada, 1920-26", and reports for each year from 1927 to 1937, inclusive, published by the Dominion Bureau of Statistics and obtainable on application. These reports contain a full explanation of the methods used in making the estimates.

**Summary.**—For the years 1924 to 1937 the total estimated expenditures of tourists from other countries in Canada, as compared with those of Canadian tourists in other countries, are given in Table 23.

**23.—Estimated Tourist Expenditures in Canada and of Canadians Abroad, calendar years 1924-37.**

| Year.     | By Tourists from Other Countries in Canada. |                          |                            |                                    |                          | By Canadian Tourists in Other Countries. | Excess by Tourists from Other Countries in Canada. |
|-----------|---|--------------------------|----------------------------|------------------------------------|--------------------------|--|--|
|           | Via Ocean Ports.                            | Via Automobile from U.S. | Via Rail or Boat from U.S. | Via Bus, Aeroplane, etc. from U.S. | Total.                   |  |  |
|           | \$  | \$                       | \$                         | \$                                 | \$                       | \$                                       | \$   |
| 1924..... | 17,012,000                                  | 76,602,000               | 79,328,000                 | 1                                  | 173,002,000              | 84,973,000                               | 88,029,000   |
| 1925..... | 15,430,000                                  | 98,416,000               | 79,328,000                 | 1                                  | 193,174,000              | 86,160,000                               | 107,014,000  |
| 1926..... | 12,235,000                                  | 109,604,000              | 79,328,000                 | 1                                  | 201,167,000              | 98,747,000                               | 102,420,000  |
| 1927..... | 14,444,000                                  | 133,768,000              | 70,265,000                 | 1                                  | 238,477,000              | 108,750,000                              | 129,727,000  |
| 1928..... | 13,735,000                                  | 188,974,000              | 72,521,000                 | 1                                  | 275,230,000              | 107,522,000                              | 167,708,000  |
| 1929..... | 13,794,000                                  | 215,577,000              | 80,008,000                 | 1                                  | 309,379,000              | 121,645,000                              | 187,734,000  |
| 1930..... | 12,955,000                                  | 202,409,000              | 63,674,000                 | 1                                  | 279,238,000              | 100,339,000                              | 178,899,000  |
| 1931..... | 12,018,000                                  | 188,120,000              | 50,629,000                 | 1                                  | 250,767,000              | 76,452,000                               | 174,324,000  |
| 1932..... | 10,543,000                                  | 159,838,000 <sup>1</sup> | 42,067,000 <sup>2</sup>    | 1                                  | 212,448,000 <sup>3</sup> | 57,403,000                               | 155,045,000  |
| 1933..... | 7,763,000                                   | 77,250,000 <sup>2</sup>  | 32,111,000 <sup>2</sup>    | 1                                  | 117,124,000 <sup>3</sup> | 50,860,000                               | 66,264,000   |
| 1934..... | 9,455,000                                   | 80,259,000               | 34,260,000                 | 16,000,000                         | 145,974,000              | 63,658,000                               | 82,316,000   |
| 1935..... | 10,117,000                                  | 132,162,000              | 53,499,000                 | 19,000,000                         | 214,778,000              | 95,600,000 <sup>2</sup>                  | 119,178,000 <sup>3</sup>                           |
| 1936..... | 12,946,000 <sup>2</sup>                     | 153,509,000 <sup>2</sup> | 64,844,000                 | 20,000,000 <sup>2</sup>            | 251,299,000 <sup>2</sup> | 110,400,000 <sup>2</sup>                 | 140,899,000 <sup>2</sup>                           |
| 1937..... | 16,672,000                                  | 181,332,000              | 69,751,000                 | 26,627,000                         | 294,482,000              | 124,422,000                              | 170,060,000  |

<sup>1</sup> Information not available on a comparable basis for the years 1924-33.

Canadian funds at average rates of exchange for the period.

Book.

<sup>2</sup> Preliminary figures.

<sup>3</sup> Converted into Canadian funds.

<sup>4</sup> Revised since publication of the 1937 Year Book.

Until the depression made itself felt in 1930, there was a steady increase in the amounts spent both by tourists from other countries in Canada and by Canadians in other countries. During the years 1930-32 the tourist trade, in spite of successive declines, exhibited a surprising vitality as compared with the generally depressed state of trade and industry. In each of these years the expenditures of tourists in Canada (and in the latter two the balance after deducting the corresponding expenditures of Canadians in foreign countries) constituted an 'invisible' export of greater value than any single commodity exported. A marked contraction in both volume of travel and tourist expenditures occurred in 1933 and conditions in 1934 were very little better. A pronounced improvement in tourist trade took place in 1935. The upward trend continued in 1936 and again in 1937, in which year the value of the tourist trade to Canada was but little short of the pre-depression peak level.

### Section 5.—Balance of International Payments, 1920-37.\*

"Balance of Trade" figures are frequently misinterpreted owing to the persistence of the doctrine long ago exploded that a nation's trade is necessarily in a healthy state when exports exceed imports, necessitating an import of gold to make up the difference. Trade was then said to show a 'favourable balance'. This theory took account only of the 'visible' or commodity items of trade, whereas the true

\* Abridged from the annual report "Canada's Balance of International Payments", and from the special report "The Canadian Balance of International Payments, 1926-1936", by Herbert Marshall, B.A., F.S.S., Chief of the Internal Trade Branch of the Dominion Bureau of Statistics. These reports include explanatory data on the methods followed in computing these statistics.



balance of a nation's trade can only be known when not only the commodity items are considered, but also the 'invisible' items such as interest, freight, immigrant remittances, financial services, tourist traffic, etc. In short, all debit and credit transactions must be set down in order to find out the true balance. If all the visible and invisible items are thus tabulated the debit or credit difference will be a final invisible item—capital import or export—and this will bring the nation's trade account into a state of balance.\* Thus, the commodity trade balance of a country cannot be understood by itself, but only as it is interpreted in the light of the invisible items of a country's international transactions. In the light of such data, it will be found that a so-called favourable or unfavourable balance will mean an entirely different thing at different times in a country's history. The balance of international payments, which takes account not only of commodity trade but of all transactions, reveals the meaning of the trade balance. It shows, for example, that in 1920, 1921, and 1922 our international accounts were balanced by large imports of capital, although our commodity trade balance was favourable in 1920 and 1922. During these years Britain repaid us war funds as follows: 1920, \$104,000,000; 1921, \$128,000,000; 1922, \$84,000,000. From 1923-28, however, the international accounts show a credit balance after allowing for interest payments and maturities, thus denoting capital exports. In these years Canada became, temporarily, a capital-exporting country and, therefore, the explanation of our favourable commodity trade balance was quite different from that for the period 1894 to 1903, when it was explained by payments of interest and maturities.

From the foregoing it will be seen that an estimated balance of international payments is indispensable to the understanding of trade accounts. It has, however, a great many other important uses, among which the following may be mentioned: (1) to give a comprehensive picture of our international debits and credits and how they are balanced; (2) to show the extent of our international borrowings and lendings; (3) to show the magnitude of individual invisible items, such as interest, freights, tourist traffic, etc., in our international transactions; (4) to explain exchange disturbances and the effect of international financial difficulties; and (5) to furnish data for guidance in the formulation of international fiscal, financial, and commercial policy.

The Dominion Bureau of Statistics has recently completed a comprehensive study of the Canadian balance of international payments between 1926 and 1936 and it is, consequently, now possible to draw up for this period revised statements of the balance of payments which incorporate new information that has become available.†

Of special importance are the data that have been collected on the movement of capital between Canada and other countries during the period. These movements of capital have been analyzed in detail and presented in the capital account. Viewing the period as a whole, one of the more outstanding results of Canada's international capital transactions has been the extent to which outward movements of capital have offset inward movements. In the ten years between 1927 and 1936 Canadian governments and corporations received \$1,978,600,000 from the sale of

\*It is impossible to obtain absolute completeness and accuracy in estimates of invisible items; hence, part of the difference will be due to errors and omissions.

†"The Canadian Balance of International Payments, 1926-1936", published by and obtainable from the Dominion Bureau of Statistics.

bonds abroad, while during the same years they paid off \$1,801,900,000 of bonded obligations, so that the net capital receipts from their borrowings abroad during the decade were only \$176,700,000. At the same time, large sums were remitted from Canada for the purchase of United States, Latin-American, and other foreign securities, for the repurchase of Canadian securities, and in connection with capital repayments and other financial transactions of trust companies, international branch plants, etc. In the earlier years of the period there was a considerable inward movement of capital in connection with the repatriation of Canadian banking assets held abroad.

**Current and Capital Transactions in 1935 and 1936.**—In each of the years 1935 and 1936, Canada's current and capital transactions with other countries had many features in common. Both years were characterized by large credit balances in the current account accompanied by substantial outward movements of capital. The principal sources of the credits in the current account, which summarizes international transactions in goods, gold, and services, were the growing credit balances derived in these years from the expansion of Canada's export trade, from larger sales of gold to other countries and from the increasing expenditures in Canada of tourists from other countries. External credits derived from these transactions were more than sufficient to make the customary large net payments of interest and dividends to residents of other countries as well as the net payments to other countries arising out of other international service transactions. Taking all such current payments abroad into account there remained surplus credits in the current account of \$176,900,000 and \$309,000,000, respectively, in 1935 and 1936.

The capital account shows how the surplus external credits in the current account were employed as well as giving a detailed analysis of the various types of capital movement between Canada and other countries in these years. The net outward movements of capital in 1935 and 1936 which have been traced in the capital account were \$173,300,000 and \$253,700,000, respectively. In each year a feature of the outward movement of capital was the large volume of Canadian securities owned abroad which were redeemed, and in both years these amounts of maturing and called bonds exceeded by far the amounts of new Canadian issues sold abroad, with consequent substantial reductions in Canada's liabilities to other countries. A long-run consequence of these large scale redemption operations will be the future reductions in Canada's interest payments to non-resident bondholders. The purchases and sales of securities between Canada and other countries were the source of net credits in each year, although in 1936 purchases from other countries were not far short of sales. There were substantial outflows of capital funds in each year as a consequence of international insurance transactions and of the international transactions of Canadian trust companies, the operations of British and foreign branch plants in Canada, and the branch activities in other countries of Canadian companies.

Table 24 shows estimates of the balance of international payments for 1935 and 1936. Figures for earlier years back to 1920 may be found in the 1929 and later Year Books, but, as indicated on p. 588, the balances since 1926 have recently been the subject of comprehensive study and revision, and, for the revised figures for these years, the interested reader is referred to the special report mentioned in footnotes to pp. 587 and 588.

## 24.—Estimated Balance of International Payments, 1935 and 1936.

NOTE.—If the estimates of the current and capital items below were absolutely correct and all inclusive, the balancing item of the current account and the balancing item of the capital account would be equal. The difference between these two amounts in the statement represents either errors in the computations or the omission of transactions which could not be traced at the time the tables were prepared. Figures for both years are subject to revision. Corresponding figures for earlier years back to 1926 may be found in the report "The Canadian Balance of International Payments, 1926-1936", issued by the Dominion Bureau of Statistics.

| Item.   | 1935.  |   |  | 1936.  |   |  |
|---|--|---|--|--|---|--|
|   | Credits—<br>Exports,<br>Visible<br>and<br>Invisible. | Debits—<br>Imports,<br>Visible<br>and<br>Invisible. | Net<br>Credits<br>(+) or<br>Debits<br>(—). | Credits—<br>Exports,<br>Visible<br>and<br>Invisible. | Debits—<br>Imports,<br>Visible<br>and<br>Invisible. | Net<br>Credits<br>(+) or<br>Debits<br>(—). |
| <b>Current Account of Goods, Services and Gold.</b>   | \$'000,000   | \$'000,000  | \$'000,000                                 | \$'000,000   | \$'000,000  | \$'000,000                                 |
| <b>Commodity Trade—</b>   |  |   |  |  |   |  |
| Recorded merchandise exports and imports.....   | 743.3  | 550.3   |  | 957.4  | 635.2   |  |
| Unrecorded imports of ships.....  | —  | 0.5   |  | —  | 0.8   |  |
|   | 743.3  | 550.8   |  | 957.4  | 635.5   |  |
| Deductions for settlers' effects and other non-commercial exports and imports.....                | 3.4  | 8.2   |  | 3.6  | 9.1   |  |
|   | 739.9  | 542.6   |  | 953.8  | 626.4   |  |
| Correction for over-valuation of imports  | —  | 1.1   |  | —  | 1.7   |  |
|   | 739.9  | 541.5   |  | 953.8  | 624.7   |  |
| Minus gold-bearing quartz and bullion from exports and plus silver and other coin on imports..... | 4.3  | 1.4   |  | 5.9  | 1.0   |  |
| Corrected totals of commodity trade..   | 735.6  | 542.9   | +192.7                                     | 947.9  | 625.7   | +322.2                                     |
| <b>Gold Exports and Imports—<sup>1</sup></b>  |  |   |  |  |   |  |
| Non-monetary.....   | 116.7  | —   | +116.7                                     | 133.0  | 1.0   | +131.0                                     |
| Monetary.....   | Nil  | Nil   | —  | Nil  | Nil   | —  |
| Totals, Gold.....   | 116.7  | —   | +116.7                                     | 133.0  | 1.0   | +131.0                                     |
| Freight receipts and payments, <i>n.o.p.</i> .....  | 68.2   | 82.3  | — 14.1                                     | 80.2   | 98.0  | — 17.8                                     |
| Tourist expenditures.....   | 214.8  | 95.0  | +119.2                                     | 248.8  | 107.4   | +141.4                                     |
| Interest and dividend receipts and payments.....  | 62.0   | 270.6   | —208.6                                     | 75.2   | 310.0   | —233.8                                     |
| Immigrants' remittances.....  | 6.3  | 15.0  | — 8.7                                      | 7.1  | 18.0  | — 10.9                                     |
| Government receipts and expenditures.....   | 5.6  | 10.9  | — 5.3                                      | 0.5  | 11.0  | — 4.5                                      |
| Charitable and missionary contributions.....  | 1.0  | 2.0   | — 1.0                                      | 1.0  | 2.0   | — 1.0                                      |
| Advertising transactions.....   | 1.7  | 1.4   | +0.3                                       | 1.8  | 1.4   | +0.4                                       |
| Motion picture remittances.....   | Nil  | 3.2   | — 3.2                                      | Nil  | 3.5   | — 3.5                                      |
| Capital of immigrants and emigrants.....  | 1.7  | 3.1   | — 1.4                                      | 1.7  | 3.1   | — 1.4                                      |
| Earnings of Canadian residents employed in U.S.A. and U.S. residents employed in Canada.....      | 3.8  | 1.5   | +2.3                                       | 3.6  | 1.7   | +1.9                                       |
| Net payments for entertainment services, royalties, etc., not included above.....                 | —  | 12.0  | — 12.0                                     | —  | 15.0  | — 15.0                                     |
| <b>Totals, Current Account.....</b>   | <b>1,217.4</b>                                       | <b>1,040.5</b>                                      | <b>+176.9</b>                              | <b>1,566.8</b>                                       | <b>1,197.8</b>                                      | <b>+369.0</b>                              |
| <b>Capital Account.</b>   |  |   |  |  |   |  |
| <b>New Issues of Canadian securities (par value).....</b>   | <b>117.1</b>   | <b>—</b>  | <b>—</b>                                   | <b>110.1</b>   | <b>—</b>  | <b>—</b>                                   |
| Commissions and discounts.....  | 4.0  | —   | —  | 4.0  | —   | —  |
| <b>Net New Issues.....</b>  | <b>113.1</b>   | <b>—</b>  | <b>+113.1</b>                              | <b>106.1</b>   | <b>—</b>  | <b>+106.1</b>                              |
| Retirements of Canadian securities (including maturities and redemptions).....                    | —  | 267.5   | —267.5                                     | —  | 270.0   | —270.0                                     |
| Purchases and sales of outstanding securities.....  | 301.8  | 250.8   | +51.0                                      | 422.5  | 414.7   | +7.8                                       |
| Net capital transactions of international branch plants, etc. <sup>2</sup> .....                  | —  | 52.2  | —52.2                                      | —  | 74.2  | —74.2                                      |
| Insurance transactions, <i>n.o.p.</i> .....   | 20.0   | 38.0  | —18.0                                      | 19.0   | 45.0  | —26.0                                      |
| Net change in estimated net assets of Canadian banks outside Canada.....                          | 0.1  | —   | +0.1                                       | 2.6  | —   | +2.6                                       |
| <b>Totals, Capital Account.....</b>   | <b>435.0</b>   | <b>608.5</b>  | <b>—173.5</b>                              | <b>550.2</b>   | <b>802.9</b>  | <b>—253.7</b>                              |

<sup>1</sup> All gold coin and bullion exported and imported, including exports of gold-bearing quartz and 'ear-marked' gold.

<sup>2</sup> Included in this item are the net movements of funds resulting from the operations of the branches, subsidiaries, etc. of British and foreign companies in Canada, subsidiaries, etc. of Canadian companies operating outside of Canada and the net movements of funds resulting from the international transactions of Canadian trust companies. Although the more important current transactions of these concerns, such as dividends, have been included in the current account, various small items of current transactions which are difficult to segregate, remain in this item.

<sup>3</sup> Direct estimate of net outflow of capital.

## CHAPTER XVII.—INTERNAL TRADE.

This treatment of trade within the Dominion commences with a general statement on interprovincial trade, followed by sections dealing with the statistics of the grain trade and of the marketing of live stock and animal products. Statistics of cold storage facilities and of commodities in cold storage are next in order. Following these will be found sections relating to various administrative services connected with trade, including: the payment of bounties; the granting of patents, copyrights and trade marks; weights and measures; and electricity and gas inspection. Section 9 deals with the statistics of wholesale and retail merchandising and of various types of service establishments. The concluding section of the chapter contains a brief treatment of the control and sale of alcoholic liquors and beverages in Canada.

### Section 1.—Interprovincial Trade.\*

Canada may be divided into the following five economic regions, each deriving its specific character from the predominant occupations of its people:—

1. *The Eastern Fishing, Lumbering, and Mining Region*, comprising the river valley and gulf of the St. Lawrence, together with the Atlantic coast; in other words, the greater part of the Maritime Provinces, the northern part of the province of Quebec (excluding the former district of Ungava), and a portion of northern Ontario.

2. *The Eastern Agricultural and Industrial Region*, comprising the cultivated portions of the Maritime Provinces and of the provinces of Quebec and Ontario. In the latter provinces the cultivated areas extend along the banks of the St. Lawrence and its tributaries.

3. *The Central Agricultural Region*, extending from the Red River valley to the Rocky mountains and from the Canada-United States boundary to about 56° N. lat.

4. *The Western Fishing, Mining, and Lumbering Region*, comprising the western portion of the province of Alberta, the whole of British Columbia and the southern portion of Yukon.

5. *The Northern Fishing, Mining, and Hunting Region*, extending from the regions of permanent settlement northwards, and from the boundary of Labrador to the Pacific and to the Alaskan boundary. This vast region is sparsely inhabited by indigenous nomadic tribes engaged in fishing and hunting for their own support or for exchange with the fur-trading companies, and with individual whalers and traders who visit the region. In recent years mining activity has been developing in this region, especially along its southern fringe and in the basin of the Mackenzie river.

Great differences exist between the products of these various regions; even the fisheries and lumber products of the East are quite distinct from those of British Columbia. The needs of the people throughout the country are met to a great extent by the exchange of the products of one region for those of another.

Interprovincial trade in what is now Canada had its beginning, many years before Confederation, in the exchange of the furs and lumber products of Upper and Lower Canada for the fisheries and mineral products of the Maritimes. Although a large part of British Columbia lumber, minerals, fish, and fruits, Prairie Provinces agricultural products, Ontario minerals, Quebec wood-pulp, paper, asbestos, and Maritime Provinces lumber, potatoes, fruit, and fish are exported to foreign countries

\*Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch, Dominion Bureau of Statistics.

and the central manufacturing provinces import the greater part of their coal, there is a large trade of manufactured and raw materials between the economic regions of the Dominion. This trade is carried principally on the railways and, to a lesser extent, on the St. Lawrence river and Great Lakes and in late years an increasing amount is being carried by motor trucks.

Monthly railway traffic reports and an annual summary report are published by the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics showing, for each province and for the Dominion as a whole, the total revenue freight traffic of all railways, divided into 76 classes of commodities. The data also show the quantity of each class that originated and terminated in each province, and are of use in computing the net imports and exports of each province for each of the 76 classes of commodities. These statistics show rail traffic only, a limitation which should be borne in mind in connection with the trade of provinces having water transportation. Summary figures for all commodities are given in Table 1. The totals, however, give no indication of how the imports of manufactures are offset by the exports of grain, coal, etc., in particular provinces. Such analyses are possible only from the detailed data.

The revenue freight traffic movement on the steam railways of Canada fluctuates to a certain extent with the yield of the crops and with activity in the mining and construction industries involving heavy movements of low-grade freight. The general trend from 1921 to 1928 was upward, increasing from 83,814,436 tons of freight carried in 1921 to 119,227,758 tons in 1928. In 1929, however, a decrease to 114,600,778 tons was reported and, with the industrial depression, there were still greater decreases to 57,099,111 tons in 1933, but traffic began to improve during the last six months of 1933 and each month of 1934 showed an increase over the corresponding month of 1933 and the total for the year was 18 p.c. greater than for 1933. The rate of increase was reduced somewhat during the first half of 1935 but there was a fairly steady increase thereafter, the total tonnage moved during 1936 being 9.5 p.c. heavier than in 1935 and during the first eleven months of 1937 being also 9.5 p.c. above that for the eleven months of 1936.

**1.—Railway Revenue Freight Traffic Movement in Canada, by Provinces, calendar years 1935 and 1936.**

| Province.                 | Originating in Canada or Specified Province. |                   | Received from Foreign Connections. |                   | Totals, Freight Originating. <sup>1</sup> |                   |
|---------------------------|--|-------------------|------------------------------------|-------------------|---|-------------------|
|                           | 1935.  | 1936.             | 1935.                              | 1936.             | 1935.                                     | 1936.             |
|                           | tons.  | tons.             | tons.                              | tons.             | tons.                                     | tons.             |
| Prince Edward Island..... | 231,013                                      | 186,392           | 176                                | 396               | 231,189                                   | 186,788           |
| Nova Scotia.....          | 6,123,028                                    | 6,043,220         | 120,271                            | 137,972           | 6,243,299                                 | 6,181,192         |
| New Brunswick.....        | 1,731,056                                    | 1,849,825         | 384,171                            | 423,327           | 2,115,227                                 | 2,273,152         |
| Quebec.....               | 7,756,547                                    | 8,530,254         | 2,903,861                          | 3,157,279         | 10,660,408                                | 11,687,533        |
| Ontario.....              | 14,153,264                                   | 16,444,910        | 14,225,258                         | 16,024,858        | 28,378,522                                | 32,469,768        |
| Manitoba.....             | 3,584,771                                    | 3,926,548         | 143,142                            | 163,103           | 3,727,913                                 | 4,089,651         |
| Saskatchewan.....         | 5,719,438                                    | 6,200,044         | 185,934                            | 299,565           | 5,905,372                                 | 6,499,609         |
| Alberta.....              | 7,247,605                                    | 6,969,960         | 237,223                            | 216,081           | 7,484,828                                 | 7,186,041         |
| British Columbia.....     | 3,824,218                                    | 3,881,847         | 297,839                            | 454,365           | 4,122,057                                 | 4,336,212         |
| <b>Totals.....</b>        | <b>59,370,940</b>                            | <b>54,633,000</b> | <b>18,497,875</b>                  | <b>20,876,946</b> | <b>68,868,815</b>                         | <b>75,509,946</b> |

For footnote, see end of table, p. 593.

1.—Railway Revenue Freight Traffic Movement in Canada, by Provinces,  
calendar years 1935 and 1936—concluded.

| Province.                  | Terminating in Canada<br>or Specified Province. |            | Delivered to Foreign<br>Connections. |            | Totals, Freight<br>Terminating. <sup>1</sup> |            |
|----------------------------|---|------------|--------------------------------------|------------|--|------------|
|                            | 1935.   | 1936.      | 1935.                                | 1936.      | 1935.  | 1936.      |
|                            | tons.   | tons.      | tons.                                | tons.      | tons.  | tons.      |
| Prince Edward Island ..... | 275,971   | 226,138    | 8,221                                | 20,345     | 284,192                                      | 246,483    |
| Nova Scotia .....          | 5,262,435                                       | 5,769,873  | 594,684                              | 564,372    | 5,857,169                                    | 6,334,245  |
| New Brunswick .....        | 1,537,664                                       | 1,641,684  | 1,056,853                            | 1,237,343  | 2,594,517                                    | 2,879,027  |
| Quebec .....               | 6,379,204                                       | 6,637,175  | 3,709,109                            | 4,831,509  | 10,088,313                                   | 11,468,684 |
| Ontario .....              | 19,598,621                                      | 21,580,190 | 13,858,811                           | 15,992,631 | 33,457,432                                   | 37,572,821 |
| Manitoba .....             | 3,740,491                                       | 3,824,358  | 271,614                              | 325,766    | 4,012,105                                    | 4,150,124  |
| Saskatchewan .....         | 3,391,342                                       | 3,452,747  | 293,042                              | 268,312    | 3,684,384                                    | 3,721,059  |
| Alberta .....              | 2,683,434                                       | 2,595,453  | 549                                  | 4,452      | 2,683,983                                    | 2,599,910  |
| British Columbia .....     | 2,797,517                                       | 2,756,833  | 2,514,399                            | 2,961,826  | 5,311,916                                    | 5,718,659  |
| Totals .....               | 45,666,729                                      | 48,484,456 | 22,307,282                           | 26,206,556 | 67,974,011                                   | 74,691,012 |

<sup>1</sup>The freight originating and that terminating will not agree because that which originates within a certain year does not all terminate within the same year. On the other hand, some which terminated in 1935, for instance, originated within the previous year.

## Section 2.—Grain Trade Statistics.\*

The Canada Year Book, 1922-23, contained on pp. 581-583 a historical summary of the more important points respecting the shipment, inspection, and sale of Canadian grain under the Canada Grain Act, and an outline of the Canada Grain Act of 1925 appeared at p. 1017 of the 1925 Year Book. The 1929 amendments were dealt with at pp. 1047-1048 of the 1930 Year Book, and the Canada Grain Act, 1930, at p. 1101 of the 1931 Year Book.

**Board of Grain Commissioners.**—This Board was established in 1912 under the authority of the Canada Grain Act (c. 27, 1912). It assumed functions in regulation of the grain trade which were formerly carried out under the Manitoba Grain Act and the Inspection and Sale Act. The Board consists of a Chief Commissioner and not more than two Commissioners, appointed by the Governor in Council for periods of ten years. The chief offices of the Board are located in Winnipeg.

The Board is responsible for the administration of the provisions of the Canada Grain Act and its functions relate to: the grading and weighing of grain; deductions from grain for dockage; shortages appearing upon the delivery of grain into or out of any elevator; the unfair or discriminatory operation of any elevator; the deterioration of grain during storage or treatment; and any other provisions of the Act, or regulations made or licences granted thereunder.

**Movement of Canadian Wheat, Crop Year 1936-37.**—A résumé of the Canadian wheat movement naturally begins with a description of the crop of the Western Inspection Division. The wheat crop of 1936 marketed in the Western Division during the crop year from Aug. 1, 1936, to July 31, 1937, amounted to 203.5 million bushels. A carry-over of 82.2 million bushels from the previous crop year, together with some minor items, brought the stock of the Western Division to a total for the year of 286.0 million bushels. As for distribution, 200.9 million bushels were commercially disposed of, the chief items of which were 66.9 million bushels exported to the United Kingdom and 93.8 million bushels shipped to the Eastern Division. The direct exports to the United States were 13.1 million bushels and to other countries 10.9 million bushels. The total shipments from the Western

\*Revised under the direction of Dr. T. W. Grindley, Chief, Agricultural Branch, Dominion Bureau of Statistics.



Division were thus 184.7 million bushels. The wheat used by the milling companies for the manufacture of flour amounted to about 16.1 million bushels, of which 12.5 million bushels were ground into flour for domestic consumption. The all-rail movement eastward from the Western Division, including shipments to the Ogilvie Flour Mills Co. at Port William for grindings, was 1,160.8 thousand bushels. Lake shipments from Port William and Port Arthur were 141.4 million bushels, 92.4 million bushels going to Canadian ports and 48.3 million to United States ports. The principal Canadian lake ports were those of lake Huron and Georgian bay, with receipts of 25.0 million bushels, and Port Colborne with 27.1 million bushels. Among the United States lake ports, Buffalo was of chief importance in the handling of Canadian wheat, with receipts by water from Port Arthur and Port William of 35.3 million bushels. The export of wheat through Vancouver was 31.7 million bushels, as compared with 52.8 million in the previous crop year; 2.0 million bushels were exported through New Westminster, and 4.2 million from Churchill. The seed requirements were estimated at 32.4 million bushels, feed for live stock and poultry at 9.3 million bushels, and the stocks at the end of the crop year were 25.2 million bushels.

The Eastern Division received during the crop year not only the eastern crop, estimated at 15.7 million bushels, but also shipments from the West aggregating 93.8 million bushels. The quantity on hand at the beginning of the crop year was 25.8 million bushels, making, with a comparatively small importation from the United States, a total stock entering the Eastern Division of 135.4 million bushels. The distribution included 7.5 million bushels carried over in store into the following year, 71.9 million bushels exported from the St. Lawrence ports, and 10.5 million bushels shipped through the winter ports of Saint John and Halifax, while 1.7 million bushels moved over the border into the United States for consumption. In addition, 39.2 million bushels were cleared for export to the United Kingdom and other countries *via* the United States Atlantic ports. The chief ports concerned with the movement of Canadian grain from both Divisions were New York, Albany, Boston, and Portland.

Total exports from Canada to the United States for consumption amounted to 14.8 million bushels, to the United Kingdom 124.3 million bushels, to other countries 35.6 million bushels; 123.9 million bushels were shown to be shipped *via* Canadian ports and 136.0 million bushels *via* United States ports, after deducting 3.1 million bushels transhipped from Buffalo to Montreal and adding the same to the Canadian movement. Total exports of wheat from Canada during the crop year amounted to 174.8 million bushels.

Table 3 shows, for the licence years 1936 and 1937, the number of elevators and their total storage capacity, the figures being given by provinces for each class of elevator, with a summary showing the total of all elevators for each province. The growth of Canadian elevators in number and capacity has accompanied the expansion of grain acreage in the present century. Canadian elevators in 1901 numbered 426 with a capacity of 18,329,352 bushels; in 1911 these had increased to 1,909 elevators and 105,462,700 bushels; and totals of 3,855 elevators and 231,213,620 bushels were reached in 1921. Further increases in the past few years have resulted in a total of 5,856 elevators with a capacity of 421,855,620 bushels in 1937.

Table 4 gives a summary of the inspections of grain, 1934-37. Detailed statistics may be found in the Reports on the Grain Trade of Canada,\* Tables 5 and 6 show the shipments of grain by vessel and rail for 1936 and 1937 and Tables 7 and 8 deal with the Canadian grain handled in recent years at Eastern elevators.

\*The latest report is for the crop year ended July 31, 1936, and may be obtained from the Dominion Statistician.



## 2.—Summary of the Distribution of Canadian Grain, crop year ended July 31, 1937.

| Item.  | Wheat.      | Oats.       | Barley.    | Flax.     | Rye.      |
|--|-------------|-------------|------------|-----------|-----------|
|  | bu.         | bu.         | bu.        | bu.       | bu.       |
| 1. On Hand, Aug. 1, 1936—  |             |             |            |           |           |
| In farmers' hands.....   | 5,520,000   | 31,180,000  | 4,199,200  | 7,600     | 270,600   |
| In Eastern elevators.....  | 22,368,381  | 1,198,655   | 761,969    | Nil       | 367,111   |
| In flour-mills and mill elevators, Western Division.....           | 5,481,979   | 1,143,856   | 1,393,244  | 9,819     | 39,515    |
| In interior terminals, Western Division.....                       | 580,027     | 496,528     | 61,957     | 26        | 170       |
| In Vancouver and New Westminster elevators.....                    | 7,709,229   | 329,080     | 19,221     | 309       | 12,464    |
| In Victoria and Prince Rupert elevators..                          | 1,027,676   | Nil         | Nil        | Nil       | Nil       |
| In Churchill elevator.....   | 2,478,657   | Nil         | Nil        | Nil       | Nil       |
| In country and private terminals, Western Division.....            | 30,760,751  | 3,017,646   | 1,564,385  | 99,722    | 1,038,927 |
| In public and private terminals, Fort William and Port Arthur..... | 25,485,743  | 1,697,639   | 1,271,448  | 136,205   | 1,341,627 |
| In Eastern Division—afloat.....                                    | 2,488,013   | 389,066     | 165,781    | Nil       | Nil       |
| In flour-mills, Eastern Division.....                              | 1,728,255   | 290,981     | 24,292     | 90        | 14,225    |
| In transit.....  | 2,456,566   | 546,240     | 366,134    | 15,516    | 110,630   |
| Totals on Hand.....  | 108,094,277 | 40,304,697  | 9,827,631  | 269,287   | 3,194,369 |
| 2. Crops, 1936.....  | 219,218,000 | 271,778,000 | 71,922,000 | 1,795,300 | 4,281,000 |
| 3. Shipped in from U.S.A. and other countries.....                 | 403,396     | 24,257      | 3,381      | 991,007   | 6,038     |
| 4. Totals, annual stocks (sum of 1, 2, and 3).....                 | 327,715,673 | 312,106,954 | 81,753,012 | 3,055,594 | 7,481,407 |
| 5. Shipped Out to—   |             |             |            |           |           |
| U.S.A.....   | 14,868,352  | 229,332     | 15,082,377 | 4,075     | 1,315,693 |
| United Kingdom.....  | 124,368,897 | 4,618,117   | 2,323,318  | 165,055   | 982,110   |
| Other countries.....   | 35,620,911  | 1,149,913   | 151,138    | 9,338     | 1,335,229 |
| Totals Shipped Out.....  | 174,858,160 | 5,997,362   | 17,555,833 | 178,468   | 3,633,032 |
| 6. Milled—   |             |             |            |           |           |
| For domestic consumption.....                                      | 43,549,047  | 7,743,790   | 1,049,617  | 1,785,000 | 78,657    |
| For export.....  | 20,365,493  | 3,502,633   | Nil        | Nil       | 1,420     |
| Consumed in malting and brewing establishments.....                | Nil         | Nil         | 5,850,000  | Nil       | Nil       |
| 7. Totals disposed of commercially (sum of 5 and 6).....           | 238,772,700 | 17,243,685  | 24,455,450 | 1,963,468 | 3,713,109 |
| 8. Feed for live stock and poultry.....                            | 15,794,000  | Nil         | Nil        | Nil       | Nil       |
| 9. Used for seed.....  | 34,112,000  | 32,621,250  | 8,662,800  | 120,650   | 1,340,550 |
| 10. In Store, July 31, 1937—                                       |             |             |            |           |           |
| In farmers' hands.....   | 3,999,300   | 15,231,000  | 1,476,400  | 9,800     | 78,400    |
| In Eastern elevators.....  | 5,980,927   | 395,986     | 341,030    | 2,115     | 5,394     |
| In Eastern Division—afloat.....                                    | 2,275,436   | 338,598     | 509,970    | 24,776    | 133,058   |
| In flour-mills and mill elevators, Western Division.....           | 3,991,401   | 681,487     | 778,092    | 30,269    | 5,170     |
| In interior terminals, Western Division..                          | 34,539      | 39,240      | 3,633      | Nil       | Nil       |
| In Vancouver and New Westminster elevators.....                    | 3,414,592   | 79,363      | 8,001      | 418       | 1,227     |
| In Victoria and Prince Rupert elevators                            | 911,340     | Nil         | Nil        | Nil       | Nil       |
| In Churchill elevator.....   | 614,569     | Nil         | Nil        | Nil       | Nil       |
| In country and private terminals, Western Division.....            | 3,401,452   | 674,703     | 189,064    | 82,527    | 65,598    |
| In public and private terminals, Fort William and Port Arthur..... | 6,811,752   | 508,913     | 958,743    | 312,154   | 98,544    |
| In transit.....  | 533,951     | 114,333     | 10,092     | 2,842     | 19,595    |
| In flour-mills, Eastern Division.....                              | 770,593     | 215,185     | 88,210     | 66        | 2,716     |
| Totals in Store.....   | 32,739,852  | 18,278,808  | 4,363,235  | 464,967   | 409,702   |

## 2.—Summary of the Distribution of Canadian Grain, crop year ended July 31, 1937 —concluded.

| Item.  | Wheat.         | Oats.       | Barley.    | Flax.     | Rye.      |
|--|----------------|-------------|------------|-----------|-----------|
|  | bu.            | bu.         | bu.        | bu.       | bu.       |
| 11. Totals accounted for (sum 7, 8, 9, and 10).....  | 321,418,552    | 68,143,743  | 37,481,488 | 2,428,435 | 4,122,811 |
| 12. Losses in cleaning.....  | 2,500,000      | 150,000     | 50,000     | 100,000   | 20,000    |
| 13. Grain, not merchantable.....   | 1,515,500      | 8,509,000   | 832,200    | 15,900    | 23,500    |
| 14. Balances, merchantable grain fed on farms<br>or otherwise consumed in, and moved<br>out of, Canada through other channels..... | 2,281,621      | 235,304,211 | 43,389,327 | 511,159   | 3,315,096 |
| 15. Totals (sum of 11 to 14).....  | 327,715,673    | 312,106,954 | 81,753,012 | 3,055,594 | 7,481,407 |
| 16. Amounts inspected.....   | 182,794,400    | 24,553,767  | 22,659,755 | 1,331,400 | 2,484,008 |
| 17. Percentages inspected.....   | 83.4           | 9.1         | 31.5       | 74.2      | 58.6      |
| 18. Percentages of commercial grain inspected<br>(line 16 of 11).....  | 57.4           | 36.3        | 60.5       | 54.8      | 60.3      |
| 19. Commercial grain from season's crop (10<br>and 7-1-3).....   | 163,014,879    | —4,806,461  | 18,987,673 | 1,168,141 | 922,374   |
| 20. Percentages of crop commercial grain (line<br>19 of 2).....  | 74.4           | —           | 26.4       | 65.1      | 21.5      |
| 21. Values of crop.....  | \$ 205,327,000 | 116,267,000 | 49,512,000 | 2,588,000 | 2,980,000 |

## 3.—Numbers and Storage Capacities of Canadian Grain Elevators, licence years 1936 and 1937.

NOTE.—Detailed statistics of elevators for the years 1901 to 1918 are given in the 1921 Year Book, pp. 507-509, and the figures for later years will be found in successive Year Books.

| Division, Elevator, and Province.      | 1936.      |             | 1937.      |             |
|--|------------|-------------|------------|-------------|
|  | Elevators. | Capacity.   | Elevators. | Capacity.   |
|  | No.        | bu.         | No.        | bu.         |
| <b>WESTERN DIVISION.</b>               |            |             |            |             |
| <b>Country Elevators—</b>              |            |             |            |             |
| Ontario.....                           | 1          | 40,000      | 1          | 40,000      |
| Manitoba.....                          | 710        | 22,522,150  | 705        | 22,343,650  |
| Saskatchewan.....                      | 3,232      | 101,216,150 | 3,222      | 100,850,850 |
| Alberta.....                           | 1,762      | 65,404,500  | 1,756      | 65,268,000  |
| British Columbia.....                  | 13         | 425,000     | 14         | 485,000     |
| Totals, Country Elevators.....         | 5,718      | 189,607,800 | 5,698      | 188,987,500 |
| <b>Private Country Elevators—</b>      |            |             |            |             |
| Manitoba.....                          | 5          | 232,000     | 4          | 105,000     |
| Saskatchewan.....                      | 2          | 55,000      | 3          | 90,000      |
| Alberta.....                           | 4          | 137,000     | 4          | 180,000     |
| Totals, Private Country Elevators..... | 11         | 324,000     | 11         | 375,000     |
| <b>Mill Elevators—</b>                 |            |             |            |             |
| Ontario.....                           | 1          | 180,000     | 1          | 180,000     |
| Manitoba.....                          | 4          | 152,500     | 4          | 152,500     |
| Saskatchewan.....                      | 8          | 133,000     | 9          | 148,000     |
| Alberta.....                           | 3          | 63,000      | 3          | 63,000      |
| British Columbia.....                  | 12         | 468,110     | 15         | 451,110     |
| Totals, Mill Elevators.....            | 28         | 996,610     | 32         | 994,610     |
| <b>Private Terminal Elevators—</b>     |            |             |            |             |
| Ontario.....                           | 6          | 1,890,000   | 6          | 1,890,000   |
| Manitoba.....                          | 10         | 4,006,000   | 11         | 4,254,000   |
| Saskatchewan.....                      | 6          | 4,500,500   | 5          | 4,410,500   |
| Alberta.....                           | 14         | 4,090,000   | 15         | 4,610,000   |
| British Columbia.....                  | 2          | 570,000     | 4          | 630,000     |
| Totals, Private Terminals.....         | 38         | 15,116,500  | 41         | 15,794,500  |

### 3.—Numbers and Storage Capacities of Canadian Grain Elevators, licence years 1936 and 1937—concluded.

| Division, Elevator, and Province.    | 1936.        |                    | 1937.        |                    |
|--------------------------------------|--------------|--------------------|--------------|--------------------|
|                                      | Elevators.   | Capacity.          | Elevators.   | Capacity.          |
|                                      | No.          | bu.                | No.          | bu.                |
| <b>WESTERN DIVISION—concluded.</b>   |              |                    |              |                    |
| Public Terminal Elevators—           |              |                    |              |                    |
| Saskatchewan.....                    | 2            | 11,000,000         | 2            | 11,000,000         |
| Alberta.....                         | 3            | 6,250,000          | 3            | 6,250,000          |
| British Columbia.....                | 1            | 1,715,000          | 1            | 1,715,000          |
| Totals, Public Terminals.....        | 6            | 18,965,000         | 6            | 18,965,000         |
| Semi-Public Terminal Elevators—      |              |                    |              |                    |
| Ontario.....                         | 27           | 92,542,210         | 26           | 91,167,210         |
| Manitoba.....                        | 2            | 3,500,000          | 2            | 3,500,000          |
| Alberta.....                         | 1            | 530,000            | Nil          | —                  |
| British Columbia.....                | 9            | 19,158,000         | 9            | 19,158,000         |
| Totals, Semi-Public Terminals.....   | 39           | 115,720,210        | 37           | 113,825,210        |
| <b>Totals, Western Division.....</b> | <b>5,840</b> | <b>340,730,120</b> | <b>5,825</b> | <b>338,941,820</b> |
| <b>EASTERN DIVISION.</b>             |              |                    |              |                    |
| Eastern Elevators—                   |              |                    |              |                    |
| Nova Scotia.....                     | 1            | 2,200,000          | 1            | 2,200,000          |
| New Brunswick.....                   | 3            | 3,076,800          | 3            | 3,076,800          |
| Quebec.....                          | 8            | 22,537,000         | 9            | 25,537,000         |
| Ontario.....                         | 18           | 52,100,000         | 18           | 52,100,000         |
| <b>Totals, Eastern Division.....</b> | <b>30</b>    | <b>79,913,800</b>  | <b>31</b>    | <b>82,913,800</b>  |
| <b>SUMMARY BY PROVINCES.</b>         |              |                    |              |                    |
| Nova Scotia.....                     | 1            | 2,200,000          | 1            | 2,200,000          |
| New Brunswick.....                   | 3            | 3,076,800          | 3            | 3,076,800          |
| Quebec.....                          | 8            | 22,537,000         | 9            | 25,537,000         |
| Ontario.....                         | 53           | 146,732,210        | 52           | 145,377,210        |
| Manitoba.....                        | 731          | 36,312,650         | 726          | 30,355,150         |
| Saskatchewan.....                    | 3,250        | 116,964,650        | 3,241        | 116,499,350        |
| Alberta.....                         | 1,787        | 76,464,500         | 1,781        | 76,371,000         |
| British Columbia.....                | 37           | 22,336,110         | 43           | 22,439,110         |
| <b>Grand Totals for Canada.....</b>  | <b>5,870</b> | <b>420,643,220</b> | <b>5,856</b> | <b>421,855,620</b> |

### 4.—Quantities of Canadian Grain Inspected during the crop years ended July 31, 1934-37.

| Grain.                    | 1933-34.           |                   |                    | 1934-35.           |                   |                    |
|---------------------------|--------------------|-------------------|--------------------|--------------------|-------------------|--------------------|
|                           | Western Division.  | Eastern Division. | Total.             | Western Division.  | Eastern Division. | Total.             |
|                           | bu.                | bu.               | bu.                | bu.                | bu.               | bu.                |
| Spring wheat.....         | 228,014,700        | 4,000             | 228,018,700        | 231,027,500        | 25,000            | 231,052,500        |
| Winter wheat.....         | 107,280            | 75,000            | 182,280            | 502,500            | 113,000           | 615,500            |
| <b>Totals, Wheat.....</b> | <b>228,121,980</b> | <b>79,000</b>     | <b>228,200,980</b> | <b>231,530,000</b> | <b>138,000</b>    | <b>231,668,000</b> |
| Oats.....                 | 31,520,720         | 102,137           | 31,622,857         | 28,195,000         | 1,247,453         | 29,442,453         |
| Burley.....               | 13,413,400         | 7,500             | 13,420,900         | 14,840,000         | 1,082,262         | 15,922,262         |
| Flax.....                 | 351,820            | Nil               | 351,820            | 429,000            | Nil               | 429,000            |
| Rye.....                  | 1,306,965          | Nil               | 1,306,965          | 1,021,500          | 4,000             | 1,025,500          |
| Corn.....                 | —                  | —                 | Nil                | Nil                | 86,400            | 86,400             |
| Buckwheat.....            | 2,000              | 208,582           | 270,582            | Nil                | 428,325           | 428,325            |
| Screenings.....           | 38,000             | Nil               | 38,000             | —                  | —                 | Nil                |
| Mixed grain.....          | 211,065            | 6,097             | 217,762            | 132,500            | 216,304           | 348,804            |
| <b>Totals, Grain.....</b> | <b>374,966,550</b> | <b>463,316</b>    | <b>375,429,866</b> | <b>276,148,000</b> | <b>3,212,774</b>  | <b>279,360,774</b> |

## 4.—Quantities of Canadian Grain Inspected during the crop years ended July 31, 1934-37—concluded.

| Grain.             | 1935-36.          |                   |             | 1936-37.          |                   |             |
|--------------------|-------------------|-------------------|-------------|-------------------|-------------------|-------------|
|                    | Western Division. | Eastern Division. | Total.      | Western Division. | Eastern Division. | Total.      |
|                    | bu.               | bu.               | bu.         | bu.               | bu.               | bu.         |
| Spring wheat.....  | 217,620,910       | 375,243           | 217,996,153 | 182,102,040       | Nil               | 182,102,040 |
| Winter wheat.....  | 519,090           | 1,290,817         | 1,809,907   | 110,960           | 581,450           | 692,410     |
| Totals, Wheat..... | 218,140,000       | 1,666,060         | 219,806,060 | 182,213,000       | 581,450           | 182,794,450 |
| Oats.....          | 25,008,500        | 2,411,027         | 27,419,527  | 24,302,000        | 551,767           | 24,853,767  |
| Barley.....        | 14,745,000        | 337,900           | 15,082,900  | 21,849,360        | 810,395           | 22,659,755  |
| Flax.....          | 880,000           | Nil               | 880,000     | 1,331,400         | Nil               | 1,331,400   |
| Rye.....           | 1,968,500         | 12,000            | 1,970,500   | 2,285,000         | 8,000             | 2,285,000   |
| Corn.....          | 9,600             | 474,000           | 483,600     | 1,000             | 119,250           | 120,250     |
| Buckwheat.....     | Nil               | 280,280           | 280,280     | 1,000             | 107,629           | 108,629     |
| Sample grain.....  | Nil               | 37,732            | 37,732      | -                 | Nil               | Nil         |
| Mixed grain.....   | 91,000            | 115,172           | 206,172     | 239,480           | 10,700            | 250,180     |
| Totals, Grain..... | 260,832,600       | 5,334,171         | 266,166,771 | 232,193,140       | 2,190,191         | 234,383,331 |

## 5.—Shipments of Grain by Vessels from Fort William and Port Arthur for the navigation seasons 1936 and 1937.

| Grain.                        | 1936.              |                |                          | 1937.              |                |                         |
|-------------------------------|--------------------|----------------|--------------------------|--------------------|----------------|-------------------------|
|                               | To Canadian Ports. | To U.S. Ports. | Total Shipments.         | To Canadian Ports. | To U.S. Ports. | Total Shipments.        |
|                               | bu.                | bu.            | bu.                      | bu.                | bu.            | bu.                     |
| Wheat.....                    | 89,581,223         | 76,084,090     | 166,809,142 <sup>1</sup> | 75,228,159         | 13,724,564     | 89,230,891 <sup>2</sup> |
| Oats.....                     | 11,818,939         | 124,638        | 11,943,577               | 5,938,343          | Nil            | 5,938,343               |
| Barley.....                   | 7,257,733          | 12,519,246     | 19,776,979               | 13,079,796         | 3,040,568      | 16,120,364              |
| Flaxseed.....                 | 404,928            | 165,055        | 569,983                  | 101,417            | Nil            | 401,417                 |
| Rye.....                      | 1,099,819          | 3,284,212      | 4,384,031                | 1,536,721          | 142,820        | 1,679,541               |
| Totals.....                   | 110,162,642        | 92,177,241     | 202,339,883              | 96,184,436         | 16,907,672     | 113,092,108             |
| Screenings.....               | 11,188             | 52,656         | 63,844                   | 7,000              | 26,037         | 33,127                  |
| Mixed feed (oats groats)..... | 484                | Nil            | 484                      | 150                | Nil            | 150                     |
| Barley malt.....              | 9,368,170          | Nil            | 9,368,170                | 16,387,800         | Nil            | 16,387,800              |

<sup>1</sup>Includes 1,143,820 and 181,051 bushels of wheat and rye, respectively, exported direct to Europe.<sup>2</sup>Includes 278,168 bushels of wheat exported direct to Europe.

## 6.—Shipments of Grain by Lake and All-Rail Routes from Fort William and Port Arthur for the crop years ended July 31, 1936 and 1937.

| Grain.                         | 1935-36.    |           |             | 1936-37.    |           |             |
|--------------------------------|-------------|-----------|-------------|-------------|-----------|-------------|
|                                | Lake.       | Rail.     | Total.      | Lake.       | Rail.     | Total.      |
|                                | bu.         | bu.       | bu.         | bu.         | bu.       | bu.         |
| Wheat—                         |             |           |             |             |           |             |
| No. 1 Hard.....                | 7,727,275   | 2,310     | 7,729,585   | 2,559,778   | 5,000     | 2,564,778   |
| No. 1 Northern.....            | 66,554,431  | 133       | 66,554,564  | 72,209,800  | 223,387   | 72,433,187  |
| No. 2 Northern.....            | 15,988,719  | 609       | 15,989,328  | 10,026,153  | 68,023    | 10,094,175  |
| No. 3 Northern.....            | 18,631,374  | 2,068     | 18,633,442  | 16,986,885  | 316,991   | 17,303,876  |
| No. 4.....                     | 18,996,980  | 8,721     | 19,005,701  | 9,498,117   | 12,817    | 9,510,934   |
| Old grade No. 2 Northern.      | 11,088,390  | Nil       | 11,088,390  | -           | Nil       | Nil         |
| Other grades.....              | 39,664,811  | 225,031   | 39,889,842  | 21,549,636  | 550,484   | 22,100,120  |
| Totals, Wheat.....             | 178,651,980 | 238,962   | 178,890,942 | 141,839,369 | 1,181,701 | 143,021,070 |
| Other Grain—                   |             |           |             |             |           |             |
| Oats.....                      | 14,704,062  | 1,766,570 | 16,470,632  | 10,194,982  | 2,353,453 | 12,548,435  |
| Barley.....                    | 9,504,885   | 249,170   | 9,754,055   | 18,545,501  | 196,830   | 18,742,321  |
| Flaxseed.....                  | 528,010     | 109,096   | 637,106     | 619,248     | 176,050   | 795,298     |
| Rye.....                       | 2,752,734   | 2,850     | 2,755,584   | 3,501,236   | 9         | 3,501,245   |
| Mixed grain <sup>1</sup> ..... | 14,021      | 39,153    | 53,174      | 5,108       | 63,100    | 68,208      |
| Totals, Other Grain....        | 27,503,712  | 2,166,839 | 29,670,551  | 32,866,165  | 2,789,692 | 35,655,857  |

<sup>1</sup> Mixed grain in bushels of 60 lb.

### 7.—Canadian Grain Handled at Eastern Elevators, by crop years ended July 31, 1930-37.

NOTE.—Figures for the crop years 1922 to 1929 are shown at p. 626 of the 1931 edition of the Year Book.

| Year.                    | Wheat.      | Oats.      | Barley.    | Flaxseed. | Rye.       | Total Grain. |
|--------------------------|-------------|------------|------------|-----------|------------|--------------|
|                          | bu.         | bu.        | bu.        | bu.       | bu.        | bu.          |
| Receipts and Carry-over— |             |            |            |           |            |              |
| 1929-1930.....           | 132,356,863 | 15,932,469 | 8,381,291  | 658,303   | 3,226,137  | 160,555,063  |
| 1930-1931.....           | 178,120,479 | 20,874,442 | 37,555,371 | 1,710,059 | 6,226,473  | 244,486,824  |
| 1931-1932.....           | 151,395,023 | 17,063,934 | 17,109,737 | 1,012,939 | 15,210,866 | 201,792,499  |
| 1932-1933.....           | 233,419,639 | 17,367,890 | 7,797,343  | 1,116,233 | 3,921,887  | 263,622,982  |
| 1933-1934.....           | 164,243,854 | 17,949,649 | 7,496,255  | 631,973   | 837,076    | 191,163,807  |
| 1934-1935.....           | 116,415,429 | 10,851,457 | 10,045,694 | 485,990   | 933,244    | 138,731,814  |
| 1935-1936.....           | 164,437,961 | 20,967,752 | 14,403,239 | 582,309   | 2,033,088  | 202,414,349  |
| 1936-1937.....           | 161,828,566 | 12,273,458 | 6,247,592  | 586,734   | 2,444,868  | 183,380,959  |
| Shipments—               |             |            |            |           |            |              |
| 1929-1930.....           | 111,077,966 | 13,372,999 | 6,734,676  | 657,101   | 1,654,237  | 133,496,979  |
| 1930-1931.....           | 163,730,581 | 19,086,592 | 36,435,055 | 1,093,430 | 4,378,874  | 225,874,541  |
| 1931-1932.....           | 133,610,498 | 15,706,287 | 16,807,097 | 974,649   | 13,738,895 | 180,837,426  |
| 1932-1933.....           | 200,354,656 | 15,662,250 | 9,929,791  | 1,027,504 | 2,836,333  | 226,710,540  |
| 1933-1934.....           | 166,952,408 | 16,824,993 | 6,325,712  | 720,692   | 1,204,467  | 192,028,273  |
| 1934-1935.....           | 105,273,843 | 13,027,608 | 11,047,771 | 485,990   | 1,306,106  | 131,141,318  |
| 1935-1936.....           | 184,120,242 | 19,563,798 | 14,652,637 | 582,309   | 2,108,700  | 221,022,686  |
| 1936-1937.....           | 178,492,948 | 13,159,516 | 6,724,438  | 586,734   | 2,811,294  | 201,774,930  |

<sup>1</sup>Receipts only.

### 8.—Canadian Grain Handled at Eastern Elevators, by Classes of Ports, during the crop year ended July 31, 1937.

| Ports.                             | Wheat.     | Oats.     | Barley.   | Flaxseed. | Rye.      | Total. <sup>1</sup> |
|------------------------------------|------------|-----------|-----------|-----------|-----------|---------------------|
|                                    | bu.        | bu.       | bu.       | bu.       | bu.       | bu.                 |
| Lake Huron and Georgian Bay Ports— |            |           |           |           |           |                     |
| Receipts—Water.....                | 25,068,085 | 3,978,524 | 745,185   | 166,891   | 381,981   | 30,360,666          |
| Rail.....                          | 134,208    | 29,038    | 62,780    | Nil       | Nil       | 226,086             |
| Totals, Receipts.....              | 25,222,353 | 4,007,562 | 807,965   | 166,891   | 381,981   | 30,586,752          |
| Shipments—Water.....               | 7,382,880  | Nil       | 30,000    | Nil       | 343,312   | 7,766,192           |
| Rail.....                          | 22,719,322 | 4,257,354 | 830,669   | 166,891   | 49,124    | 28,013,351          |
| Totals, Shipments.....             | 30,102,202 | 4,257,354 | 850,669   | 166,891   | 392,436   | 35,709,543          |
| Lower Lake Ports—                  |            |           |           |           |           |                     |
| Receipts—Water.....                | 54,449,583 | 2,807,004 | 2,402,792 | 135,818   | 493,601   | 60,288,798          |
| Rail.....                          | 234,819    | 237,641   | 680,370   | Nil       | 6,363     | 1,159,193           |
| Totals, Receipts.....              | 54,684,402 | 3,044,645 | 3,083,072 | 135,818   | 499,964   | 61,447,901          |
| Shipments—Water.....               | 48,270,163 | 1,034,266 | 1,805,672 | 97,293    | 501,269   | 51,708,663          |
| Rail.....                          | 9,349,000  | 2,129,833 | 1,436,896 | 38,525    | 209,090   | 13,163,444          |
| Totals, Shipments.....             | 57,619,163 | 3,164,199 | 3,242,568 | 135,818   | 710,359   | 64,872,107          |
| St. Lawrence Ports—                |            |           |           |           |           |                     |
| Receipts—Water.....                | 67,968,214 | 4,464,738 | 1,882,070 | 284,025   | 1,554,120 | 76,153,167          |
| Rail.....                          | 4,967,297  | 666,168   | 409,681   | Nil       | Nil       | 5,073,146           |
| Totals, Receipts.....              | 72,965,511 | 5,130,906 | 2,291,751 | 284,025   | 1,554,120 | 82,226,313          |
| Shipments—Water.....               | 75,136,492 | 3,401,231 | 1,623,728 | Nil       | 1,060,947 | 81,822,398          |
| Rail.....                          | 5,024,887  | 2,245,615 | 942,078   | 284,025   | 39,034    | 8,536,239           |
| Totals, Shipments.....             | 80,161,379 | 5,646,846 | 2,566,406 | 284,025   | 1,099,981 | 90,358,637          |
| Maritime Ports—                    |            |           |           |           |           |                     |
| Receipts—Water.....                | 238,517    | Nil       | Nil       | Nil       | Nil       | 238,517             |
| Rail.....                          | 8,717,782  | 90,372    | 64,804    | Nil       | 8,518     | 8,881,476           |
| Totals, Receipts.....              | 8,956,299  | 90,372    | 64,804    | Nil       | 8,518     | 9,119,993           |
| Shipments—Water.....               | 10,562,565 | 85,487    | 64,804    | Nil       | 8,518     | 10,721,374          |
| Rail.....                          | 47,639     | 5,630     | Nil       | Nil       | Nil       | 53,269              |
| Totals, Shipments.....             | 10,610,204 | 91,117    | 64,804    | Nil       | 8,518     | 10,774,643          |

<sup>1</sup>Exclusive of minor quantities of Canadian corn, buckwheat, and mixed grain.

**Flour Milling in 1936.**—The flour- and grist-milling industry in Canada in 1936 showed a decrease of 9 mills of all classes from 1935, and capacity of flour mills was decreased by 3,198 barrels of flour a day from the 1935 figure. Capital investment was \$55,275,090. The mills were distributed by provinces as shown in Table 9. Statistics of the employees, value of products, etc., for both flour and feed mills, for the latest year available, will be found in Table 7 of the chapter on Manufactures, pp. 403-472 of this volume.

**9.—Flour-Mills of Canada, with Their Equipment and Capacities, by Provinces, 1936, with Totals, 1935.**

| Province.                 | Flour and Grist Mills. | Chopping Mills. | Total Mills. | Rolls.       | Stones.    | Capacity of Flour-Mills. |
|---------------------------|------------------------|-----------------|--------------|--------------|------------|--------------------------|
|                           | No.                    | No.             | No.          | pairs.       | pairs.     | bbl. per day.            |
| Prince Edward Island..... | 11                     | 1               | 12           | 60           | 12         | 482                      |
| Nova Scotia.....          | 3                      | 3               | 11           | 11           | Nil        | 93                       |
| New Brunswick.....        | 6                      | 21              | 27           | 50           | Nil        | 3,620                    |
| Quebec.....               | 85                     | 148             | 233          | 530          | 144        | 12,990                   |
| Ontario.....              | 124                    | 513             | 637          | 1,981        | 41         | 50,333                   |
| Manitoba.....             | 34                     | 7               | 41           | 555          | 2          | 11,335                   |
| Saskatchewan.....         | 49                     | 19              | 68           | 553          | 15         | 13,635                   |
| Alberta.....              | 48                     | 33              | 81           | 633          | 5          | 12,369                   |
| British Columbia.....     | 3                      | 5               | 8            | 46           | Nil        | 735                      |
| <b>Totals, 1936.....</b>  | <b>363</b>             | <b>755</b>      | <b>1,118</b> | <b>4,425</b> | <b>219</b> | <b>102,042</b>           |
| <b>Totals, 1935.....</b>  | <b>384</b>             | <b>743</b>      | <b>1,127</b> | <b>4,496</b> | <b>238</b> | <b>105,240</b>           |

### Section 3.—Marketing of Live Stock and Live-Stock Products.\*

The estimated value of farm animals sold for meat in Canada in 1936 was \$130,886,000. In addition, the 1936 wool production was worth \$2,783,000 and the farm value of poultry and eggs produced was \$53,236,000. Live stock makes a very important contribution to farmers' income and also provides the basis for a large slaughtering and meat-packing industry in Canada. Since the War the slaughtering and meat-packing industry has been one of the most important single manufacturing industries in Canada.

\*Revised by the Agricultural Branch, Dominion Bureau of Statistics. For more detailed information on this subject, see: Canada Year Book, 1922-23, pp. 594-595; Live Stock and Animal Products Statistics, published annually by the Dominion Bureau of Statistics; and The Annual Market Review, published annually by the Live Stock Branch of the Dominion Department of Agriculture. Statistics of live stock and poultry are given at pp. 251 to 255 of this volume.

**10.—Animals in Canada, Animals Killed or Sold by Farmers, and Wool Produced in Canada, by census years 1871-1931.**

| Year.                   | Animals in Canada.   |           |           | Animals Killed or Sold. |                      |                        | Wool Produced. |
|-------------------------|----------------------|-----------|-----------|-------------------------|----------------------|------------------------|----------------|
|                         | Cattle. <sup>1</sup> | Sheep.    | Swine.    | Cattle.                 | Sheep.               | Swine.                 |                |
|                         | No.                  | No.       | No.       | No.                     | No.                  | No.                    | lb.            |
| 1871.....               | 2,484,655            | 3,155,509 | 1,366,083 | 507,725                 | 1,557,430            | 1,216,097              | 11,103,480     |
| 1881.....               | 3,382,396            | 3,048,678 | 1,207,619 | 657,681                 | 1,496,465            | 1,302,503              | 11,800,736     |
| 1891.....               | 3,907,023            | 2,568,781 | 1,735,850 | 957,737                 | 1,464,172            | 1,791,104              | 10,031,970     |
| 1901.....               | 5,576,451            | 2,510,239 | 2,353,828 | 1,110,209               | 1,329,141            | 2,497,636              | 10,657,597     |
| 1911 <sup>2</sup> ..... | 6,526,083            | 3,174,300 | 3,634,778 | 1,752,792 <sup>3</sup>  | 949,039 <sup>3</sup> | 2,771,755 <sup>3</sup> | 6,933,955      |
| 1921 <sup>3</sup> ..... | 8,519,484            | 3,203,966 | 3,404,730 | 2,097,390               | 1,217,987            | 2,972,331              | 11,338,268     |
| 1931 <sup>3</sup> ..... | 8,099,883            | 3,627,116 | 4,774,828 | 2,046,428               | 1,296,158            | 3,578,189              | 12,794,634     |

<sup>1</sup>Figures for 1871-91 do not include work oxen.

<sup>2</sup>Census taken as of June 1, while previous censuses

were taken in April, so that the proportion of young animals is greater than for years previous to 1911.

<sup>3</sup>Animals slaughtered on farms were not included. The following figures are comparable with data given for other years, the amounts being partly estimated: cattle, 1,915,059; sheep, 1,067,015; swine, 4,282,624.



## 12.—Total Receipts of Live-Stock and Disposition of Slaughter and Store Stock at Principal Markets in Canada, calendar years 1935 and 1936—concluded.

| Market and Item.                 | 1935.   |         |         |                  | 1936.   |         |         |                  |
|----------------------------------|---------|---------|---------|------------------|---------|---------|---------|------------------|
|                                  | Cattle. | Calves. | Hogs.   | Sheep and Lambs. | Cattle. | Calves. | Hogs.   | Sheep and Lambs. |
|                                  | No.     | No.     | No.     | No.              | No.     | No.     | No.     | No.              |
| Winnipeg—                        |         |         |         |                  |         |         |         |                  |
| Receipts (total).....            | 294,160 | 97,610  | 215,607 | 99,502           | 307,860 | 121,457 | 258,486 | 62,306           |
| Shipments—                       |         |         |         |                  |         |         |         |                  |
| 1. Slaughter stock to packers..  | 157,953 | 66,213  | 144,020 | 58,919           | 169,899 | 80,071  | 201,347 | 54,185           |
| 2. Slaughter stock to butchers.  | 32,055  | 17,375  | 7,976   | 4,765            | 28,399  | 21,851  | 7,401   | 4,668            |
| 3. Store stock to country points | 40,361  | 2,276   | Nil     | Nil              | 48,206  | 2,424   | Nil     | Nil              |
| Calgary—                         |         |         |         |                  |         |         |         |                  |
| Receipts (total).....            | 59,025  | 15,237  | 84,090  | 13,304           | 83,242  | 19,762  | 83,464  | 13,322           |
| Shipments—                       |         |         |         |                  |         |         |         |                  |
| 1. Slaughter stock to packers..  | 47,060  | 1       | 71,352  | 12,368           | 62,744  | 1       | 66,890  | 11,292           |
| 2. Slaughter stock to butchers.  | 6,221   | 1       | 666     | 377              | 7,170   | 1       | 507     | 322              |
| 3. Store stock to country points | 16,759  | 50      | Nil     | Nil              | 17,019  | Nil     | Nil     | Nil              |
| Edmonton—                        |         |         |         |                  |         |         |         |                  |
| Receipts (total).....            | 50,200  | 13,064  | 77,561  | 18,215           | 58,211  | 16,610  | 58,566  | 18,397           |
| Shipments—                       |         |         |         |                  |         |         |         |                  |
| 1. Slaughter stock to packers..  | 27,510  | 8,165   | 69,078  | 11,632           | 27,046  | 7,107   | 48,992  | 13,797           |
| 2. Slaughter stock to butchers.  | 2,093   | 1,589   | 2,317   | 2,400            | 3,007   | 1,827   | 1,957   | 1,573            |
| 3. Store stock to country points | 12,636  | 624     | Nil     | Nil              | 8,715   | 330     | Nil     | Nil              |
| Prince Albert—                   |         |         |         |                  |         |         |         |                  |
| Receipts (total).....            | 6,479   | 945     | 28,549  | 1,765            | 10,908  | 2,272   | 32,021  | 3,466            |
| Shipments—                       |         |         |         |                  |         |         |         |                  |
| 1. Slaughter stock to packers..  | 2,108   | 505     | 27,095  | 1,526            | 4,053   | 1,475   | 32,393  | 3,292            |
| 2. Slaughter stock to butchers.  | 360     | 178     | 45      | 14               | 309     | 78      | 3       | 10               |
| 3. Store stock to country points | 2,265   | 58      | Nil     | Nil              | 3,374   | 354     | Nil     | Nil              |
| Moose Jaw—                       |         |         |         |                  |         |         |         |                  |
| Receipts (total).....            | 16,048  | 3,883   | 19,862  | 16,020           | 15,406  | 5,824   | 30,266  | 15,214           |
| Shipments—                       |         |         |         |                  |         |         |         |                  |
| 1. Slaughter stock to packers..  | 11,227  | 2,998   | 17,658  | 7,061            | 12,300  | 4,076   | 26,318  | 7,904            |
| 2. Slaughter stock to butchers.  | 4       | Nil     | 9       | 20               | 23      | 1       | Nil     | Nil              |
| 3. Store stock to country points | 3,928   | 750     | Nil     | Nil              | 2,189   | 764     | Nil     | Nil              |
| Saskatoon—                       |         |         |         |                  |         |         |         |                  |
| Receipts (total).....            | 9,752   | 4,204   | 32,104  | 4,192            | 15,859  | 6,520   | 51,852  | 5,990            |
| Shipments—                       |         |         |         |                  |         |         |         |                  |
| 1. Slaughter stock to packers..  | 5,444   | 2,075   | 26,425  | 3,634            | 8,876   | 5,217   | 46,671  | 4,944            |
| 2. Slaughter stock to butchers.  | 2,871   | 1,387   | 2,134   | 490              | 3,422   | 1,521   | 2,333   | 645              |
| 3. Store stock to country points | 1,009   | 68      | Nil     | Nil              | 1,030   | 55      | Nil     | Nil              |
| Regina—                          |         |         |         |                  |         |         |         |                  |
| Receipts (total).....            | 7,339   | 3,657   | 15,685  | 1,971            | 8,014   | 4,322   | 27,409  | 2,588            |
| Shipments—                       |         |         |         |                  |         |         |         |                  |
| 1. Slaughter stock to packers..  | 4,857   | 2,019   | 13,074  | 1,530            | 4,724   | 2,424   | 23,564  | 1,635            |
| 2. Slaughter stock to butchers.  | 1,997   | 1,584   | 1,140   | 412              | 2,206   | 1,919   | 1,159   | 961              |
| 3. Store stock to country points | 250     | 14      | Nil     | Nil              | 596     | 22      | Nil     | Nil              |

<sup>1</sup>Included with cattle.

The interprovincial and export movement of live stock in 1936 showed increases in all classes. Total shipments in 1936 with comparative figures for 1935 in parentheses were as follows: cattle 756,512 (584,642); calves 255,991 (191,128); swine 900,185 (891,266); and sheep 262,013 (249,451).

The marketings of live stock through stockyards, by direct shipment to packers, or by export according to provinces of origin for the calendar year 1936 are given in Table 13. In Table 14 are given the statistics of the grading of animals from several provinces marketed through the stockyards in 1936 and, in the case of hogs, those marketed direct to packers, since a majority of these animals are handled in this way. Of recent years the practice is developing of grading an increasing proportion of hogs by the carcass after being dressed at the packing plant. Hogs graded by each method are shown separately in Table 14.



### 13.—Live Stock from Several Provinces of Canada, Marketed through Stockyards, Packers, etc., calendar year 1936.

| Live Stock.                 | Maritime<br>Provinces. | Quebec.        | Ontario.         | Manitoba.      | Saskat-<br>chewan. | Alberta.         | Total.           |
|-----------------------------|------------------------|----------------|------------------|----------------|--------------------|------------------|------------------|
|                             | No.                    | No.            | No.              | No.            | No.                | No.              | No.              |
| <b>Cattle—</b>              |                        |                |                  |                |                    |                  |                  |
| Totals to stockyards.....   | 344                    | 20,882         | 297,016          | 98,985         | 250,563            | 223,158          | 890,948          |
| Direct to packers.....      | 2,289                  | 6,929          | 95,299           | 27,587         | 50,513             | 84,070           | 266,687          |
| Direct for export.....      | 3,985                  | 3,956          | 46,060           | 2,308          | 12,025             | 56,583           | 124,917          |
| <b>Totals, Cattle.....</b>  | <b>6,618</b>           | <b>31,767</b>  | <b>438,375</b>   | <b>128,890</b> | <b>313,101</b>     | <b>363,811</b>   | <b>1,282,552</b> |
| <b>Calves—</b>              |                        |                |                  |                |                    |                  |                  |
| Totals to stockyards.....   | 4,037                  | 81,639         | 169,152          | 48,858         | 80,820             | 55,447           | 439,962          |
| Direct to packers.....      | 3,536                  | 28,750         | 91,469           | 32,807         | 7,142              | 50,332           | 214,042          |
| Direct for export.....      | 1,457                  | 3,389          | 17,183           | 118            | 554                | 3,327            | 26,058           |
| <b>Totals, Calves.....</b>  | <b>9,060</b>           | <b>113,784</b> | <b>277,804</b>   | <b>81,783</b>  | <b>88,525</b>      | <b>109,106</b>   | <b>680,662</b>   |
| <b>Hogs—</b>                |                        |                |                  |                |                    |                  |                  |
| Totals to stockyards.....   | 1,576                  | 150,008        | 347,593          | 100,396        | 297,498            | 265,462          | 1,171,533        |
| Direct to packers.....      | 47,211                 | 101,070        | 1,230,026        | 158,280        | 272,490            | 764,847          | 2,573,938        |
| Direct for export.....      | 6,178                  | 412            | 35,543           | 180            | 16                 | 9,157            | 51,486           |
| <b>Totals, Hogs.....</b>    | <b>54,965</b>          | <b>251,490</b> | <b>1,613,162</b> | <b>267,856</b> | <b>570,013</b>     | <b>1,039,466</b> | <b>3,796,952</b> |
| <b>Sheep—</b>               |                        |                |                  |                |                    |                  |                  |
| Totals to stockyards.....   | 3,517                  | 95,735         | 146,885          | 28,593         | 76,574             | 78,715           | 430,019          |
| Direct to packers.....      | 11,421                 | 27,465         | 103,477          | 52,462         | 17,110             | 167,825          | 379,760          |
| Direct for export.....      | 528                    | 37             | 1,611            | Nil            | 4                  | 216              | 2,396            |
| <b>Totals, Sheep.....</b>   | <b>15,466</b>          | <b>123,237</b> | <b>251,973</b>   | <b>81,055</b>  | <b>93,688</b>      | <b>246,756</b>   | <b>812,175</b>   |
| Store cattle purchased..... | 2,778                  | 4,148          | 125,278          | 26,809         | 4,068              | 20,360           | 183,441          |

### 14.—Grades of Live Stock from Several Provinces of Canada, Marketed at the Stockyards, calendar year 1936.

| Live Stock and Grade.      | Maritime<br>Provinces. | Quebec. | Ontario. | Manitoba. | Saskat-<br>chewan. | Alberta. | Total. |
|----------------------------|------------------------|---------|----------|-----------|--------------------|----------|--------|
|                            | No.                    | No.     | No.      | No.       | No.                | No.      | No.    |
| <b>1. Cattle—</b>          |                        |         |          |           |                    |          |        |
| Steers up to 1,050 lb.—    |                        |         |          |           |                    |          |        |
| Choice.....                | Nil                    | 9       | 247      | 1,740     | 2,444              | 2,003    | 6,443  |
| Good.....                  | Nil                    | 95      | 17,757   | 5,173     | 8,550              | 8,135    | 39,710 |
| Medium.....                | Nil                    | 1,073   | 31,574   | 7,200     | 16,353             | 14,233   | 70,433 |
| Common.....                | 23                     | 1,134   | 10,800   | 3,015     | 11,374             | 15,203   | 41,549 |
| Steers over 1,050 lb.—     |                        |         |          |           |                    |          |        |
| Choice.....                | Nil                    | 45      | 8,603    | 1,691     | 2,715              | 2,993    | 16,047 |
| Good.....                  | Nil                    | 837     | 27,828   | 4,041     | 7,683              | 8,200    | 48,684 |
| Medium.....                | Nil                    | 1,028   | 21,565   | 2,334     | 6,711              | 9,367    | 41,055 |
| Common.....                | Nil                    | 376     | 3,636    | 368       | 1,283              | 3,201    | 8,974  |
| Heifers—                   |                        |         |          |           |                    |          |        |
| Choice.....                | Nil                    | 8       | 42       | 1,668     | 3,027              | 2,812    | 7,557  |
| Good.....                  | Nil                    | 122     | 17,659   | 4,516     | 9,577              | 9,559    | 41,433 |
| Medium.....                | 2                      | 317     | 27,142   | 7,126     | 20,256             | 16,139   | 70,982 |
| Common.....                | 16                     | 451     | 8,599    | 3,993     | 13,237             | 13,847   | 40,148 |
| Fed Calves—                |                        |         |          |           |                    |          |        |
| Choice.....                | Nil                    | Nil     | 5,744    | 1,039     | 1,436              | 1,103    | 9,377  |
| Good.....                  | Nil                    | 2       | 9,132    | 1,750     | 2,612              | 2,609    | 16,155 |
| Medium.....                | Nil                    | 16      | 11,320   | 3,193     | 5,477              | 3,937    | 23,952 |
| Cows—                      |                        |         |          |           |                    |          |        |
| Good.....                  | 1                      | 663     | 16,857   | 4,655     | 12,125             | 16,365   | 50,666 |
| Medium.....                | 13                     | 2,955   | 16,904   | 8,797     | 17,083             | 12,937   | 59,589 |
| Common.....                | 5                      | 3,190   | 15,133   | 5,014     | 10,554             | 6,766    | 40,662 |
| Canners and cutters.....   | 277                    | 4,624   | 19,887   | 6,275     | 10,907             | 4,823    | 49,793 |
| Bulls—                     |                        |         |          |           |                    |          |        |
| Good.....                  | Nil                    | 79      | 3,912    | 1,105     | 2,199              | 1,435    | 8,730  |
| Common.....                | 7                      | 2,941   | 7,244    | 1,673     | 3,001              | 2,392    | 17,258 |
| Stocker and Feeder Steers— |                        |         |          |           |                    |          |        |
| Good.....                  | Nil                    | 8       | 3,530    | 8,413     | 21,796             | 16,303   | 50,050 |
| Common.....                | Nil                    | 36      | 5,153    | 8,691     | 25,442             | 10,328   | 58,650 |

## 14.—Grades of Live Stock from Several Provinces of Canada, Marketed at the Stockyards, calendar year 1936—concluded.

| Live Stock and Grade.                     | Maritime Provinces. | Quebec.        | Ontario.         | Manitoba.      | Saskatchewan.  | Alberta.       | Total.           |
|---|---------------------|----------------|------------------|----------------|----------------|----------------|------------------|
|   | No.                 | No.            | No.              | No.            | No.            | No.            | No.              |
| <b>1. Cattle—concluded.</b>               |                     |                |                  |                |                |                |                  |
| Stock Cows and Heifers—                   |                     |                |                  |                |                |                |                  |
| Good.....                                 | Nil                 | Nil            | 24               | 1,250          | 5,243          | 4,403          | 10,920           |
| Common.....                               | Nil                 | Nil            | 56               | 1,948          | 5,615          | 4,222          | 11,841           |
| Milkers and springers.....                | Nil                 | 795            | 5,625            | 997            | 691            | 104            | 8,212            |
| Unclassified.....                         | Nil                 | 78             | 984              | 1,195          | 22,267         | 20,554         | 45,078           |
| <b>Totals, Cattle.....</b>                | <b>344</b>          | <b>20,882</b>  | <b>297,016</b>   | <b>98,935</b>  | <b>250,563</b> | <b>223,158</b> | <b>896,945</b>   |
| <b>2. Calves—</b>                         |                     |                |                  |                |                |                |                  |
| Veal—                                     |                     |                |                  |                |                |                |                  |
| Good and choice.....                      | 1                   | 1,742          | 53,561           | 20,689         | 23,365         | 15,437         | 113,795          |
| Common and medium.....                    | 557                 | 49,540         | 106,742          | 27,608         | 52,731         | 35,422         | 273,600          |
| Grass.....                                | 3,479               | 30,337         | 9,849            | 561            | 4,733          | 4,588          | 53,567           |
| <b>Totals, Calves.....</b>                | <b>4,637</b>        | <b>81,619</b>  | <b>169,152</b>   | <b>48,858</b>  | <b>80,829</b>  | <b>55,447</b>  | <b>439,962</b>   |
| <b>3. Hogs, Graded Alive—<sup>1</sup></b> |                     |                |                  |                |                |                |                  |
| Select bacon.....                         | 966                 | 40,709         | 408,147          | 43,806         | 90,393         | 221,966        | 805,987          |
| Bacon.....                                | 2,463               | 81,431         | 644,601          | 96,257         | 186,350        | 380,363        | 1,391,474        |
| Butchers.....                             | 3,162               | 47,878         | 119,451          | 32,584         | 107,177        | 250,524        | 560,776          |
| Heavy.....                                | 446                 | 6,281          | 27,786           | 7,691          | 20,492         | 22,201         | 84,897           |
| Extra heavies.....                        | 343                 | 3,787          | 5,956            | 3,974          | 11,189         | 5,926          | 31,175           |
| Lights and feeders.....                   | 3,266               | 31,300         | 48,571           | 56,522         | 85,195         | 58,739         | 284,596          |
| Sows No. 1.....                           | 469                 | 1,657          | 5,605            | 8,437          | 23,820         | 15,458         | 56,446           |
| Sows No. 2.....                           | 182                 | 2,592          | 27,534           | 5,078          | 13,775         | 22,394         | 71,855           |
| Roughs.....                               | 56                  | 38             | 1,761            | 576            | 2,008          | 1,673          | 6,112            |
| Stags.....                                | 51                  | 152            | 1,037            | 452            | 1,117          | 1,246          | 4,655            |
| <b>Totals, Hogs Graded Alive.....</b>     | <b>11,404</b>       | <b>215,825</b> | <b>1,291,352</b> | <b>255,377</b> | <b>542,535</b> | <b>981,490</b> | <b>3,297,973</b> |
| <b>Hog Carcasses—<sup>1</sup></b>         |                     |                |                  |                |                |                |                  |
| A.....                                    | 10,853              | 7,704          | 109,703          | 3,640          | 7,355          | 15,491         | 154,776          |
| B.....                                    | 16,629              | 15,583         | 137,016          | 5,703          | 11,958         | 23,387         | 210,276          |
| C.....                                    | 3,143               | 3,668          | 11,773           | 1,086          | 3,049          | 5,455          | 28,175           |
| D.....                                    | 1,106               | 118            | 1,895            | 97             | 578            | 272            | 4,096            |
| E.....                                    | 893                 | 187            | 1,814            | 55             | 238            | 335            | 3,552            |
| Heavy.....                                | 781                 | 1,052          | 9,777            | 449            | 940            | 2,435          | 15,384           |
| Extra heavy.....                          | 205                 | 637            | 1,846            | 93             | 341            | 521            | 3,533            |
| Light.....                                | 2,960               | 5,977          | 9,672            | 945            | 1,631          | 890            | 22,075           |
| Sows.....                                 | 773                 | 327            | 2,641            | 231            | 1,352          | 32             | 5,356            |
| <b>Totals, Hog Carcasses.....</b>         | <b>37,383</b>       | <b>35,253</b>  | <b>286,267</b>   | <b>12,290</b>  | <b>27,472</b>  | <b>48,810</b>  | <b>447,493</b>   |
| <b>4. Lambs and Sheep—</b>                |                     |                |                  |                |                |                |                  |
| Lambs—                                    |                     |                |                  |                |                |                |                  |
| Good handyweights.....                    | 1,335               | 52,244         | 100,533          | 19,333         | 30,482         | 39,787         | 243,713          |
| Good heavies.....                         | 14                  | 871            | 4,656            | 840            | 10,885         | 2,934          | 20,194           |
| Common, all weights.....                  | 654                 | 18,371         | 13,745           | 6,206          | 11,569         | 11,075         | 61,556           |
| Bucks.....                                | 628                 | 14,210         | 6,171            | 285            | 261            | 140            | 21,695           |
| Sheep—                                    |                     |                |                  |                |                |                |                  |
| Good heavies.....                         | 28                  | 466            | 3,158            | 13             | 615            | 2,101          | 6,381            |
| Good handyweights.....                    | 362                 | 4,189          | 11,534           | 1,228          | 3,840          | 4,589          | 25,742           |
| Common.....                               | 466                 | 5,384          | 7,096            | 686            | 1,666          | 3,616          | 17,014           |
| Unclassified.....                         | Nil                 | Nil            | Nil              | Nil            | 17,257         | 15,473         | 32,730           |
| <b>Totals, Lambs and Sheep.....</b>       | <b>3,517</b>        | <b>95,735</b>  | <b>146,885</b>   | <b>23,592</b>  | <b>76,574</b>  | <b>78,715</b>  | <b>436,019</b>   |

<sup>1</sup>Including shipments direct to packers.

**Slaughtering and Meat Packing.**—This industry has become one of the most important branches of manufacturing in Canada. Its growth, shown by the statistics of Table 15, has been accompanied by a concentration of the major part of the production of the industry into a comparatively small number of large establishments, thereby facilitating the utilization of by-products and greater efficiency of operation. There has been a large increase in the number of establishments since 1931, due to the inclusion of wholesale butchers operating small plants engaged in

slaughtering only. The inclusion of these small establishments did not affect materially the value of production of the industry. The numbers of live stock slaughtered at Canadian inspected establishments in 1935 and 1936 are shown in Table 16.

**15.—Principal Statistics of the Slaughtering and Meat-Packing Industry of Canada, decennally 1870-1930, annually 1932-36.**

| Description.              | 1870.       | 1880.            | 1890.            | 1900. <sup>1</sup> | 1910. <sup>1</sup> | 1920.            |
|---------------------------|-------------|------------------|------------------|--------------------|--------------------|------------------|
| Establishments.....No.    | 193         | 203              | 528              | 57                 | 80                 | 86               |
| Capital invested.....\$   | 410,325     | 1,449,677        | 2,185,077        | 5,395,162          | 15,321,088         | 84,288,306       |
| Employees.....No.         | 841         | 852              | 1,690            | 2,416              | 4,214              | 11,978           |
| Salaries and wages.....\$ | 145,376     | 209,483          | 505,563          | 1,020,164          | 2,685,518          | 10,061,471       |
| Cost of materials.....\$  | 2,942,786   | 3,163,576        | 5,556,746        | 19,520,058         | 40,981,761         | 170,916,888      |
| Value of products.....\$  | 3,700,552   | 4,084,133        | 7,132,831        | 22,217,984         | 48,527,076         | 240,544,618      |
|                           | 1930.       | 1932.            | 1933.            | 1934.              | 1935.              | 1936.            |
| Establishments.....No.    | 76          | 141 <sup>2</sup> | 135 <sup>2</sup> | 147 <sup>2</sup>   | 139 <sup>2</sup>   | 142 <sup>2</sup> |
| Capital invested.....\$   | 60,778,996  | 53,227,929       | 54,590,398       | 56,765,624         | 58,207,715         | 61,800,075       |
| Employees.....No.         | 9,290       | 9,101            | 9,289            | 10,119             | 10,674             | 11,776           |
| Salaries and wages.....\$ | 12,114,607  | 10,349,315       | 10,103,744       | 11,608,838         | 12,448,347         | 13,021,410       |
| Cost of materials.....\$  | 129,004,327 | 65,575,957       | 70,467,544       | 98,417,162         | 108,191,810        | 126,630,086      |
| Value of products.....\$  | 164,020,053 | 91,246,523       | 92,366,137       | 122,112,406        | 133,379,312        | 156,971,640      |

<sup>1</sup>Figures for these years cover establishments employing five hands or over only.

<sup>2</sup>See the text preceding this table.

**16.—Live Stock Slaughtered at Canadian Inspected Establishments, by months, 1935 and 1936.**

| Month.         | 1935.   |         |         |           | 1936.   |         |         |           |
|----------------|---------|---------|---------|-----------|---------|---------|---------|-----------|
|                | Cattle. | Calves. | Sheep.  | Hogs.     | Cattle. | Calves. | Sheep.  | Hogs.     |
|                | No.     | No.     | No.     | No.       | No.     | No.     | No.     | No.       |
| January.....   | 67,716  | 28,142  | 40,448  | 281,089   | 60,810  | 27,060  | 48,434  | 275,775   |
| February.....  | 53,401  | 29,947  | 37,341  | 254,944   | 62,097  | 29,099  | 43,398  | 245,049   |
| March.....     | 56,234  | 49,246  | 39,932  | 242,820   | 61,927  | 45,588  | 42,563  | 262,531   |
| April.....     | 57,189  | 72,252  | 45,308  | 255,066   | 66,819  | 67,539  | 52,312  | 260,855   |
| May.....       | 63,713  | 76,381  | 37,710  | 244,893   | 65,132  | 71,784  | 26,094  | 279,710   |
| June.....      | 52,063  | 65,050  | 54,003  | 194,613   | 67,029  | 68,946  | 51,882  | 269,474   |
| July.....      | 56,047  | 57,360  | 73,468  | 191,088   | 68,439  | 57,096  | 67,320  | 232,254   |
| August.....    | 66,679  | 47,695  | 97,190  | 175,542   | 76,534  | 52,613  | 81,251  | 232,050   |
| September..... | 72,313  | 46,007  | 105,083 | 170,736   | 89,832  | 55,404  | 107,576 | 284,186   |
| October.....   | 92,844  | 49,115  | 170,537 | 262,599   | 111,665 | 51,070  | 168,378 | 391,890   |
| November.....  | 88,942  | 39,515  | 108,475 | 256,361   | 102,614 | 39,553  | 109,040 | 410,449   |
| December.....  | 62,570  | 26,325  | 53,828  | 268,824   | 78,334  | 33,820  | 52,718  | 412,311   |
| Totals.....    | 759,711 | 586,851 | 861,228 | 2,895,825 | 920,229 | 602,616 | 830,975 | 3,562,531 |

**Consumption of Animal Products.**—The figures of Table 17 provide an indication of the standard of the diet of the people of Canada. Animal products such as meat, butter, and eggs are generally regarded as features of the diet of people with a high standard of living. In Canada there is a relatively high per capita consumption of beef, pork, butter, and eggs but a relatively low per capita consumption of mutton and lamb, and cheese. During the depression years, the per capita consumption of these products was not affected as much as might have been expected. Changes in the per capita consumption of various animal products occur as a result of changes in price relationships. These, in turn, are related to cycles of over- and under-production particularly marked in the case of the meat products of hogs and cattle. Beef and pork, particularly, interchange in leadership as regards the amount consumed, according to the price relationships between them. In 1937, 58·89 pounds of beef were consumed per capita as compared with 62·35 pounds of pork. In 1933, pork consumption was 75·02 pounds per capita and beef consumption 55·50 pounds per capita.

**17.—Total and Per Capita<sup>1</sup> Consumption of Meats and Live-Stock Products in  
Canada, calendar years 1933-37.**

| Item.  | 1933.         | 1934.         | 1935.                    | 1936.                   | 1937. <sup>2</sup> |
|--|---------------|---------------|--------------------------|-------------------------|--------------------|
| <b>Beef and Veal—</b>                                    |               |               |                          |                         |                    |
| Slaughtered in Canada.....No.                            | 1,715,424     | 2,137,492     | 2,035,098                | 1,889,731               | 1,853,528          |
| Estimated dressed weight.....lb.                         | 608,975,520   | 758,809,660   | 722,672,790              | 670,884,565             | 658,002,440        |
| On hand, Jan. 1....."                                    | 9,821,741     | 16,127,300    | 25,396,292               | 28,454,153              | 28,452,603         |
| Imports of beef....."                                    | 179,875       | 196,258       | 13,959,458               | 12,179,350              | 11,789,650         |
| Exports of beef....."                                    | 618,977,136   | 775,133,218   | 762,028,540              | 707,870,453             | 698,241,693        |
|  | 10,009,700    | 15,092,200    | 13,512,600               | 12,416,300              | 17,265,200         |
| On hand, Dec. 31....."                                   | 608,967,436   | 760,041,018   | 748,515,940              | 695,454,153             | 680,676,493        |
|  | 16,127,300    | 25,396,292    | 24,836,592               | 28,452,603              | 26,109,401         |
| Totals, consumption....."                                | 592,840,136   | 734,644,726   | 723,679,348              | 667,001,550             | 654,867,092        |
| Consumption per capita....."                             | 55.50         | 67.87         | 66.18                    | 60.48                   | 58.89              |
| <b>Pork—</b>   |               |               |                          |                         |                    |
| Slaughtered in Canada.....No.                            | 5,813,799     | 5,590,673     | 5,415,289                | 6,270,565               | 5,085,945          |
| Estimated dressed weight.....lb.                         | 872,069,850   | 838,600,950   | 812,393,350              | 940,584,750             | 897,891,750        |
| On hand, Jan. 1....."                                    | 29,552,198    | 24,759,461    | 28,118,841               | 30,335,225              | 49,004,317         |
| Imports of pork....."                                    | 3,774,034     | 4,147,727     | 430,348                  | 2,877,456               | 2,068,526          |
| Exports of pork....."                                    | 905,396,082   | 867,508,138   | 840,840,539              | 973,797,431             | 949,564,593        |
|  | 79,302,600    | 123,750,200   | 132,435,300              | 174,492,800             | 219,141,500        |
| On hand, Dec. 31....."                                   | 826,093,482   | 743,757,938   | 708,405,239              | 799,304,631             | 739,423,093        |
|  | 24,759,461    | 28,118,841    | 30,335,225               | 49,004,317              | 37,110,049         |
| Totals, consumption....."                                | 801,334,021   | 715,641,097   | 678,970,014              | 749,700,314             | 693,302,144        |
| Consumption per capita....."                             | 75.02         | 66.12         | 62.01                    | 67.98                   | 62.35              |
| <b>Mutton and Lamb—</b>                                  |               |               |                          |                         |                    |
| Slaughtered in Canada.....No.                            | 1,691,072     | 1,708,598     | 1,696,061                | 1,660,114               | 1,667,381          |
| Estimated dressed weight.....lb.                         | 67,642,880    | 68,343,920    | 67,842,440               | 66,404,660              | 66,095,240         |
| On hand, Jan. 1....."                                    | 5,203,237     | 7,200,802     | 7,480,457                | 5,578,415               | 7,196,840          |
| Imports of mutton and lamb....."                         | 296,581       | 37,794        | 83,162                   | 19,079                  | 40,245             |
| Exports of mutton and lamb....."                         | 73,232,698    | 75,582,486    | 75,406,059               | 72,002,054              | 73,323,325         |
|  | 406,500       | 378,800       | 315,500                  | 231,800                 | 283,500            |
| On hand, Dec. 31....."                                   | 72,826,198    | 75,203,686    | 75,090,559               | 71,770,254              | 73,648,825         |
|  | 7,200,802     | 7,480,457     | 5,578,415                | 7,196,840               | 5,110,146          |
| Totals, consumption....."                                | 65,025,396    | 67,723,229    | 69,512,144               | 64,573,414              | 68,529,679         |
| Consumption per capita....."                             | 6.14          | 6.26          | 6.36                     | 5.86                    | 6.16               |
| <b>Summary of Per Capita Consumption, All Meats—</b>     |               |               |                          |                         |                    |
| Beef and veal.....lb.                                    | 55.50         | 67.87         | 66.18                    | 60.48                   | 58.89              |
| Pork....."   | 75.02         | 66.12         | 62.01                    | 67.98                   | 62.35              |
| Mutton and lamb....."                                    | 6.14          | 6.26          | 6.36                     | 5.86                    | 6.16               |
| <b>Totals, Consumption of All Meats Per Capita....."</b> | <b>136.66</b> | <b>140.25</b> | <b>134.55</b>            | <b>134.32</b>           | <b>127.40</b>      |
| <b>Butter—</b>   |               |               |                          |                         |                    |
| On hand, Jan. 1.....lb.                                  | 21,688,844    | 22,026,655    | 32,422,719               | 32,610,519 <sup>1</sup> | 36,671,543         |
| Production—Creamery....."                                | 219,232,546   | 234,852,961   | 240,918,799              | 250,931,777             | 246,387,300        |
| Home-made....."  | 106,485,000   | 109,918,000   | 114,161,999 <sup>1</sup> | 114,026,000             | 113,084,000        |
| Imports....."  | 1,377,137     | 2,873,502     | 148,541                  | 117,281                 | 65,918             |
| Exports....."  | 348,783,527   | 369,671,178   | 387,652,058 <sup>1</sup> | 397,685,577             | 390,268,761        |
|  | 4,437,200     | 428,300       | 7,697,000                | 5,123,800               | 4,096,600          |
| On hand, Dec. 31....."                                   | 344,346,327   | 369,242,878   | 379,955,058 <sup>1</sup> | 392,556,777             | 392,112,161        |
|  | 22,026,655    | 32,422,719    | 32,302,510               | 36,671,543              | 26,352,535         |
| Totals, consumption....."                                | 322,319,672   | 336,820,159   | 347,652,539 <sup>1</sup> | 355,885,234             | 363,759,626        |
| Consumption per capita....."                             | 30.18         | 31.12         | 31.79 <sup>1</sup>       | 32.27                   | 32.71              |
| <b>Cheese—</b>   |               |               |                          |                         |                    |
| On hand, Jan. 1.....lb.                                  | 13,279,357    | 15,973,921    | 17,196,375               | 24,562,606              | 24,025,899         |
| Production—Factory....."                                 | 111,146,433   | 99,840,617    | 100,437,390              | 119,123,483             | 128,444,300        |
| Home-made....."  | 943,304       | 1,011,300     | 1,232,145 <sup>1</sup>   | 1,229,300               | 1,222,300          |
| Imports....."  | 967,613       | 940,401       | 1,274,130                | 1,239,882               | 1,410,336          |
|  | 126,337,263   | 117,278,230   | 120,130,043 <sup>1</sup> | 146,155,271             | 155,112,835        |

<sup>1</sup>For footnotes, see end of table, p. 608.

**17.—Total and Per Capita<sup>1</sup> Consumption of Meats and Live-Stock Products in Canada, calendar years 1933-37—concluded.**

| Item.                             | 1933.                     | 1934.                     | 1935.                                 | 1936.                     | 1937. <sup>2</sup>        |
|-----------------------------------|---------------------------|---------------------------|---------------------------------------|---------------------------|---------------------------|
| <b>Cheese—concluded.</b>          |                           |                           |                                       |                           |                           |
| Exports..... lb.                  | 74,168,600                | 61,167,800                | 55,718,700                            | 81,890,300                | 88,955,300                |
| On hand, Dec. 31..... "           | 52,168,663<br>15,973,921  | 56,110,439<br>17,196,375  | 64,411,433 <sup>4</sup><br>24,562,606 | 64,264,671<br>24,025,899  | 66,157,535<br>26,899,629  |
| Totals, consumption..... "        | 36,194,742                | 38,014,064                | 39,848,737 <sup>4</sup>               | 40,239,073                | 39,287,906                |
| Consumption per capita..... "     | 3-39                      | 3-60                      | 3-64 <sup>4</sup>                     | 3-65                      | 3-53                      |
| <b>Eggs—</b>                      |                           |                           |                                       |                           |                           |
| On hand, Jan. 1..... doz.         | 4,064,732                 | 2,875,825                 | 5,097,164                             | 3,359,197 <sup>3</sup>    | 4,749,444                 |
| Production—Farm..... "            | 222,254,000               | 223,272,000               | 223,540,000                           | 219,494,000               | 219,443,000               |
| Other..... "                      | 20,500,000                | 20,500,000                | 20,500,000                            | 20,500,000                | 20,500,000                |
| Imports..... "                    | 260,510                   | 1,153,715                 | 364,570                               | 869,693                   | 593,558                   |
| Exports..... "                    | 247,079,242<br>1,987,612  | 247,801,540<br>2,001,024  | 249,501,734<br>1,300,744              | 244,222,790<br>1,203,814  | 245,286,002<br>1,602,011  |
| On hand, Dec. 31..... "           | 245,091,630<br>2,875,825  | 245,800,516<br>3,097,164  | 248,200,990<br>3,315,007              | 243,018,976<br>4,749,444  | 243,682,991<br>4,726,693  |
| Totals, consumption..... "        | 242,215,805               | 240,703,352               | 244,885,983                           | 238,269,532               | 238,987,298               |
| Consumption per capita..... "     | 22-68                     | 22-24                     | 22-39                                 | 21-61                     | 21-49                     |
| <b>Poultry—</b>                   |                           |                           |                                       |                           |                           |
| On farms..... No.                 | 59,324,400                | 59,798,700                | 59,768,800                            | 59,329,400                | 57,510,100                |
| Elsewhere..... "                  | 5,675,000                 | 5,675,000                 | 5,675,000                             | 5,675,000                 | 5,675,000                 |
| Totals..... "                     | 64,999,400                | 65,473,700                | 62,443,800                            | 65,014,400                | 63,185,100                |
| Marketings..... "                 | 27,696,210                | 33,863,555                | 38,125,350                            | 39,641,625                | 38,537,805                |
| Estimated dressed weight..... lb. | 154,627,163               | 186,141,535               | 205,628,940                           | 212,324,290               | 207,132,990               |
| On hand, Jan. 1..... "            | 6,969,908                 | 10,729,147                | 11,228,378                            | 11,435,654                | 16,194,680                |
| Estimated exports..... "          | 161,597,073<br>1,352,183  | 196,870,732<br>2,585,606  | 216,857,818<br>2,091,366              | 224,200,154<br>4,909,317  | 232,327,610<br>11,104,366 |
| On hand, Dec. 31..... "           | 160,244,890<br>10,729,147 | 194,285,126<br>11,228,878 | 213,896,462<br>11,435,954             | 219,350,837<br>16,194,650 | 212,223,244<br>10,401,204 |
| Totals, consumption..... "        | 149,515,743               | 183,056,248               | 202,430,508                           | 203,146,187               | 201,822,040               |
| Consumption per capita..... "     | 14-00                     | 16-91                     | 18-61                                 | 18-43                     | 18-15                     |

<sup>1</sup> For estimates of population upon which per capita figures are calculated, see p. 155. <sup>2</sup> Subject to revision. <sup>3</sup> Includes carloads in transit. <sup>4</sup> Revised since the publication of the 1937 Year Book. <sup>5</sup> Fowl, turkeys, ducks, and geese.

**Export and Import Trade in Live Stock and Live-Stock Products.**—The exports of live stock and live-stock products from the Dominion to the United Kingdom, the United States, and all countries, are shown for the four fiscal years ended Mar. 31, 1934-37, in Table 12 of the chapter on External Trade, at pp. 540-543, and imports in Table 13 at pp. 554-557. Exports and imports by calendar years 1932-36, may be found at pp. 73, 75, and 76 of the report on "Live Stock and Animal Products Statistics, 1936". At pp. 53-78 of the report on "Trade of Canada (Imports for Consumption and Exports), Calendar Year 1937" figures are given of exports of animals and animal products for 1936 and 1937 and imports of this class for the same calendar years will be found at pp. 210-234 of the same report.

### Section 4.—Cold Storage.

**Cold Storage Warehouses.**—Under the Cold Storage Act, 1907 (6-7 Edw. VII, c. 6), now consolidated as c. 25, R.S.C., 1927, subsidies have been granted by the Dominion Government toward the construction and equipment of cold storage warehouses open to the public, the Act and regulations made thereunder being administered by the Department of Agriculture. Table 18 shows for 1937 the number of cold storage warehouses in Canada, with the refrigerated space.

## 18.—Cold Storage Warehouses in Canada, by Provinces, 1937.

NOTE.—The figures in this table were supplied through the courtesy of J. F. Singleton, Associate Director of Marketing Services, Dairy Products and Cold Storage, Dominion Department of Agriculture. Creameries with mechanical refrigeration are not now included, although for years previous to 1936 they were considered as cold storage warehouses in these tables.

| Province.                 | Subsidized Public Warehouses. |                          |           |                   | All Warehouses. |                          |
|---------------------------|-------------------------------|--------------------------|-----------|-------------------|-----------------|--------------------------|
|                           | Num-<br>ber.                  | Refriger-<br>ated Space. | Cost.     | Total<br>Subsidy. | Num-<br>ber.    | Refriger-<br>ated Space. |
|                           |                               | cu. ft.                  | \$        | \$                |                 | cu. ft.                  |
| Prince Edward Island..... | 5                             | 273,098                  | 130,673   | 39,202            | 10              | 338,002                  |
| Nova Scotia.....          | 12                            | 2,559,730                | 2,895,262 | 833,578           | 22              | 3,197,533                |
| New Brunswick.....        | 3                             | 894,177                  | 288,419   | 86,625            | 23              | 1,219,043                |
| Quebec.....               | 8                             | 367,474                  | 333,737   | 100,136           | 64              | 11,306,060               |
| Ontario.....              | 37                            | 4,631,145                | 2,051,312 | 699,549           | 123             | 17,285,433               |
| Manitoba.....             | 1                             | 27,500                   | 32,000    | 9,600             | 36              | 5,386,708                |
| Saskatchewan.....         | 4                             | 437,596                  | 268,707   | 80,612            | 21              | 1,879,291                |
| Alberta.....              | 3                             | 402,810                  | 301,512   | 90,453            | 17              | 4,216,045                |
| British Columbia.....     | 25                            | 5,592,400                | 2,402,821 | 720,846           | 76              | 10,474,373               |
| Yukon.....                | Nil                           | Nil                      | Nil       | Nil               | 1               | 44,900                   |
| Totals.....               | 98                            | 15,186,620               | 8,615,993 | 2,570,501         | 398             | 55,353,383               |

**Cold Storage Stocks.**—Statistics of the stocks of food in the cold storage warehouses of Canada are collected and published monthly by the Agricultural Branch of the Dominion Bureau of Statistics. A summary of cold storage reports is published annually as a separate statement and the same data are included in the report on "Live Stock and Animal Products Statistics", published annually. In Table 19 are included statistics, by months for 1936 and 1937, of the stocks of food in cold storage and in process of cure for various important commodities.

## 19.—Stocks of Food Commodities on Hand in Cold Storage and Dairy Factories, by Months, 1936 and 1937.

NOTE.—Figures in this table are of stocks on hand on the first of each month as published by the Agricultural Branch, Dominion Bureau of Statistics.

| Year and Month. | Eggs.                   | Butter. <sup>1</sup> | Factory<br>Cheese.      | Beef.                 |                   |                      |
|-----------------|-------------------------|----------------------|-------------------------|-----------------------|-------------------|----------------------|
|                 |                         |                      |                         | Fresh,<br>Not Frozen. | Fresh,<br>Frozen. | Cured or<br>in Cure. |
|                 | dos.                    | lb.                  | lb.                     | lb.                   | lb.               | lb.                  |
| <b>1936.</b>    |                         |                      |                         |                       |                   |                      |
| January.....    | 3,315,007               | 32,302,519           | 24,562,606              | 4,684,151             | 16,735,182        | 557,029              |
| February.....   | 2,950,489               | 25,098,097           | 23,216,783              | 6,324,808             | 13,342,795        | 643,129              |
| March.....      | 1,187,302               | 16,521,114           | 19,344,121              | 6,255,241             | 9,980,027         | 726,136              |
| April.....      | 1,210,332 <sup>1</sup>  | 8,849,651            | 16,875,807 <sup>1</sup> | 5,742,926             | 10,162,754        | 763,395              |
| May.....        | 3,774,602 <sup>1</sup>  | 4,860,978            | 14,170,237              | 5,443,034             | 9,187,759         | 807,193              |
| June.....       | 9,120,882 <sup>1</sup>  | 10,366,919           | 15,860,150              | 4,883,335             | 7,876,977         | 1,096,974            |
| July.....       | 13,311,402 <sup>1</sup> | 28,162,113           | 24,373,263 <sup>1</sup> | 5,648,896             | 6,255,490         | 1,029,026            |
| August.....     | 13,810,299 <sup>1</sup> | 41,882,554           | 30,700,229              | 5,119,578             | 5,611,096         | 1,008,069            |
| September.....  | 14,433,020 <sup>1</sup> | 50,323,973           | 34,061,775              | 5,326,942             | 6,060,843         | 673,212              |
| October.....    | 13,759,249              | 55,743,542           | 33,623,581              | 6,671,838             | 9,115,500         | 728,546              |
| November.....   | 10,062,939              | 53,474,770           | 33,044,012              | 7,251,244             | 14,322,361        | 609,211              |
| December.....   | 6,113,565               | 44,618,292           | 22,771,387 <sup>1</sup> | 7,521,109             | 18,051,006        | 413,808              |
| <b>1937.</b>    |                         |                      |                         |                       |                   |                      |
| January.....    | 4,705,254               | 35,999,543           | 24,025,899              | 4,784,458             | 13,608,326        | 554,608              |
| February.....   | 4,598,418               | 29,112,998           | 21,606,028              | 6,102,067             | 13,872,673        | 552,571              |
| March.....      | 3,749,047               | 18,910,612           | 20,112,369              | 4,825,504             | 12,431,621        | 688,713              |
| April.....      | 3,257,157               | 9,250,660            | 18,008,959              | 5,709,785             | 9,236,342         | 637,404              |
| May.....        | 6,967,345               | 5,860,895            | 15,985,455              | 5,989,584             | 7,440,367         | 470,820              |
| June.....       | 12,060,324              | 9,270,550            | 19,908,736              | 5,455,530             | 5,568,451         | 344,867              |
| July.....       | 16,294,639              | 26,828,920           | 30,571,172              | 5,533,237             | 3,994,224         | 370,798              |
| August.....     | 16,304,980              | 41,026,247           | 35,508,497              | 4,649,544             | 4,435,940         | 436,974              |
| September.....  | 16,010,116              | 49,505,246           | 42,190,862              | 6,017,035             | 5,447,974         | 520,801              |
| October.....    | 14,268,584              | 54,551,566           | 43,246,764              | 8,119,511             | 8,968,668         | 690,469              |
| November.....   | 10,130,137              | 48,122,269           | 39,502,193              | 8,514,250             | 16,892,764        | 640,320              |
| December.....   | 6,806,055               | 38,230,729           | 27,043,125              | 7,858,676             | 20,380,674        | 425,562              |

<sup>1</sup>Revised since the publication of the 1937 Year Book.

**19.—Stocks of Food Commodities on Hand in Cold Storages and Dairy Factories,  
by Months, 1936 and 1937—concluded.**

| Month.         | Veal.     | Pork.                 |                   |                      | Lard.     | Mutton<br>and Lamb. | Poultry.   |
|----------------|-----------|-----------------------|-------------------|----------------------|-----------|---------------------|------------|
|                |           | Fresh,<br>Not Frozen. | Fresh,<br>Frozen. | Cured or<br>in Cure. |           |                     |            |
|                | lb.       | lb.                   | lb.               | lb.                  | lb.       | lb.                 | lb.        |
| <b>1936.</b>   |           |                       |                   |                      |           |                     |            |
| January.....   | 2,860,230 | 2,771,191             | 12,390,313        | 15,173,721           | 3,437,438 | 5,578,415           | 12,055,251 |
| February.....  | 2,138,654 | 3,423,632             | 13,438,547        | 16,199,163           | 3,668,097 | 4,778,272           | 11,138,380 |
| March.....     | 1,633,598 | 3,421,409             | 14,921,732        | 17,323,753           | 2,770,156 | 3,621,293           | 9,983,832  |
| April.....     | 1,488,049 | 3,561,311             | 15,502,256        | 17,918,022           | 2,912,686 | 2,822,427           | 8,812,214  |
| May.....       | 1,934,575 | 4,101,961             | 16,837,436        | 16,923,903           | 3,470,503 | 1,960,734           | 6,783,107  |
| June.....      | 2,559,990 | 3,287,827             | 16,874,093        | 17,860,779           | 3,780,486 | 761,306             | 5,431,885  |
| July.....      | 3,196,106 | 3,888,526             | 15,374,014        | 17,767,675           | 3,227,607 | 678,309             | 4,628,886  |
| August.....    | 3,690,896 | 3,176,582             | 11,205,252        | 16,169,557           | 3,223,744 | 678,106             | 4,213,133  |
| September..... | 3,817,491 | 3,037,093             | 8,348,283         | 16,401,037           | 3,306,967 | 766,902             | 3,694,090  |
| October.....   | 4,602,709 | 4,103,055             | 7,678,621         | 16,393,488           | 2,203,033 | 1,707,082           | 3,997,416  |
| November.....  | 5,315,710 | 4,191,461             | 11,999,141        | 19,849,709           | 2,363,477 | 5,670,284           | 5,380,982  |
| December.....  | 5,051,778 | 5,034,390             | 20,040,936        | 18,024,049           | 2,202,841 | 7,420,841           | 8,883,048  |
| <b>1937.</b>   |           |                       |                   |                      |           |                     |            |
| January.....   | 4,505,211 | 3,734,090             | 26,744,239        | 19,125,988           | 2,332,425 | 7,106,840           | 16,829,115 |
| February.....  | 3,321,600 | 4,251,036             | 27,166,953        | 20,359,618           | 2,206,140 | 6,168,908           | 15,761,082 |
| March.....     | 2,361,453 | 4,345,048             | 29,110,785        | 21,712,355           | 2,420,634 | 5,510,653           | 13,939,429 |
| April.....     | 2,082,820 | 4,180,886             | 30,512,801        | 20,263,511           | 2,340,209 | 4,516,891           | 10,787,878 |
| May.....       | 2,105,446 | 4,733,554             | 32,492,523        | 20,719,074           | 2,954,256 | 3,252,156           | 8,145,899  |
| June.....      | 2,651,753 | 3,767,005             | 27,970,449        | 19,681,186           | 2,622,756 | 1,898,625           | 6,890,001  |
| July.....      | 2,802,092 | 3,913,491             | 22,065,125        | 19,187,419           | 2,732,533 | 958,808             | 5,939,415  |
| August.....    | 3,006,402 | 2,792,456             | 13,830,259        | 18,615,887           | 2,579,023 | 672,227             | 5,099,530  |
| September..... | 3,468,481 | 2,262,187             | 7,491,472         | 15,721,385           | 1,748,681 | 776,724             | 3,964,037  |
| October.....   | 4,424,131 | 3,076,467             | 4,124,684         | 14,871,203           | 1,241,203 | 1,629,814           | 3,355,145  |
| November.....  | 4,369,570 | 4,266,677             | 4,990,213         | 17,127,841           | 1,207,545 | 3,421,328           | 3,788,470  |
| December.....  | 4,162,734 | 5,974,861             | 9,712,301         | 16,960,933           | 1,661,393 | 5,046,619           | 6,140,316  |

**Section 5.—Bounties.\***

In cases where it is considered advisable for the Government to encourage the production of a particular commodity, bounties paid by the Government are recognized substitutes for protective duties. In the past they have been made use of by Canada to a considerable degree, but the only bounties which involved payments in the past few years were those on copper bars and rods, hemp, and bituminous coal mined in Canada and used in the manufacture of iron or steel. The Copper Bounty Act expired on June 30, 1931, and the Hemp Bounty Act expired on Dec. 31, 1932, and a statement of the bounties paid under these Acts was given on p. 662 of the 1934-35 Year Book. The bounty on bituminous coal was the outcome of a recommendation of the Royal Commission on Maritime Claims relating to the use of Canadian coal in the manufacture of iron and steel and the payments have been as follows:—

**Paid in the fiscal year—**

|                               |                            |                       |
|-------------------------------|----------------------------|-----------------------|
| 1930-31.....                  | 273,148 tons at 49½c.....  | \$ 135,200-23         |
| 1931-32.....                  | 126,356 tons at 49½c.....  | 62,540-18             |
| 1932-33.....                  | 118,783 tons at 49½c.....  | 58,797-54             |
| 1933-34.....                  | 213,841 tons at 49½c.....  | 105,851-25            |
| 1934-35.....                  | 336,849 tons at 49½c.....  | 166,740-02            |
| 1935-36.....                  | 390,168 tons at 49½c.....  | 193,133-12            |
| 1936-37.....                  | 564,695 tons at 49½c.....  | 279,523-06            |
| 1937-38 to Oct. 31, 1937..... | 243,601 tons at 49½c.....  | 120,582-50            |
| <b>Totals.....</b>            | <b>2,267,441 tons.....</b> | <b>\$1,122,383-80</b> |

\*Revised by L. T. Lett, Department of Trade and Commerce.

Bounties have been paid at various times in the past on iron and steel, on lead, on crude petroleum, on manila fibre, on zinc, and on linen yarns, but the bounties on iron and steel ceased in 1911, on lead in 1918, on zinc in 1921, on linen yarns in 1923 and on crude petroleum in 1927. The total amounts paid in bounties on these commodities between 1896 and the date of expiration were: iron and steel, and manufactures of (1896-1912), \$16,785,827 (Canada Year Book 1915, p. 460); lead (1899-1918), \$1,979,216 for 1,187,169,878 lb.; zinc, \$400,000; linen yarns, \$17,523; manila fibre (1903-13), \$367,962; crude petroleum (1905-27), \$3,457,173 on 233,135,217 gallons. (For quantities of crude petroleum and bounties paid in each year, see table on p. 635 of the 1927-28 Year Book.) Total payments for expired bounties between 1896 and 1932, including the \$611,763 paid on copper bars and rods and the \$26,847 for hemp, aggregated \$23,646,311, which, with the \$1,122,384 paid for coal, make a total of \$24,768,694 to Oct. 31, 1937. The Year Book of 1915, pp. 459-461, gave a description of the bounties that had been payable since 1883, as well as tables showing, for each commodity, the quantities on which bounties were annually paid and the amounts of such bounties for the years 1896 to 1915, inclusive. For details of the bounties on zinc, see p. 635 of the 1927-28 Year Book.

### Section 6.—Patents, Copyrights, and Trade Marks.\*

**Patents.**—Letters patent, which in England have been in the gift of the Crown from the time of the Statute of Monopolies and earlier, are a purely statutory grant in Canada and have always been so. The earliest Act was one of Lower Canada, passed in 1824, wherein provision was made for the granting of patent rights to inventors who were British subjects and inhabitants of the province. Upper Canada passed its Act in 1826, and Nova Scotia and New Brunswick passed theirs at later dates. In 1849, after the Union, a consolidating Act was passed applying to both Upper and Lower Canada, and the B.N.A. Act assigned the granting of patents exclusively to the Parliament of Canada. The Dominion Patent Act of 1869 repealed the provincial Acts and has formed the basis of all succeeding Acts.

Letters patent are now issued subject to the provisions of c. 150, R.S.C., 1927 (as amended by c. 4, 1928, c. 34, 1930, c. 21, 1932, and c. 32, 1935), and application for protection relating to the same should be addressed to the Commissioner of Patents, Ottawa, Canada.

Invention means any new and useful art, process, machine, manufacture or composition of matter or any new and useful improvement in any art, process, machine, manufacture or composition of matter.

The growth of Canadian inventions is shown by the fact that the number of applications and total fees increased each year without a break from the beginning of the present century until the fiscal year ended Mar. 31, 1913, when 8,681 applications were received and the total fees amounted to \$218,125. In the fiscal year ended Mar. 31, 1937, there were 10,668 applications, with fees amounting to \$377,453, as shown in Table 21. Of the patents for 1937, 5,709 or 70 p.c. were issued to United States inventors, 703 to Canadians and 697 to residents of Great Britain and Ireland, while Germany with 443, France with 135, Sweden with 89, and Holland with 74 followed in the number of inventors to whom patents were issued. Applications for patents were distributed over the whole field of invention, but there was a notable increase in those related to the field of organic chemistry, especially in connection with artificial resins, dyes, chemicals for treating textiles, etc.

\*Revised by J. T. Mitchell, Commissioner of Patents, Ottawa.



20.—Numbers of Canadian Patentees, by Provinces of Residence, for the fiscal years ended Mar. 31, 1926-37.

| Province.              | 1926. | 1927. | 1928. | 1929. | 1930. | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. | 1937. |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Prince Edward Island.. | 2     | 5     | 3     | 1     | 3     | 3     | 2     | Nil   | 1     | 2     | 3     | 2     |
| Nova Scotia.....       | 30    | 10    | 24    | 16    | 17    | 14    | 18    | 14    | 16    | 9     | 17    | 2     |
| New Brunswick.....     | 34    | 21    | 12    | 17    | 16    | 18    | 6     | 14    | 8     | 7     | 5     | 12    |
| Quebec.....            | 272   | 320   | 298   | 293   | 282   | 265   | 272   | 257   | 236   | 227   | 207   | 201   |
| Ontario.....           | 561   | 499   | 537   | 538   | 500   | 491   | 504   | 462   | 475   | 429   | 365   | 316   |
| Manitoba.....          | 68    | 89    | 71    | 61    | 72    | 74    | 47    | 71    | 42    | 34    | 49    | 53    |
| Saskatchewan.....      | 90    | 68    | 100   | 93    | 81    | 66    | 55    | 37    | 52    | 45    | 30    | 28    |
| Alberta.....           | 95    | 82    | 88    | 98    | 71    | 70    | 63    | 55    | 48    | 43    | 52    | 32    |
| British Columbia.....  | 150   | 129   | 152   | 148   | 120   | 101   | 117   | 113   | 104   | 89    | 65    | 56    |
| Yukon and N.W.T.....   | Nil   | Nil   | Nil   | Nil   | 1     | 1     | Nil   | Nil   | Nil   | Nil   | Nil   | 1     |
| Canada.....            | 1,292 | 1,232 | 1,285 | 1,265 | 1,169 | 1,109 | 1,084 | 1,063 | 982   | 885   | 792   | 703   |

21.—Statistics of Patents Applied for, Granted, etc., fiscal years ended Mar. 31, 1932-37.

| Item.                              |  | 1932.   | 1933.   | 1934.   | 1935.   | 1936.   | 1937.   |
|------------------------------------|--|---------|---------|---------|---------|---------|---------|
| Applications for patents.....No.   |  | 11,940  | 10,145  | 9,267   | 9,404   | 12,580  | 10,668  |
| Patents granted.....               |  | 11,124  | 10,241  | 9,124   | 8,713   | 7,791   | 8,177   |
| Certificates for renewal fees..... |  | 40      | 11      | 10      | 12      | 2       | Nil     |
| Caveats granted.....               |  | 383     | 470     | 466     | 445     | 394     | 423     |
| Assignments.....                   |  | 9,001   | 7,354   | 6,577   | 6,840   | 8,145   | 7,723   |
| Fees received, net.....\$          |  | 444,110 | 398,067 | 362,145 | 353,460 | 380,542 | 377,453 |

Copyrights and Trade Marks.—Registration of copyright is governed by c. 32, R.S.C., 1927, and applications for protection relating to same should be addressed to the Commissioner of Patents, Ottawa, Canada.

The Copyright Act of 1921 (amended in 1923 and consolidated in c. 32, R.S.C., 1927) sets out in Sec. 4 the qualifications for a copyright, and in Sec. 5 its duration: "Copyrights shall subsist in Canada . . . in every original literary, dramatic, musical and artistic work, if the author was, at the date of the making of the work, a British subject, a citizen or subject of a foreign country which has adhered to the (Berne) Convention and the additional Protocol . . . or resident within His Majesty's Dominions. The term for which the copyright shall subsist shall, except as otherwise expressly provided by this Act, be the life of the author and a period of fifty years after his death".

Copyright protection is extended to records, perforated rolls, cinematographic films and other contrivances by means of which a work may be mechanically performed. The intention of the Act is to enable Canadian authors to obtain full copyright protection throughout all parts of His Majesty's Dominions, foreign countries of the Copyright Union, and the United States of America, as well as in Canada.

The Trade Mark and Design Act (c. 201, R.S.C., 1927) was amended by c. 10 of the Statutes of 1928 bringing the Act into agreement with the terms of the Convention for the Protection of Industrial Property, as amended at The Hague in 1925 with regard to refusal to register certain trade marks. The renewal of expired trade mark registration was also provided for, while it was also enacted that in certain cases interested parties might apply to the Exchequer Court of Canada for the cancellation of a trade mark at any time within three years from its registration. The Unfair Competition Act, 1932 (22-23 Geo. V, c. 38), repealed all parts of the above Act relating to trade marks and all trade marks are now registered under and protected by the new Act.

## 22.—Statistics of Copyrights, Trade Marks, etc., fiscal years ended Mar. 31, 1932-37.

| Item.                               | 1932.  | 1933.   | 1934.  | 1935.  | 1936.  | 1937.  |
|-------------------------------------|--------|---------|--------|--------|--------|--------|
| Copyrights registered.....No.       | 2,812  | 2,684   | 2,537  | 3,060  | 3,403  | 3,249  |
| Trade marks registered....."        | 2,186  | 2,950   | 2,066  | 1,686  | 1,574  | 2,068  |
| Industrial designs registered....." | 371    | 409     | 321    | 430    | 363    | 336    |
| Timber marks registered....."       | 6      | 4       | 6      | 4      | 3      | 10     |
| Assignments registered....."        | 1,661  | 1,416   | 1,133  | 1,090  | 1,394  | 2,093  |
| Fees received, net.....\$           | 81,138 | 140,274 | 67,196 | 72,217 | 68,220 | 86,396 |

**Financial Statistics.**—The following table gives the receipts, expenditures, and surplus on account of patents, copyrights, and trade marks for the fiscal years 1930-37.

## 23.—Receipts, Expenditures, and Surplus on Account of Patents, Copyrights, and Trade Marks, fiscal years ended Mar. 31, 1930-37.

NOTE.—For figures from 1921 to 1929, see the 1933 Year Book, p. 624.

| Fiscal Year. | Receipts. | Expenditures.     |                |                |         | Surplus. |
|--------------|-----------|-------------------|----------------|----------------|---------|----------|
|              |           | Civil Government. | Patent Record. | Contingencies. | Total.  |          |
|              | \$        | \$                | \$             | \$             | \$      | \$       |
| 1930.....    | 574,918   | 169,339           | 34,946         | 31,622         | 235,907 | 339,011  |
| 1931.....    | 559,616   | 174,458           | 35,000         | 32,000         | 241,458 | 318,158  |
| 1932.....    | 525,248   | 173,370           | 35,000         | 37,803         | 246,203 | 279,045  |
| 1933.....    | 539,341   | 155,465           | 25,000         | 24,829         | 205,293 | 334,047  |
| 1934.....    | 429,342   | 152,624           | 32,860         | 22,649         | 208,133 | 221,209  |
| 1935.....    | 425,677   | 145,859           | 20,259         | 25,630         | 195,748 | 229,929  |
| 1936.....    | 454,762   | 151,629           | 24,468         | 50,538         | 226,635 | 228,127  |
| 1937.....    | 463,850   | 153,607           | 28,697         | 45,725         | 230,029 | 233,821  |

## Section 7.—Weights and Measures.\*

The object of weights and measures administration is to maintain uniformity and accuracy in the use of the legal standards of the country in industry and commerce.

Prior to Confederation, the administration of weights and measures was in the hands of each Provincial Government but passed to the Dominion Government in 1867, under Sec. 91 of the British North America Act. Steps were then taken to simplify the standards in use and to establish uniformity throughout the Dominion.

What might be termed the principal Weights and Measures Act of Canada was passed in the session of 1872-73; its provisions closely followed English weights and measures law, but the system of weights and measures was greatly simplified. This Act established as the primary legal standards for Canada the imperial pound, gallon, and yard, but in place of the system of stones, quarters, hundredweights (112 lb.), and the long ton (2,240 lb.) it provided a decimal series of weights, 1, 2, 3, 5, 10, 20, 30, 50, 100 lb., and the short ton of 2,000 lb. The only exception to this was the continued use of the old French land measure, the arpent, in Quebec. The troy ounce of 480 grains and its decimal sub-multiples are the legal weights for the weighing of gold and precious metals. The metric system is legal for all transactions.

Many changes, deletions and additions have been made to the Act of 1873 by later legislation, but its principles remain unchanged. The latest legislation is the Weights and Measures Act (c. 212, R.S.C., 1927), as amended by c. 48, 1935.

The Weights and Measures Service was first administered by the Department of Inland Revenue, and offices were opened in all the principal centres of Canada

\*Revised by E. O. Way, Director of Weights and Measures, Department of Trade and Commerce.

and equipped with standards and inspection equipment. In 1918 the Service was transferred to the Department of Trade and Commerce. For purposes of administration, the Dominion is divided into 19 districts, each in charge of a district inspector. The chief rules of administration are as follows:—

- (a) Every new type of weighing and measuring device must be submitted to the Department at Ottawa for approval before being placed on the market.
- (b) Every new machine must be inspected and stamped by an inspector before being sold or taken into use.
- (c) Imported machines are held by the customs until release is approved by the nearest inspector.
- (d) All inspections take place on the traders' premises, except where devices are brought to the inspection offices.
- (e) Fees are charged for inspection and stamping, the schedule being defined by Order in Council, and all moneys so collected are paid into the Consolidated Revenue Fund of Canada.

The following table is a summary of the articles and machines inspected in the fiscal years ended Mar. 31, 1936 and 1937. The total revenues collected by the Service in the fiscal years ended 1936 and 1937 amounted to \$404,860 and \$399,626, respectively, while the expenses, including salaries, totalled \$327,229 and \$345,199, respectively.

24.—Inspections by the Weights and Measures Service, fiscal years ended Mar. 31, 1936 and 1937.

| Article.                   | 1936.           |                |                |  | 1937.           |                |                |  |
|----------------------------|-----------------|----------------|----------------|--|-----------------|----------------|----------------|--|
|                            | Sub-<br>mitted. | Veri-<br>fied. | Re-<br>jected. | Per-<br>centage<br>of Rejec-<br>tions. | Sub-<br>mitted. | Veri-<br>fied. | Re-<br>jected. | Per-<br>centage<br>of Rejec-<br>tions. |
|                            | No.             | No.            | No.            | p.c.                                   | No.             | No.            | No.            | p.c.                                   |
| Weights (Dominion).....    | 102,905         | 95,495         | 7,410          | 7.20                                   | 102,756         | 98,898         | 3,858          | 3.75                                   |
| Weights (metric).....      | 1,187           | 1,165          | 22             | 1.85                                   | 1,202           | 1,169          | 33             | 2.75                                   |
| Measures of capacity.....  | 59,429          | 59,044         | 385            | 0.65                                   | 54,046          | 53,655         | 391            | 0.72                                   |
| Measures of length.....    | 10,351          | 10,326         | 25             | 0.24                                   | 7,676           | 7,653          | 23             | 0.23                                   |
| Milk-cans.....             | 56,851          | 56,807         | 44             | 0.08                                   | 70,757          | 70,577         | 180            | 0.25                                   |
| Ice-cream containers.....  | 43,279          | 42,279         | Nil            | Nil                                    | 47,594          | 47,594         | Nil            | Nil                                    |
| Measuring devices.....     | 56,376          | 42,739         | 7,457          | 14.84                                  | 49,339          | 41,629         | 7,710          | 15.61                                  |
| Tank wagons.....           | 681             | 650            | 31             | 4.55                                   | 669             | 656            | 13             | 1.94                                   |
| Babcock glassware.....     | 40,703          | 40,580         | 123            | 0.30                                   | 40,732          | 40,568         | 164            | 0.40                                   |
| Weighing machines.....     | 183,301         | 159,297        | 24,004         | 13.10                                  | 183,439         | 158,866        | 24,573         | 13.40                                  |
| Weighing machines (metric) | 767             | 729            | 38             | 4.95                                   | 773             | 748            | 25             | 3.23                                   |
| Domestic scales.....       | 14,413          | 14,179         | 234            | 1.62                                   | 14,811          | 14,616         | 196            | 1.32                                   |
| Miscellaneous.....         | 16,918          | 16,885         | 28             | 0.16                                   | 12,140          | 12,105         | 35             | 0.29                                   |
| <b>Totals.....</b>         | <b>589,956</b>  | <b>540,225</b> | <b>39,831</b>  | <b>6.86</b>                            | <b>585,934</b>  | <b>548,738</b> | <b>37,196</b>  | <b>6.35</b>                            |

### Section 8.—Electricity and Gas Inspection.\*

The Electricity and Gas Inspection Branch of the Department of Trade and Commerce administers three Acts: the Electricity Inspection Act (c. 22, 1928), the Gas Inspection Act (c. 82, R.S.C., 1927), and the Electricity and Fluid Exportation Act (c. 54, R.S.C., 1927).

The latest report of the Branch shows 518,415 electricity and gas meters tested in the fiscal year ended Mar. 31, 1937, as compared with 481,687 in the preceding year. The total revenue derived from electricity and gas inspection was \$349,365 as compared with an expenditure of \$326,439. The Branch also collected \$390,840 as export duty and licence fees under the provisions of the Electricity and Fluid Exportation Act; the cost of collecting this revenue was only \$376.

Other related statistics collected in the administration of the last-named Act will be found on p. 392, in the Water Power chapter of the Year Book. Here, how-

\*Revised by J. L. Stiver, Director, Electricity and Gas Inspection Service, Department of Trade and Commerce.

ever, are given statistics, also collected by the Branch in the process of administration, showing a phenomenal increase in the number of consumers of electricity in the past 23 years from 505,597 to 1,839,420 (Table 25); a lesser increase in the gas meters in use from 267,454 in 1916 to 676,245 in 1937 (Table 26); and the number of cubic feet of gas sold in Canada from 1920 to 1937 classified as carburetted water gas, coal gas, coke oven gas, natural gas, acetylene gas, and butane (Table 27).

### 25.—Numbers of Electricity Meters in Use, fiscal years ended Mar. 31, 1915-37.

| Fiscal Year. | Number. | Fiscal Year. | Number.   | Fiscal Year. | Number.   |
|--------------|---------|--------------|-----------|--------------|-----------|
| 1915.....    | 505,597 | 1923.....    | 1,046,881 | 1931.....    | 1,653,922 |
| 1916.....    | 517,629 | 1924.....    | 1,094,680 | 1932.....    | 1,704,197 |
| 1917.....    | 504,737 | 1925.....    | 1,105,604 | 1933.....    | 1,732,607 |
| 1918.....    | 661,403 | 1926.....    | 1,240,752 | 1934.....    | 1,720,907 |
| 1919.....    | 717,770 | 1927.....    | 1,314,458 | 1935.....    | 1,760,262 |
| 1920.....    | 745,465 | 1928.....    | 1,412,521 | 1936.....    | 1,788,822 |
| 1921.....    | 860,370 | 1929.....    | 1,460,872 | 1937.....    | 1,839,420 |
| 1922.....    | 945,599 | 1930.....    | 1,582,505 |              |           |

### 26.—Numbers of Gas Meters in Use, by Kinds of Gas Consumed, fiscal years ended Mar. 31, 1916-37.

| Fiscal Year. | Manu-<br>factured<br>Gas. | Natural<br>Gas. | Acety-<br>lene<br>Gas. | Butane. | Total.  | Fiscal Year. | Manu-<br>factured<br>Gas. | Natural<br>Gas. | Acety-<br>lene<br>Gas. | Butane. | Total.  |
|--------------|---------------------------|-----------------|------------------------|---------|---------|--------------|---------------------------|-----------------|------------------------|---------|---------|
| 1916.....    | 199,514                   | 67,940          | -                      | -       | 267,454 | 1927...      | 462,496                   | 90,302          | 358                    | -       | 553,156 |
| 1917.....    | 314,915                   | 55,697          | -                      | -       | 370,612 | 1928...      | 482,076                   | 98,915          | 367                    | -       | 581,348 |
| 1918.....    | 325,244                   | 88,795          | -                      | -       | 414,039 | 1929...      | 504,500                   | 107,404         | 116                    | -       | 612,120 |
| 1919.....    | 336,388                   | 91,050          | -                      | -       | 427,444 | 1930...      | 520,788                   | 118,390         | 117                    | -       | 639,295 |
| 1920.....    | 350,777                   | 85,004          | 513                    | -       | 436,294 | 1931...      | 530,909                   | 125,550         | 67                     | 205     | 656,731 |
| 1921.....    | 361,479                   | 85,494          | 577                    | -       | 447,550 | 1932...      | 540,277                   | 128,191         | 69                     | 230     | 668,767 |
| 1922.....    | 366,840                   | 101,782         | 420                    | -       | 469,042 | 1933...      | 532,139                   | 128,883         | 80                     | 285     | 661,786 |
| 1923.....    | 379,459                   | 102,007         | 438                    | -       | 481,904 | 1934...      | 522,484                   | 134,710         | 49                     | 899     | 657,612 |
| 1924.....    | 390,548                   | 105,804         | 425                    | -       | 496,777 | 1935...      | 517,948                   | 130,763         | 14                     | 638     | 648,349 |
| 1925.....    | 405,471                   | 106,861         | 404                    | -       | 512,736 | 1936...      | 505,946                   | 158,827         | 14                     | 1,108   | 665,895 |
| 1926.....    | 443,097                   | 85,752          | 425                    | -       | 529,274 | 1937...      | 506,075                   | 169,132         | 3                      | 1,035   | 676,245 |

<sup>1</sup> First time reported.

### 27.—Quantity of Each Kind of Gas Sold in Canada, fiscal years ended Mar. 31, 1920-37.

| Fiscal Year. | Carburetted<br>Water Gas. | Coal<br>Gas. | Coke Oven<br>Gas. | Natural<br>Gas. | Acetylene<br>Gas. | Butane.            | Total.     |
|--------------|---------------------------|--------------|-------------------|-----------------|-------------------|--------------------|------------|
|              | M cu. ft.                 | M cu. ft.    | M cu. ft.         | M cu. ft.       | M cu. ft.         | M cu. ft.          | M cu. ft.  |
| 1920.....    | 4,487,512                 | 6,787,370    | -                 | 17,117,100      | 1,670             | -                  | 28,393,652 |
| 1921.....    | 5,331,442                 | 7,006,222    | -                 | -               | 1                 | -                  | 23,440,983 |
| 1922.....    | 4,608,392                 | 8,453,861    | -                 | 11,289,592      | 1,005             | -                  | 24,392,550 |
| 1923.....    | 6,635,962                 | 7,687,114    | 132 <sup>2</sup>  | 12,238,837      | 1,168             | -                  | 26,510,736 |
| 1924.....    | 5,214,943                 | 8,042,882    | 3,189             | 14,806,019      | 1,194             | -                  | 28,128,727 |
| 1925.....    | 5,254,803                 | 7,824,193    | 91,628            | 10,525,604      | 1,266             | -                  | 23,697,494 |
| 1926.....    | 4,535,613                 | 8,149,894    | 1,449,795         | 13,004,470      | 1,211             | -                  | 27,140,983 |
| 1927.....    | 5,804,504                 | 8,405,556    | 1,049,978         | 17,863,366      | 1,247             | -                  | 33,124,651 |
| 1928.....    | 6,888,635                 | 7,488,965    | 1,680,237         | 20,365,049      | 1,325             | -                  | 36,419,211 |
| 1929.....    | 4,550,829                 | 6,273,275    | 6,097,920         | 25,491,446      | 647               | -                  | 42,414,117 |
| 1930.....    | 4,456,997                 | 5,802,653    | 8,153,473         | 31,880,845      | 847               | -                  | 50,294,815 |
| 1931.....    | 4,214,554                 | 6,249,190    | 7,792,047         | 28,534,604      | 875               | 9,137 <sup>2</sup> | 46,800,407 |
| 1932.....    | 4,267,074                 | 6,385,622    | 7,235,463         | 27,244,303      | 790               | 6,060              | 45,140,352 |
| 1933.....    | 3,821,080                 | 7,401,005    | 5,908,231         | 27,342,096      | 4,982             | 11,930             | 44,580,524 |
| 1934.....    | 3,349,893                 | 7,652,344    | 5,331,047         | 26,423,633      | 4,737             | 13,268             | 42,774,922 |
| 1935.....    | 2,256,568                 | 8,378,714    | 6,267,577         | 25,051,664      | 5,729             | 12,576             | 41,972,828 |
| 1936.....    | 1,972,511                 | 7,870,353    | 6,637,103         | 29,334,639      | 6,774             | 16,976             | 45,844,356 |
| 1937.....    | 1,909,493                 | 6,994,858    | 7,685,207         | 30,291,438      | 8,060             | 19,781             | 46,508,843 |

<sup>1</sup> None reported.

<sup>2</sup> First time reported.

### Section 9.—Merchandising and Service Establishments.\*

A comprehensive census of business carried on by trading and service establishments was undertaken for the first time in 1931 in connection with the Seventh Decennial Census. A partial survey of trading establishments had been made in 1924, but the results of this initial survey, while indicative of the extent of domestic trade, suffered from the incompleteness of the canvass made. The Census of Merchandising and Service Establishments, 1931, covered not only the operations of retail and wholesale merchandising establishments in 1930 but also those of service establishments, including hotels. In addition, information was collected to show the initial channels (manufacturers' wholesale branches, other wholesalers, retailers, industrial consumers, export sales, etc.) through which goods manufactured in Canada are distributed and the proportion of the total value of production sold through each channel. The results of the census have been published in several series of reports and in Volumes X and XI of the Census of 1931.

**Annual Statistics.**—An outgrowth of the Census of Merchandising and Service Establishments, 1931, has been an annual survey of wholesale and retail trade based on reports from larger concerns in the respective fields. In the case of wholesale trade, the annual survey is confined to wholesalers proper and reports are secured from firms which had a volume of sales of \$100,000 or more in 1930 together with firms of a similar size which have commenced business since 1930. The survey of retail trade is based on the reports of all chain stores and of independent stores with a turnover of \$20,000 or more in 1930. Reports are also secured from newly-established independent stores. While the annual figures for merchandising are not based on such a comprehensive survey as that made in connection with the decennial census, they provide the most reliable indicators available of recent trends in merchandise trade as they cover more than two-thirds of the dollar volume of business.

**Monthly Statistics.**—Monthly indexes of retail sales, based on returns from department stores, chain stores, and a representative sample of independent firms, are now available for the period commencing January, 1929. A description of these indexes appears in Subsection 2 of this chapter. Monthly indexes of wholesale trade are also available, although for the shorter period beginning January, 1935. This series is shown in Table 30, Subsection 1, below.

#### Subsection 1.—Wholesale and Other Bulk or Non-Retail Merchandising.

Under this heading there appeared at pp. 670-672 of the 1934-35 Year Book a summary of trade in the wholesale field, as derived from the Census of Merchandising and Service Establishments, and tables showing, for 1930, bulk merchandising statistics (1) by provinces, and (2) by type of distributor. The interested reader is referred to that material which is the latest available. Supplementary data for the chief cities in Canada are given below.

**Wholesale Trade in Canadian Cities.**—Summary figures for all wholesale establishments and for wholesalers proper in cities of over 20,000 population are shown for 1930 in Table 28. Included in the figures for all wholesale establishments are data for agents, brokers, manufacturers' sales branches, and other specialized wholesale agencies. Wholesalers proper embrace only regular wholesale houses, such as wholesale merchants, importers, and exporters. The importance of such cities as Montreal, Toronto, Winnipeg, and Vancouver as wholesale centres is clearly shown by the figures in Table 28.

\* Prepared by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics. For a list of publications of this Branch, see Chapter XXIX, Section 1, under "Internal Trade".

**28.—Bulk Merchandising (Wholesale and Other Non-Retail) in Cities of 20,000 Population or Over, 1936.**

| City and Province.         | Population, 1931. | All Establishments. |            |                     |                   |  | Wholesalers Proper. |                   |
|----------------------------|-------------------|---------------------|------------|---------------------|-------------------|--|---------------------|-------------------|
|                            |                   | Establishments.     | Employees. | Salaries and Wages. | Net Sales (1936). | Stocks on Hand, End of Year (at Cost). | Establishments.     | Net Sales (1936). |
|                            | No.               | No.                 | No.        | \$                  | \$                | \$                                     | No.                 | \$                |
| Montreal, Que.....         | 818,577           | 1,888               | 21,400     | 35,649,800          | 766,332,800       | 68,043,000                             | 1,035               | 287,176,800       |
| Toronto, Ont.....          | 631,207           | 1,835               | 19,891     | 33,743,000          | 691,738,400       | 60,106,000                             | 971                 | 227,375,400       |
| Vancouver, B.C....         | 246,593           | 761                 | 5,712      | 9,757,200           | 211,111,800       | 23,059,900                             | 341                 | 78,382,100        |
| Winnipeg, Man.....         | 218,785           | 768                 | 8,379      | 14,215,600          | 635,722,200       | 25,522,100                             | 314                 | 72,862,800        |
| Hamilton, Ont.....         | 155,547           | 191                 | 1,778      | 2,904,800           | 47,755,800        | 5,578,800                              | 119                 | 21,314,200        |
| Quebec, Que.....           | 130,594           | 249                 | 2,416      | 3,167,800           | 75,180,800        | 6,981,000                              | 144                 | 33,497,800        |
| Ottawa, Ont.....           | 126,872           | 199                 | 1,660      | 2,447,600           | 41,592,300        | 5,587,600                              | 114                 | 26,254,000        |
| Calgary, Alta.....         | 83,761            | 261                 | 2,818      | 4,916,100           | 92,127,900        | 11,715,600                             | 114                 | 30,499,000        |
| Edmonton, Alta.....        | 79,197            | 200                 | 1,852      | 3,115,700           | 68,940,100        | 5,193,500                              | 82                  | 24,701,200        |
| London, Ont.....           | 71,148            | 147                 | 1,269      | 2,145,000           | 32,069,000        | 3,805,000                              | 83                  | 15,503,400        |
| Windsor, Ont.....          | 63,108            | 92                  | 725        | 1,155,400           | 19,141,800        | 1,815,700                              | 56                  | 9,819,700         |
| Verdun, Que.....           | 60,745            | 6                   | 15         | 22,400              | 502,700           | 28,900                                 | 6                   | 692,700           |
| Halifax, N.S.....          | 59,275            | 163                 | 1,462      | 2,181,600           | 42,676,900        | 3,998,200                              | 84                  | 20,439,600        |
| Regina, Sask.....          | 53,209            | 148                 | 1,991      | 3,260,700           | 46,577,500        | 9,713,200                              | 60                  | 17,637,300        |
| Saint John, N.B.....       | 47,514            | 151                 | 1,964      | 2,889,500           | 49,538,200        | 4,974,800                              | 53                  | 17,995,700        |
| Saskatoon, Sask.....       | 43,291            | 115                 | 1,426      | 2,283,500           | 39,312,400        | 6,323,200                              | 51                  | 17,316,000        |
| Victoria, B.C.....         | 39,082            | 65                  | 487        | 725,700             | 13,704,400        | 1,839,400                              | 36                  | 8,114,300         |
| Three Rivers, Que..        | 35,460            | 30                  | 165        | 215,300             | 5,083,600         | 866,700                                | 16                  | 2,700,700         |
| Kitchener, Ont.....        | 30,798            | 51                  | 245        | 395,500             | 7,391,400         | 624,800                                | 32                  | 3,428,400         |
| Brantford, Ont.....        | 30,107            | 36                  | 300        | 417,200             | 7,184,400         | 579,200                                | 22                  | 3,583,100         |
| Hull, Que.....             | 29,433            | 11                  | 53         | 75,200              | 1,138,500         | 89,200                                 | 6                   | 310,300           |
| Sherbrooke, Que.....       | 28,933            | 41                  | 355        | 540,500             | 9,452,200         | 1,145,100                              | 20                  | 7,146,000         |
| Outremont, Que.....        | 28,611            | 9                   | 167        | 292,000             | 4,572,300         | 514,700                                | 5                   | 1,127,500         |
| Fort William, Ont..        | 26,277            | 41                  | 433        | 650,400             | 15,627,100        | 2,760,100                              | 27                  | 7,867,900         |
| St. Catharines, Ont.       | 24,753            | 25                  | 110        | 158,700             | 2,641,200         | 237,500                                | 12                  | 1,378,300         |
| Westmount, Que.....        | 24,235            | 7                   | 173        | 303,400             | 2,059,200         | 426,100                                | 5                   | 1,208,000         |
| Kingston, Ont.....         | 23,439            | 39                  | 280        | 407,400             | 7,351,100         | 1,400,700                              | 26                  | 4,532,100         |
| Oshawa, Ont.....           | 23,439            | 19                  | 256        | 1,039,500           | 16,689,600        | 226,800                                | 8                   | 1,021,800         |
| Sydney, N.S.....           | 23,089            | 31                  | 165        | 247,500             | 6,857,000         | 600,900                                | 20                  | 5,316,200         |
| Sault Ste. Marie, Ont..... | 23,082            | 20                  | 139        | 195,300             | 4,997,100         | 501,600                                | 14                  | 3,443,000         |
| Peterborough, Ont..        | 22,327            | 25                  | 136        | 188,100             | 3,374,100         | 291,200                                | 13                  | 2,031,400         |
| Moose Jaw, Sask.....       | 21,299            | 37                  | 320        | 497,700             | 9,950,700         | 1,048,400                              | 19                  | 5,969,900         |
| Guelp, Ont.....            | 21,075            | 21                  | 138        | 196,300             | 3,430,600         | 501,300                                | 16                  | 2,880,800         |
| Glace Bay, N.S.....        | 20,706            | 6                   | 18         | 18,000              | 478,700           | 73,200                                 | 4                   | 385,800           |
| Moncton, N.B.....          | 20,689            | 36                  | 287        | 342,000             | 6,195,800         | 911,300                                | 16                  | 3,254,200         |

**Annual Wholesale Statistics.**—In constructing an annual index of wholesale sales, the chief objective has been to obtain the most representative measure of wholesale trade and particularly of the pre-retail business. This annual index is confined to wholesalers proper. Wholesalers proper are mainly wholesale merchants, importers, exporters, and supply and machinery distributors. From this group are excluded such distributors as agents and brokers, manufacturers' sales branches and other types of specialized distributors. However, in order to attain the above-mentioned objective of a representative measure of wholesale trade, it was later found to be necessary to make certain alterations in the classifications used in presenting the results of the Census of Merchandising and Service Establishments, 1931. These alterations were referred to at p. 612 of the 1937 Year Book.

Total sales and indexes are shown in Table 29, by provinces and kinds of business; the 1930 figures are those of the census, while those for 1931-35 are estimates based on the results of the annual surveys. Wholesale trade in Canada during 1936 totalled \$1,181,543,000 compared with \$1,370,066,000 in 1930. While sales were still 13.8 p.c. below the 1930 level, the improvement which commenced during 1933 was continued, an increase of 9.3 p.c. over the amount of trade recorded for 1935 bringing the index for 1936 more than 5 p.c. above that for 1931. The largest increases in sales in 1936 were reported by firms dealing in industrial or building

equipment and supplies which had suffered the most severe losses in trade between 1930 and 1933. To what extent movements in the value of wholesale sales are due to changes in prices or to variations in the physical volume of goods handled cannot be determined accurately.

**29.—Total Sales and Indexes of Sales made by Wholesalers Proper, by Provinces and Kinds of Business, 1930, 1933, 1935, and 1936.**

| Province or Kind of Business.                    | Total Net Sales. |                |                  |                  | Indexes of Sales.<br>(1930=100.) |             |             |             |             |             | Per Cent Change, 1933-36. |
|--|------------------|----------------|------------------|------------------|----------------------------------|-------------|-------------|-------------|-------------|-------------|---------------------------|
|  | 1930.            | 1933.          | 1935.            | 1936.            | 1930.                            | 1931.       | 1932.       | 1933.       | 1935.       | 1936.       |                           |
|  | \$'000           | \$'000         | \$'000           | \$'000           |                                  |             |             |             |             |             |                           |
| Prince Edward Island...                          | 7,518            | 4,662          | 5,309            | 6,297            | 100-0                            | 83-5        | 57-2        | 62-0        | 70-6        | 83-8        | +18-6                     |
| Nova Scotia.....                                 | 46,464           | 32,812         | 39,031           | 42,385           | 100-0                            | 85-6        | 73-5        | 70-6        | 84-0        | 91-2        | + 8-6                     |
| New Brunswick.....                               | 38,320           | 25,192         | 20,761           | 32,530           | 100-0                            | 85-9        | 68-9        | 65-7        | 77-7        | 84-9        | + 9-3                     |
| Quebec.....                                      | 386,220          | 254,696        | 209,090          | 327,034          | 100-0                            | 83-7        | 69-4        | 65-9        | 77-7        | 84-7        | + 9-0                     |
| Ontario.....                                     | 471,618          | 324,828        | 392,730          | 431,477          | 100-0                            | 84-4        | 70-9        | 68-9        | 83-3        | 91-5        | + 9-9                     |
| Manitoba.....                                    | 98,960           | 64,461         | 80,099           | 87,473           | 100-0                            | 77-7        | 68-5        | 65-1        | 80-9        | 88-3        | + 9-2                     |
| Saskatchewan.....                                | 90,210           | 48,855         | 59,206           | 64,025           | 100-0                            | 66-2        | 59-5        | 53-8        | 65-6        | 70-9        | + 8-1                     |
| Alberta.....                                     | 99,333           | 61,872         | 72,436           | 78,790           | 100-0                            | 74-6        | 67-2        | 62-3        | 72-9        | 79-3        | + 8-8                     |
| British Columbia.....                            | 131,414          | 83,418         | 102,171          | 111,532          | 100-0                            | 81-9        | 64-8        | 63-5        | 77-7        | 84-6        | + 9-2                     |
| <b>Totals.....</b>                               | <b>1,370,060</b> | <b>900,496</b> | <b>1,089,712</b> | <b>1,181,543</b> | <b>100-0</b>                     | <b>81-6</b> | <b>68-7</b> | <b>65-7</b> | <b>78-9</b> | <b>86-2</b> | <b>+ 9-3</b>              |
| Amusement, photographic and sporting goods.....  | 4,278            | 2,464          | 2,933            | 3,354            | 100-0                            | 82-9        | 67-7        | 57-6        | 68-6        | 78-4        | +14-4                     |
| Automotive.....                                  | 20,990           | 13,473         | 16,913           | 18,875           | 100-0                            | 84-3        | 65-3        | 64-2        | 80-6        | 89-9        | +11-6                     |
| Chemicals and paints.....                        | 8,387            | 7,743          | 9,852            | 10,702           | 100-0                            | 84-1        | 74-7        | 92-3        | 117-5       | 127-6       | + 8-6                     |
| Drugs and drug sundries.....                     | 27,973           | 22,139         | 24,814           | 26,644           | 100-0                            | 96-3        | 85-2        | 79-1        | 88-7        | 95-2        | + 7-4                     |
| Coal and coke.....                               | 50,252           | 42,881         | 52,227           | 55,748           | 100-0                            | 87-9        | 83-9        | 85-3        | 103-9       | 110-9       | + 6-7                     |
| Dry goods and apparel.....                       | 102,355          | 64,396         | 75,450           | 79,122           | 100-0                            | 79-0        | 65-3        | 62-9        | 73-7        | 77-3        | + 4-9                     |
| Electrical.....                                  | 22,982           | 9,973          | 14,940           | 19,170           | 100-0                            | 78-4        | 52-2        | 43-4        | 65-0        | 83-4        | +28-3                     |
| Farm supplies.....                               | 16,037           | 8,719          | 11,153           | 10,453           | 100-0                            | 87-2        | 84-8        | 54-4        | 69-5        | 65-4        | + 6-0                     |
| Foodstuffs.....                                  | 540,820          | 377,070        | 444,520          | 482,819          | 100-0                            | 83-4        | 70-6        | 69-8        | 82-8        | 89-3        | + 8-6                     |
| Groceries.....                                   | 293,838          | 184,436        | 203,245          | 217,713          | 100-0                            | 87-7        | 79-4        | 62-4        | 80-8        | 87-3        | + 7-1                     |
| Dairy and poultry products.....                  | 48,771           | 32,185         | 36,273           | 40,866           | 100-0                            | 81-4        | 69-4        | 66-0        | 74-4        | 83-8        | +12-6                     |
| Fruits and vegetables.....                       | 99,102           | 63,176         | 75,486           | 83,836           | 100-0                            | 83-5        | 70-1        | 69-7        | 76-2        | 84-0        | +10-3                     |
| Meats and fish.....                              | 169,109          | 97,873         | 129,631          | 141,010          | 100-0                            | 78-4        | 59-6        | 57-9        | 76-0        | 83-4        | + 8-9                     |
| Furniture and house furnishings.....             | 13,632           | 7,293          | 9,404            | 10,163           | 100-0                            | 76-7        | 58-0        | 53-5        | 69-0        | 74-6        | + 8-1                     |
| General merchandise.....                         | 13,478           | 8,663          | 11,097           | 12,886           | 100-0                            | 78-1        | 69-0        | 64-3        | 82-3        | 95-6        | +16-1                     |
| Hardware.....                                    | 65,943           | 38,025         | 49,260           | 56,075           | 100-0                            | 76-5        | 59-4        | 57-7        | 74-7        | 85-0        | +13-8                     |
| Jewellery and optical goods.....                 | 10,858           | 6,935          | 9,711            | 11,374           | 100-0                            | 85-8        | 67-8        | 63-9        | 89-4        | 104-8       | +17-1                     |
| Leather and leather goods.....                   | 7,377            | 5,325          | 6,512            | 6,854            | 100-0                            | 76-8        | 67-2        | 72-2        | 88-3        | 92-9        | + 5-3                     |
| Lumber and building materials.....               | 51,872           | 18,912         | 27,584           | 34,234           | 100-0                            | 73-8        | 44-1        | 36-5        | 53-2        | 66-0        | +24-1                     |
| Machinery, equipment and supplies.....           | 59,321           | 21,789         | 33,757           | 39,696           | 100-0                            | 55-1        | 40-7        | 36-7        | 56-9        | 66-9        | +17-6                     |
| Metals and metal work.....                       | 14,059           | 6,817          | 11,122           | 12,821           | 100-0                            | 71-2        | 52-0        | 48-5        | 79-1        | 91-2        | +15-3                     |
| Paper and paper products.....                    | 22,462           | 17,263         | 20,103           | 21,257           | 100-0                            | 87-7        | 82-3        | 76-9        | 89-6        | 94-8        | + 5-0                     |
| Petroleum products.....                          | 230,169          | 163,315        | 178,367          | 189,272          | 100-0                            | 83-8        | 78-0        | 71-0        | 77-5        | 83-2        | + 6-1                     |
| Plumbing and heating equipment and supplies..... | 14,512           | 5,508          | 7,554            | 9,078            | 100-0                            | 75-5        | 44-1        | 38-0        | 52-1        | 62-6        | +20-2                     |
| Tobacco and confectionery.....                   | 45,870           | 32,165         | 38,568           | 41,403           | 100-0                            | 80-1        | 76-5        | 70-1        | 84-1        | 90-3        | + 7-4                     |
| Waste materials.....                             | 10,118           | 6,335          | 9,721            | 12,824           | 100-0                            | 78-7        | 52-3        | 62-6        | 96-1        | 126-7       | +31-0                     |
| All other.....                                   | 16,318           | 12,688         | 15,171           | 16,659           | 100-0                            | 86-2        | 79-6        | 77-8        | 93-0        | 102-1       | + 9-8                     |

<sup>1</sup> The difference between this total and that shown under the heading of wholesalers proper on pp. 671-672 of the 1934-35 Year Book is due to a reclassification of some firms as between wholesalers proper and other bulk distributors.

**Monthly Indexes of Wholesale Sales.**—Commencing with January, 1935, the Dominion Bureau of Statistics has published monthly indexes of wholesale sales based on returns submitted by approximately 200 wholesale firms comprising a representative sample of nine different lines of business. The base on which these indexes were first computed was that of average monthly sales in 1935 equalling 100; the results of the annual surveys of wholesale trade were then utilized in reducing the monthly indexes to the 1930 base in order that they should conform

with other series. Since the monthly indexes are based upon a smaller coverage of sales than that secured for the annual census, these results cannot be expected to have the accuracy of the more exhaustive survey. The monthly indexes do, however, give a fair indication of current trends in wholesale trade.

Dollar volume of wholesale sales averaged 10.1 p.c. higher in 1937 than in 1936 for the nine lines of business for which monthly indexes are computed. The hardware group registered the best increase at 16.7 p.c., followed by tobacco and confectionery at 12.8 p.c. Wholesalers in the grocery trade reported the smallest increase at 8.0 p.c.

All sections of the country reported increased sales in 1937 compared with the preceding year. The gain in British Columbia was particularly impressive at 16.8 p.c. and those in the Maritime Provinces and Quebec were only slightly smaller at 14.2 p.c. and 13.5 p.c., respectively. Ontario sales were up 8.5 p.c., while the gain for the Prairie Provinces was 5.6 p.c.

### 30.—Unadjusted Index Numbers of Wholesale Sales, by Economic Divisions and by Kinds of Business, January, 1935, to December, 1937.

(Average for 1930=100.)

| Year and Month.       | Wholesale Trade.<br>(Composites of nine lines of business.) |                     |             |             |                    |              | Selected Kinds of Business. |              |              |             |              |                        |             |
|-----------------------|---|---------------------|-------------|-------------|--------------------|--------------|-----------------------------|--------------|--------------|-------------|--------------|------------------------|-------------|
|                       | Canada  | Maritime Provinces. | Que.        | Ont.        | Prairie Provinces. | B.C.         | Auto-motive Supplies.       | Drugs.       | Foot-wear.   | Dry Goods.  | Groceries.   | Fruits and Vegetables. | Hardware.   |
| <b>1935.</b>          |   |                     |             |             |                    |              |                             |              |              |             |              |                        |             |
| January.....          | 58.9  | 57.4                | 51.7        | 69.3        | 53.7               | 56.6         | 49.5                        | 82.3         | 34.5         | 49.1        | 74.0         | 53.3                   | 45.6        |
| February.....         | 63.2  | 57.4                | 61.1        | 69.2        | 58.0               | 63.4         | 51.7                        | 85.4         | 53.0         | 59.7        | 74.2         | 61.6                   | 52.1        |
| March.....            | 72.6  | 72.5                | 72.3        | 78.8        | 64.5               | 72.8         | 60.8                        | 90.7         | 94.3         | 73.5        | 80.6         | 69.1                   | 69.6        |
| April.....            | 76.8  | 78.4                | 76.9        | 83.4        | 68.6               | 74.6         | 78.9                        | 87.1         | 96.2         | 73.7        | 82.7         | 82.8                   | 77.1        |
| May.....              | 83.7  | 90.3                | 85.2        | 90.4        | 73.7               | 80.4         | 82.0                        | 87.0         | 90.1         | 72.1        | 91.7         | 95.3                   | 88.1        |
| June.....             | 79.8  | 79.7                | 79.1        | 85.9        | 71.9               | 79.7         | 77.6                        | 82.8         | 77.5         | 64.3        | 90.7         | 89.6                   | 80.6        |
| July.....             | 82.8  | 87.3                | 74.0        | 88.0        | 79.6               | 84.4         | 81.7                        | 86.7         | 60.4         | 82.5        | 102.0        | 87.2                   | 79.4        |
| August.....           | 84.8  | 82.1                | 75.0        | 86.2        | 87.1               | 87.4         | 92.0                        | 88.3         | 82.4         | 72.8        | 100.1        | 77.0                   | 82.8        |
| September.....        | 80.0  | 92.5                | 93.0        | 88.8        | 86.9               | 84.1         | 107.8                       | 93.5         | 101.9        | 97.8        | 99.0         | 77.8                   | 85.8        |
| October.....          | 94.2  | 97.7                | 98.1        | 93.0        | 91.5               | 85.3         | 120.6                       | 97.6         | 119.1        | 94.4        | 108.5        | 76.3                   | 88.8        |
| November.....         | 84.7  | 90.4                | 87.0        | 84.0        | 79.1               | 87.2         | 93.0                        | 95.9         | 121.6        | 81.9        | 97.4         | 67.4                   | 81.9        |
| December.....         | 75.9  | 77.8                | 78.0        | 82.6        | 66.2               | 73.4         | 69.8                        | 87.1         | 120.1        | 62.5        | 87.8         | 76.2                   | 64.7        |
| <b>Averages, 1935</b> | <b>78.9</b>   | <b>80.3</b>         | <b>77.7</b> | <b>83.3</b> | <b>73.4</b>        | <b>77.7</b>  | <b>89.6</b>                 | <b>88.7</b>  | <b>87.6</b>  | <b>71.2</b> | <b>90.8</b>  | <b>76.2</b>            | <b>74.7</b> |
| <b>1936.</b>          |   |                     |             |             |                    |              |                             |              |              |             |              |                        |             |
| January.....          | 61.6  | 59.6                | 54.1        | 68.3        | 56.8               | 67.6         | 56.3                        | 86.7         | 36.8         | 48.2        | 77.8         | 54.8                   | 48.8        |
| February.....         | 65.5  | 62.0                | 62.7        | 70.4        | 58.1               | 74.4         | 50.0                        | 88.7         | 55.4         | 59.4        | 79.8         | 58.0                   | 53.8        |
| March.....            | 70.2  | 74.5                | 77.0        | 80.0        | 68.6               | 79.7         | 65.6                        | 94.7         | 103.6        | 77.9        | 83.7         | 73.6                   | 74.1        |
| April.....            | 81.8  | 87.7                | 81.8        | 85.4        | 73.1               | 85.8         | 84.7                        | 93.1         | 88.6         | 76.6        | 89.2         | 84.1                   | 85.7        |
| May.....              | 86.9  | 89.6                | 86.9        | 93.2        | 76.7               | 89.6         | 92.0                        | 90.6         | 100.0        | 75.1        | 93.1         | 97.7                   | 95.3        |
| June.....             | 89.1  | 93.5                | 90.3        | 91.3        | 79.5               | 89.7         | 87.1                        | 91.6         | 92.2         | 69.3        | 107.6        | 108.8                  | 94.5        |
| July.....             | 90.3  | 95.6                | 79.2        | 95.5        | 87.1               | 98.4         | 83.8                        | 92.4         | 67.2         | 51.9        | 112.1        | 108.3                  | 86.3        |
| August.....           | 97.4  | 87.8                | 77.9        | 89.3        | 96.0               | 96.7         | 101.7                       | 88.6         | 74.6         | 106.1       | 107.1        | 89.0                   | 88.2        |
| September.....        | 101.2   | 105.9               | 101.2       | 97.9        | 102.5              | 95.9         | 128.7                       | 103.7        | 129.0        | 107.2       | 110.0        | 92.3                   | 103.5       |
| October.....          | 108.8   | 107.7               | 106.3       | 98.9        | 104.7              | 99.2         | 138.7                       | 109.8        | 162.9        | 102.8       | 115.4        | 83.0                   | 110.8       |
| November.....         | 90.2  | 98.2                | 93.5        | 88.5        | 82.1               | 98.2         | 110.9                       | 101.4        | 109.9        | 87.2        | 102.3        | 70.2                   | 93.3        |
| December.....         | 85.6  | 92.4                | 78.3        | 91.0        | 78.6               | 93.4         | 82.9                        | 96.7         | 86.4         | 66.3        | 99.0         | 86.6                   | 85.7        |
| <b>Averages, 1936</b> | <b>85.2</b>   | <b>87.9</b>         | <b>82.4</b> | <b>87.7</b> | <b>80.4</b>        | <b>88.7</b>  | <b>90.2</b>                 | <b>95.1</b>  | <b>93.9</b>  | <b>74.7</b> | <b>97.2</b>  | <b>83.4</b>            | <b>85.0</b> |
| <b>1937.</b>          |   |                     |             |             |                    |              |                             |              |              |             |              |                        |             |
| January.....          | 70.0  | 72.5                | 62.5        | 76.5        | 62.1               | 81.7         | 62.5                        | 96.2         | 51.4         | 51.4        | 86.5         | 65.0                   | 61.7        |
| February.....         | 73.8  | 72.7                | 71.5        | 78.4        | 65.9               | 81.8         | 61.1                        | 103.2        | 76.6         | 70.7        | 83.9         | 68.6                   | 68.8        |
| March.....            | 91.4  | 93.0                | 89.7        | 91.5        | 84.3               | 104.8        | 76.1                        | 104.8        | 103.8        | 85.1        | 99.8         | 89.7                   | 103.5       |
| April.....            | 94.4  | 102.5               | 96.3        | 93.9        | 84.6               | 105.5        | 98.8                        | 104.5        | 117.2        | 84.4        | 96.7         | 96.0                   | 118.5       |
| May.....              | 96.5  | 103.0               | 100.3       | 99.3        | 82.3               | 108.9        | 105.1                       | 98.3         | 111.3        | 84.0        | 100.8        | 108.7                  | 113.0       |
| June.....             | 100.4   | 107.6               | 103.0       | 105.8       | 85.1               | 111.5        | 96.4                        | 102.6        | 98.7         | 79.3        | 106.6        | 116.3                  | 113.0       |
| July.....             | 97.4  | 107.3               | 87.5        | 89.5        | 91.0               | 116.8        | 89.9                        | 101.8        | 61.1         | 59.6        | 119.1        | 102.0                  | 102.3       |
| August.....           | 98.2  | 100.8               | 92.3        | 96.8        | 95.9               | 110.6        | 107.0                       | 104.6        | 117.2        | 88.2        | 111.4        | 90.2                   | 102.0       |
| September.....        | 113.3   | 123.6               | 118.9       | 109.2       | 108.5              | 112.4        | 143.1                       | 122.2        | 106.2        | 118.8       | 123.3        | 102.3                  | 116.2       |
| October.....          | 107.4   | 116.7               | 116.4       | 105.6       | 97.5               | 108.5        | 134.4                       | 116.9        | 159.5        | 112.5       | 117.5        | 88.9                   | 111.4       |
| November.....         | 96.6  | 108.0               | 99.9        | 94.9        | 88.6               | 104.2        | 104.9                       | 111.4        | 97.7         | 92.6        | 111.7        | 79.9                   | 96.8        |
| December.....         | 86.2  | 96.5                | 85.6        | 91.6        | 73.4               | 96.2         | 87.5                        | 104.4        | 96.8         | 66.7        | 99.0         | 85.0                   | 82.2        |
| <b>Averages, 1937</b> | <b>93.8</b>   | <b>100.4</b>        | <b>93.6</b> | <b>95.2</b> | <b>84.9</b>        | <b>103.6</b> | <b>97.2</b>                 | <b>105.9</b> | <b>104.0</b> | <b>82.8</b> | <b>104.9</b> | <b>91.2</b>            | <b>99.2</b> |



## Subsection 2.—Retail Trade and Service Establishments.\*

As complete a review of the retail merchandising and service statistics as will appear in the Year Book from the Census of Merchandising and Service Establishments, 1931, was given at pp. 673-690, inclusive, of the 1934-35 Year Book. This review gave detailed analyses of such trade, annual net sales and employees engaged, by provinces, business groups and kinds of business, and by manner of operation (i.e., independents, two-store multiples, three-store multiples, voluntary and other types of chains, etc.). Since these statistics will stand until the next census is taken, it has been considered unnecessary to reprint them in this edition of the Year Book. In this edition, therefore, the only table reprinted, and this merely in part, is that showing the retail trade in Canadian cities, which appears now as Table 31. There is, however, additional new matter presented dealing with: (1) total sales and indexes of sales, by provinces and kinds of business, 1930-36 (figures for 1930 being from the census and those for other years estimates based upon returns secured from the annual surveys); (2) the growth of the chain store; (3) the new monthly index of retail sales which has lately assumed permanent form and in which corrections have been made to allow for variations in number of business days and for seasonal changes; and (4) detailed statistics showing the importance of the motion picture industry, recently made available as a result of a special study of this field.

**Retail Merchandise Trade in Canadian Cities.**—The retail merchandise trade in Canadian cities of over 20,000 population during 1930, according to the Census of 1931, is shown in Table 31.† The cities are arranged in descending order according to their 1931 census populations. A notable feature of these figures is the wide variation in different cities in the relationship between population and retail sales. In general, per capita sales are high for cities which form distributing centres for large or populous areas, while such sales are lowest in residential or industrial cities adjacent to larger centres, as in the case of Verdun, Outremont, Westmount, and Hull.

\* A review of retail trade for the period 1923-30 was given at pp. 637-639 of the 1935 Year Book. This was summarized from a special study report "A Decade of Retail Trade" published in bulletin form in 1935 by the Internal Trade Branch of the Dominion Bureau of Statistics.

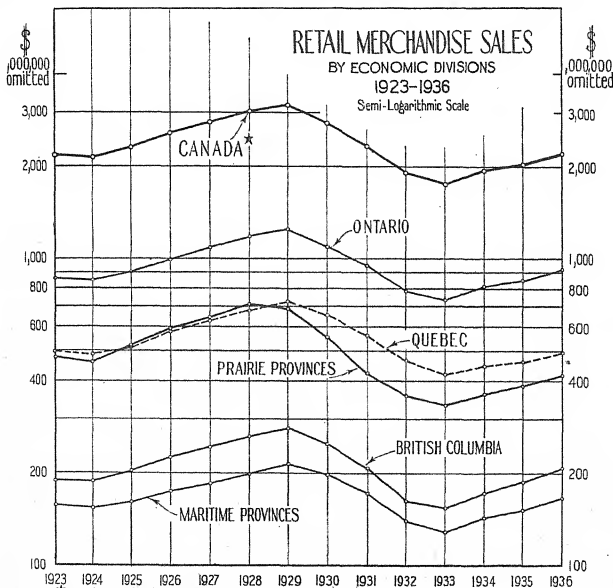
† A similar table showing retail merchandise trade in cities of over 10,000 population was published at pp. 684-685 of the 1934-35 Year Book.

31.—Retail Merchandise Trade in Cities of 20,000 Population or Over, 1930.

| City and Province.   | Population, 1931. | Establishments. | Full-Time Employees. |         |                     | Net Sales.  | Stocks on Hand, End of Year (at Cost). |
|----------------------|-------------------|-----------------|----------------------|---------|---------------------|-------------|--|
|                      |                   |                 | Male.                | Female. | Salaries and Wages. |             |  |
|                      | No.               | No.             | No.                  | No.     | \$                  | \$          | \$                                     |
| Montreal, Que.....   | 818,577           | 11,969          | 27,144               | 12,622  | 40,171,900          | 369,471,200 | 52,893,200                             |
| Toronto, Ont.....    | 631,207           | 8,725           | 23,601               | 13,473  | 44,548,300          | 372,682,000 | 45,777,000                             |
| Vancouver, B.C.....  | 246,533           | 3,845           | 7,911                | 4,258   | 13,516,200          | 122,830,900 | 18,630,700                             |
| Winnipeg, Man.....   | 218,735           | 2,436           | 3,154                | 5,513   | 15,379,600          | 131,489,200 | 15,542,700                             |
| Hamilton, Ont.....   | 155,547           | 2,117           | 3,831                | 2,082   | 6,528,500           | 68,512,800  | 9,605,200                              |
| Quebec, Que.....     | 130,594           | 1,742           | 3,824                | 1,437   | 4,696,900           | 48,173,200  | 9,555,600                              |
| Ottawa, Ont.....     | 128,872           | 1,525           | 3,896                | 1,973   | 6,205,700           | 59,702,200  | 10,449,800                             |
| Calgary, Alta.....   | 82,761            | 1,136           | 2,686                | 1,262   | 4,809,600           | 43,389,800  | 7,143,100                              |
| Edmonton, Alta.....  | 79,197            | 1,054           | 2,235                | 1,176   | 4,011,200           | 37,555,900  | 6,202,600                              |
| London, Ont.....     | 71,148            | 1,074           | 2,135                | 985     | 3,426,300           | 35,596,000  | 4,883,600                              |
| Windsor, Ont.....    | 63,108            | 903             | 1,938                | 615     | 3,300,000           | 30,123,400  | 4,439,000                              |
| Verdun, Que.....     | 60,745            | 588             | 938                  | 297     | 1,163,300           | 12,774,300  | 1,678,100                              |
| Halifax, N.S.....    | 59,275            | 900             | 1,662                | 1,135   | 2,709,300           | 20,843,200  | 4,100,300                              |
| Regina, Sask.....    | 52,209            | 569             | 2,016                | 951     | 3,497,200           | 33,105,600  | 5,555,800                              |
| Saint John, N.B..... | 47,514            | 822             | 1,465                | 846     | 2,180,100           | 21,435,100  | 3,233,700                              |
| Saskatoon, Sask..... | 43,291            | 546             | 1,536                | 760     | 2,639,500           | 25,364,200  | 4,277,200                              |

31.—Retail Merchandise Trade in Cities of 20,000 Population or Over, 1930—concl.

| City and Province.     | Population,<br>1931. | Estab-<br>lish-<br>ments. | Full-Time Employees. |         |                           | Net<br>Sales. | Stocks<br>on<br>Hand, End<br>of Year<br>(at Cost). |
|------------------------|----------------------|---------------------------|----------------------|---------|---------------------------|---------------|--|
|                        |                      |                           | Male.                | Female. | Salaries<br>and<br>Wages. |               |  |
|                        | No.                  | No.                       | No.                  | No.     | \$                        | \$            | \$   |
| Victoria, B.C.         | 39,082               | 809                       | 1,790                | 914     | 2,944,900                 | 27,108,800    | 4,990,900  |
| Three Rivers, Que.     | 35,450               | 456                       | 719                  | 312     | 960,100                   | 10,079,700    | 1,857,200  |
| Kitchener, Ont.        | 30,793               | 399                       | 725                  | 343     | 1,211,300                 | 13,770,500    | 2,005,700  |
| Brantford, Ont.        | 30,107               | 451                       | 809                  | 375     | 1,230,300                 | 13,966,800    | 1,937,100  |
| Hull, Que.             | 29,433               | 443                       | 645                  | 133     | 663,800                   | 7,776,800     | 1,319,300  |
| Sherbrooke, Que.       | 28,933               | 428                       | 737                  | 253     | 977,400                   | 10,959,900    | 2,050,600  |
| Outremont, Que.        | 28,611               | 129                       | 365                  | 45      | 455,100                   | 4,306,700     | 487,800  |
| Fort William, Ont.     | 26,277               | 333                       | 544                  | 300     | 830,300                   | 10,003,800    | 1,723,000  |
| St. Catharines, Ont.   | 24,753               | 437                       | 802                  | 333     | 1,328,500                 | 14,684,800    | 2,340,200  |
| Westmount, Que.        | 24,235               | 128                       | 504                  | 116     | 727,500                   | 6,330,100     | 600,500  |
| Kingston, Ont.         | 23,439               | 376                       | 858                  | 323     | 1,214,500                 | 12,873,200    | 2,079,000  |
| Oshawa, Ont.           | 23,439               | 278                       | 584                  | 159     | 802,900                   | 8,498,600     | 1,192,900  |
| Sydney, N.S.           | 23,089               | 340                       | 445                  | 258     | 637,100                   | 8,136,700     | 1,483,900  |
| Sault Ste. Marie, Ont. | 23,082               | 357                       | 436                  | 231     | 682,400                   | 9,984,600     | 1,783,400  |
| Peterborough, Ont.     | 22,327               | 383                       | 688                  | 317     | 969,500                   | 11,132,500    | 1,706,600  |
| Moose Jaw, Sask.       | 21,299               | 308                       | 611                  | 248     | 993,100                   | 9,058,400     | 1,574,600  |
| Guelph, Ont.           | 21,075               | 309                       | 497                  | 241     | 782,200                   | 9,194,400     | 1,388,200  |
| Gloucester, N.S.       | 20,706               | 232                       | 200                  | 156     | 277,300                   | 4,208,100     | 680,000  |
| Moncton, N.B.          | 20,689               | 302                       | 920                  | 699     | 1,621,700                 | 20,751,400    | 2,290,700  |



**Annual Retail Statistics.**—As in the case of wholesale merchandising, annual statistics of retail sales are based on the complete census covering 1930, supplemented by an annual survey of all the more important retail establishments, such establishments having accounted for over two-thirds of the total value of sales in 1930. In Table 32, therefore, the figures for 1930 are the results of the comprehensive census, while the figures for later years are estimates calculated from the annual surveys.

It is impossible to measure accurately the effect of the general decline in prices as a factor in the decrease in the total sales from 1930 to 1933. It probably was the principal

**32.—Total Sales and Indexes of Sales of Retail Merchandise**

| No. | Province or Group and Kind of Business.   | Total Sales.     |                  |                  |
|-----|---|------------------|------------------|------------------|
|     |   | 1930.            | 1932.            | 1933.            |
|     |   | \$'000           | \$'000           | \$'000           |
| 1   | Prince Edward Island <sup>1</sup> .....   | 13,774           | 9,286            | 8,905            |
| 2   | Nova Scotia <sup>1</sup> .....  | 69,550           | 74,607           | 68,839           |
| 3   | New Brunswick <sup>1</sup> .....  | 84,372           | 57,024           | 52,875           |
| 4   | Quebec <sup>1</sup> .....   | 651,138          | 495,335          | 422,297          |
| 5   | Ontario <sup>1</sup> .....  | 1,099,990        | 790,149          | 741,630          |
| 6   | Manitoba <sup>1</sup> .....   | 189,244          | 131,675          | 122,045          |
| 7   | Saskatchewan <sup>1</sup> .....   | 189,181          | 112,025          | 103,091          |
| 8   | Alberta <sup>1</sup> .....  | 176,537          | 115,906          | 109,074          |
| 9   | British Columbia <sup>1</sup> .....   | 248,598          | 163,771          | 155,747          |
| 10  | Yukon and Northwest Territories <sup>1</sup> .....                                  | 3,216            | 2,198            | 1,765            |
|     | <b>Canada<sup>1</sup>.....</b>  | <b>2,755,570</b> | <b>1,922,066</b> | <b>1,785,768</b> |
|     | <b>Food Group.</b>  |                  |                  |                  |
| 11  | Bakery product stores (manufacturing bakeries not included).....                    | 11,028           | 8,002            | 7,727            |
| 12  | Candy and confectionery stores.....   | 54,176           | 36,661           | 33,010           |
| 13  | Dairy product dealers (other than manufacturing dairies).....                       | 37,174           | 28,317           | 26,451           |
| 14  | Fruit and vegetable stores.....   | 16,203           | 13,346           | 12,394           |
| 15  | Grocery and combination stores.....   | 405,403          | 315,825          | 297,307          |
| 16  | Meat markets (including sea foods).....   | 83,026           | 53,595           | 50,090           |
| 17  | Other food stores.....  | 8,376            | 5,481            | 5,039            |
|     | <b>Totals, Food Group.....</b>  | <b>615,476</b>   | <b>461,227</b>   | <b>432,018</b>   |
| 18  | <b>Country General Stores.....</b>  | <b>228,504</b>   | <b>158,634</b>   | <b>151,233</b>   |
|     | <b>General Merchandise Group.</b>   |                  |                  |                  |
| 19  | Department stores.....  | 355,259          | 253,831          | 241,850          |
| 20  | Dry goods stores.....   | 31,706           | 22,976           | 21,000           |
| 21  | General merchandise stores.....   | 20,366           | 14,071           | 13,217           |
| 22  | Variety stores.....   | 44,212           | 39,627           | 37,256           |
|     | <b>Totals, General Merchandise Group.....</b>                                       | <b>451,543</b>   | <b>330,505</b>   | <b>312,323</b>   |
|     | <b>Automotive Group.</b>  |                  |                  |                  |
| 23  | Motor vehicle dealers.....  | 253,608          | 136,370          | 129,889          |
| 24  | Accessories, tires and batteries.....   | 10,956           | 7,732            | 7,200            |
| 25  | Filling stations <sup>1</sup> .....   | 66,449           | 61,769           | 58,428           |
| 26  | Garages.....  | 47,560           | 34,208           | 30,230           |
| 27  | Other automotive establishments (including motorcycles, bicycles and supplies)..... | 3,356            | 2,018            | 1,899            |
|     | <b>Totals, Automotive Group<sup>1</sup>.....</b>                                    | <b>351,959</b>   | <b>242,097</b>   | <b>227,646</b>   |

<sup>1</sup> Figures for filling stations for years subsequent to 1930 have been revised and are estimated on basis of gallonage data and retail gasoline prices. The changes affect the provincial totals and automotive group totals for the same years.

factor in the food and apparel groups. On the other hand, the prices of more durable goods have not declined so much as food prices, so that the greater reduction in sales of groups handling durable goods is, no doubt, due much more to reduced volume.

The improvement in retail trade, evident in Canada since the spring months of 1933, was continued in 1936 when the value of sales was 7.2 p.c. greater than in the preceding year and 23 p.c. greater than in 1933. The index of retail sales for 1936 on the base 1930 equals 100 stands at 79.9. Increases over 1935 were recorded in all provinces, these increases ranging from 5.5 p.c. in Alberta to 14.6 p.c. in Prince Edward Island.

### Trade, by Provinces and Kinds of Business, 1930, 1932-36.

| Total Sales. |           |           | Indexes of Retail Sales.<br>(1930 = 100.) |       |       |       |       |       | Per Cent<br>Change,<br>1935-36. | No. |
|--------------|-----------|-----------|---|-------|-------|-------|-------|-------|---------------------------------|-----|
| 1934.        | 1935.     | 1936.     | 1930.                                     | 1932. | 1933. | 1934. | 1935. | 1936. |                                 |     |
| \$'000       | \$'000    | \$'000    |   |       |       |       |       |       | p.c.                            |     |
| 9,684        | 9,901     | 11,351    | 100.0                                     | 67.4  | 64.7  | 70.3  | 71.9  | 82.4  | +14.6                           | 1   |
| 76,818       | 81,257    | 87,099    | 100.0                                     | 75.1  | 69.2  | 77.2  | 81.6  | 87.5  | + 7.2                           | 2   |
| 58,333       | 61,681    | 66,965    | 100.0                                     | 67.6  | 62.1  | 69.1  | 73.1  | 79.4  | + 8.6                           | 3   |
| 449,327      | 464,109   | 498,143   | 100.0                                     | 71.5  | 64.9  | 69.0  | 71.3  | 76.5  | + 7.3                           | 4   |
| 824,084      | 858,162   | 918,223   | 100.0                                     | 71.8  | 67.4  | 74.9  | 78.0  | 83.0  | + 6.4                           | 5   |
| 131,390      | 138,947   | 148,541   | 100.0                                     | 69.6  | 64.5  | 69.4  | 73.4  | 78.5  | + 6.9                           | 6   |
| 112,314      | 119,586   | 130,621   | 100.0                                     | 59.2  | 54.5  | 59.4  | 63.2  | 69.0  | + 9.2                           | 7   |
| 121,839      | 129,435   | 136,522   | 100.0                                     | 65.6  | 61.8  | 69.0  | 73.3  | 77.3  | + 5.5                           | 8   |
| 172,927      | 188,424   | 207,768   | 100.0                                     | 65.9  | 62.6  | 69.6  | 75.8  | 83.6  | +10.3                           | 9   |
| 2,088        | 2,197     | 1,969     | 100.0                                     | 68.3  | 54.9  | 64.9  | 68.3  | 61.2  | -10.4                           | 10  |
| 1,953,754    | 2,053,699 | 2,203,202 | 100.0                                     | 69.8  | 64.8  | 71.1  | 74.5  | 79.9  | + 7.2                           |     |
| 8,343        | 8,883     | 9,219     | 100.0                                     | 72.6  | 70.1  | 75.7  | 80.6  | 83.6  | + 3.8                           | 11  |
| 33,880       | 35,202    | 36,727    | 100.0                                     | 67.7  | 60.9  | 62.5  | 65.0  | 67.8  | + 4.3                           | 12  |
| 28,607       | 31,027    | 32,915    | 100.0                                     | 76.2  | 71.2  | 77.0  | 83.5  | 88.5  | + 6.1                           | 13  |
| 13,076       | 13,360    | 14,348    | 100.0                                     | 81.9  | 76.1  | 80.3  | 82.0  | 88.1  | + 7.4                           | 14  |
| 307,478      | 312,197   | 325,261   | 100.0                                     | 77.0  | 73.3  | 75.8  | 77.0  | 80.2  | + 4.2                           | 15  |
| 55,578       | 58,712    | 60,579    | 100.0                                     | 64.6  | 60.3  | 66.9  | 70.7  | 73.0  | + 3.2                           | 16  |
| 5,283        | 5,680     | 5,952     | 100.0                                     | 65.4  | 60.2  | 62.6  | 66.6  | 71.1  | + 6.7                           | 17  |
| 452,195      | 464,961   | 485,001   | 100.0                                     | 74.9  | 70.2  | 73.5  | 75.5  | 78.8  | + 4.3                           |     |
| 167,216      | 172,456   | 182,734   | 100.0                                     | 69.3  | 66.1  | 73.1  | 75.4  | 79.9  | + 6.0                           | 18  |
| 254,001      | 258,053   | 273,358   | 100.0                                     | 71.4  | 68.1  | 71.5  | 73.8  | 76.9  | + 5.7                           | 19  |
| 23,066       | 24,365    | 24,624    | 100.0                                     | 72.5  | 66.2  | 72.6  | 73.7  | 77.7  | + 5.4                           | 20  |
| 14,729       | 15,433    | 16,566    | 100.0                                     | 69.1  | 64.9  | 72.3  | 75.8  | 81.3  | + 7.3                           | 21  |
| 40,041       | 42,409    | 46,281    | 100.0                                     | 89.6  | 84.3  | 90.6  | 95.9  | 104.7 | + 9.1                           | 22  |
| 331,777      | 339,860   | 360,829   | 100.0                                     | 73.2  | 69.4  | 73.5  | 75.3  | 79.9  | + 6.2                           |     |
| 179,139      | 216,309   | 251,211   | 100.0                                     | 53.8  | 51.2  | 70.6  | 83.3  | 99.1  | +16.1                           | 23  |
| 7,068        | 6,975     | 8,062     | 100.0                                     | 70.6  | 65.7  | 64.5  | 63.7  | 73.6  | +15.6                           | 24  |
| 65,321       | 66,869    | 67,141    | 100.0                                     | 93.0  | 87.9  | 98.3  | 100.6 | 101.0 | + 0.4                           | 25  |
| 31,640       | 31,784    | 33,700    | 100.0                                     | 71.9  | 63.6  | 66.5  | 66.8  | 70.9  | + 6.0                           | 26  |
| 2,141        | 2,382     | 2,545     | 100.0                                     | 59.6  | 56.1  | 63.2  | 70.3  | 75.2  | + 6.8                           | 27  |
| 285,309      | 321,319   | 362,659   | 100.0                                     | 63.4  | 59.6  | 74.7  | 84.9  | 94.9  | +11.8                           |     |

## 32.—Total Sales and Indexes of Sales of Retail Merchandise

| No.                                   | Group and Kind of Business.   | Total Sales.   |                |                |
|---------------------------------------|---|----------------|----------------|----------------|
|                                       |   | 1930.          | 1932.          | 1933.          |
|                                       |   | \$'000         | \$'000         | \$'000         |
| <b>Apparel Group.</b>                 |   |                |                |                |
| 28                                    | Men's and boys' clothing and furnishings (includes custom tailors)..... | 72,111         | 46,786         | 44,435         |
| 29                                    | Family clothing stores.....   | 42,144         | 31,818         | 31,582         |
| 30                                    | Women's apparel and accessories stores.....                             | 69,806         | 49,416         | 44,689         |
| 31                                    | Shoe stores.....  | 35,908         | 27,445         | 25,989         |
|                                       | <b>Totals, Apparel Group.....</b>                                       | <b>219,969</b> | <b>155,465</b> | <b>146,705</b> |
| <b>Building Materials Group.</b>      |   |                |                |                |
| 33                                    | Hardware stores.....  | 70,801         | 47,335         | 42,732         |
| 33                                    | Lumber and building materials.....                                      | 68,201         | 34,811         | 29,331         |
| 34                                    | Other building materials (including roofing materials).....             | 9,597          | 4,876          | 8,417          |
| 35                                    | Electrical shops (without radio).....                                   | 15,548         | 9,220          | 7,705          |
| 35                                    | Heating and plumbing shops.....   |                |                |                |
|                                       | Paint and glass stores.....   |                |                |                |
|                                       | <b>Totals, Building Materials Group.....</b>                            | <b>162,237</b> | <b>96,242</b>  | <b>83,245</b>  |
| <b>Furniture and Household Group.</b> |   |                |                |                |
| 36                                    | Furniture stores.....   | 41,017         | 25,930         | 23,073         |
| 37                                    | Household appliance stores.....   | 17,798         | 10,883         | 9,208          |
| 38                                    | Other home furnishings (including floor coverings, curtains, etc.)..... | 8,957          | 5,161          | 5,006          |
| 39                                    | Radio and music stores.....   | 33,894         | 16,913         | 13,440         |
|                                       | <b>Totals, Furniture and Household Group.....</b>                       | <b>101,666</b> | <b>58,887</b>  | <b>50,727</b>  |
| 40                                    | <b>Restaurants, Cafeterias, and Eating Places.....</b>                  | <b>75,977</b>  | <b>47,673</b>  | <b>41,667</b>  |
| <b>Other Retail Stores.</b>           |   |                |                |                |
| 41                                    | Farmers' supplies.....  | 45,760         | 30,423         | 29,160         |
| 42                                    | Book stores.....  | 8,337          | 6,070          | 5,405          |
| 43                                    | Coal and wood yards.....  | 36,047         | 70,675         | 70,384         |
| 44                                    | Drug stores.....  | 79,849         | 63,959         | 57,233         |
| 45                                    | Florists.....   | 9,265          | 6,405          | 5,570          |
| 46                                    | Jewellery stores.....   | 26,663         | 16,396         | 15,044         |
| 47                                    | Office, school, and store supplies and equipment dealers.....           | 19,330         | 11,463         | 10,003         |
| 48                                    | Tobacco stores and stands.....  | 30,703         | 23,879         | 21,586         |
| 49                                    | Government liquor stores.....   | 100,694        | 67,106         | 54,869         |
| 50                                    | Unclassified kinds of business.....                                     | 113,291        | 74,930         | 69,930         |
|                                       | <b>Totals, Other Retail Stores.....</b>                                 | <b>517,939</b> | <b>371,336</b> | <b>339,204</b> |

**Chain Stores.**—During the past decade the chain store has come to occupy an important place in the field of distribution. The Dominion Bureau of Statistics classifies as chains all retail organizations operating four or more branches, excepting departmental concerns. The number of chains reported in any year thus depends not only on the rise or disappearance of firms but also on the number of units operated. As a minimum of four stores is required before a firm is classified as a chain, the

Trade, by Provinces and Kinds of Business, 1930, 1932-36—concluded.

| Total Sales. |         |         | Indexes of Retail Sales.<br>(1930=100.) |       |       |       |       |       | Per Cent<br>Change,<br>1935-36. | No. |
|--------------|---------|---------|---|-------|-------|-------|-------|-------|---------------------------------|-----|
| 1931.        | 1935.   | 1936.   | 1930.                                   | 1932. | 1933. | 1934. | 1935. | 1936. |                                 |     |
| \$'000       | \$'000  | \$'000  |   |       |       |       |       |       | p.c.                            |     |
| 49,901       | 53,166  | 56,897  | 100-0                                   | 64-9  | 61-6  | 69-2  | 73-7  | 78-9  | + 7-0                           | 28  |
| 35,575       | 37,792  | 40,208  | 100-0                                   | 75-5  | 74-9  | 84-1  | 89-5  | 95-4  | + 6-6                           | 29  |
| 47,474       | 47,565  | 49,676  | 100-0                                   | 70-8  | 64-0  | 68-0  | 68-1  | 71-2  | + 4-4                           | 30  |
| 27,002       | 27,431  | 28,592  | 100-0                                   | 76-4  | 72-4  | 75-2  | 76-4  | 79-6  | + 4-2                           | 31  |
| 159,953      | 165,864 | 175,373 | 100-0                                   | 70-7  | 66-7  | 72-7  | 75-1  | 79-7  | + 5-7                           |     |
| 47,917       | 50,043  | 53,972  | 100-0                                   | 66-8  | 69-3  | 67-6  | 70-6  | 76-1  | + 7-9                           | 32  |
| 34,302       | 36,004  | 42,806  | 100-0                                   | 32-6  | 44-3  | 51-8  | 55-7  | 63-0  | +14-0                           | 33  |
| 4,054        | 4,495   | 5,518   | 100-0                                   | 59-8  | 35-6  | 42-2  | 46-8  | 57-5  | +22-8                           | 34  |
| 8,057        | 9,125   | 10,297  | 100-0                                   | 59-3  | 49-9  | 55-7  | 58-7  | 65-6  | +11-9                           | 35  |
| 94,930       | 100,567 | 112,063 | 100-0                                   | 59-3  | 51-3  | 58-5  | 62-9  | 68-0  | +11-4                           |     |
| 26,765       | 29,239  | 32,231  | 100-0                                   | 63-2  | 56-3  | 65-3  | 71-3  | 78-6  | +10-3                           | 36  |
| 10,742       | 12,451  | 13,424  | 100-0                                   | 61-1  | 51-7  | 60-4  | 70-0  | 75-4  | + 7-8                           | 37  |
| 5,797        | 5,872   | 6,779   | 100-0                                   | 57-0  | 55-9  | 64-7  | 65-0  | 75-7  | +15-4                           | 38  |
| 15,524       | 17,516  | 19,559  | 100-0                                   | 49-9  | 39-7  | 45-8  | 51-7  | 57-8  | +11-8                           | 39  |
| 58,828       | 65,071  | 72,023  | 100-0                                   | 57-9  | 49-9  | 57-9  | 61-0  | 70-8  | +10-7                           |     |
| 44,087       | 45,825  | 48,762  | 100-0                                   | 62-7  | 54-5  | 58-0  | 60-3  | 61-2  | + 6-1                           | 40  |
| 34,230       | 35,309  | 38,282  | 100-0                                   | 60-5  | 63-7  | 74-8  | 77-2  | 83-7  | + 8-4                           | 41  |
| 5,622        | 5,898   | 6,283   | 100-0                                   | 65-7  | 61-2  | 63-6  | 66-7  | 71-1  | + 6-5                           | 42  |
| 71,600       | 72,486  | 75,959  | 100-0                                   | 82-1  | 81-8  | 83-3  | 84-2  | 85-3  | + 4-8                           | 43  |
| 59,458       | 61,355  | 64,055  | 100-0                                   | 83-3  | 74-5  | 77-4  | 79-8  | 83-4  | + 4-4                           | 44  |
| 5,905        | 6,097   | 6,448   | 100-0                                   | 69-1  | 69-1  | 63-7  | 65-8  | 69-6  | + 5-5                           | 45  |
| 16,819       | 18,238  | 19,566  | 100-0                                   | 61-5  | 50-4  | 63-1  | 68-4  | 71-5  | + 8-9                           | 46  |
| 12,269       | 13,740  | 15,656  | 100-0                                   | 57-8  | 50-4  | 61-9  | 60-3  | 79-0  | +13-9                           | 47  |
| 22,551       | 23,129  | 24,501  | 100-0                                   | 77-8  | 70-3  | 73-4  | 75-3  | 79-8  | + 5-9                           | 48  |
| 56,207       | 56,830  | 65,908  | 100-0                                   | 60-6  | 54-5  | 55-8  | 56-4  | 65-5  | +10-0                           | 49  |
| 79,700       | 81,690  | 85,860  | 100-0                                   | 66-1  | 61-7  | 70-3  | 72-1  | 75-8  | + 5-1                           | 50  |
| 364,469      | 374,776 | 402,818 | 100-0                                   | 71-7  | 65-5  | 70-1  | 72-4  | 77-8  | + 7-5                           |     |

reduction in branches below this number automatically removes a firm from the chain store group. In an effort to obtain some comparative information for chain stores, a careful check was made of census and other records for the year 1923. The data secured do not provide complete figures for chain stores in the early year, but the figures in Table 33 give some indication of the growth in chain stores between 1923 and 1930 for the trades in which chains hold important positions.

### 33.—Numbers of Chains and Chain Stores in Selected Kinds of Business, 1923, 1930, 1935, and 1936.

| Kind of Business.   | 1923. <sup>1</sup> |               | 1930.      |               | 1935.      |               | 1936.      |               |
|---|--------------------|---------------|------------|---------------|------------|---------------|------------|---------------|
|   | Chains.            | Chain Stores. | Chains.    | Chain Stores. | Chains.    | Chain Stores. | Chains.    | Chain Stores. |
| Candy and confectionery.....                                      | 6                  | 65            | 14         | 163           | 9          | 167           | 10         | 177           |
| Grocery and combination.....                                      | 32                 | 640           | 66         | 2,004         | 73         | 2,090         | 75         | 2,079         |
| Meat markets.....   | 13                 | 154           | 21         | 214           | 13         | 151           | 14         | 150           |
| Dry goods.....  | 4                  | 18            | 10         | 94            | 6          | 62            | 5          | 58            |
| Variety, 5-and-10, and to-a-dollar..                              | 3                  | 122           | 15         | 313           | 14         | 377           | 14         | 396           |
| Automobile dealers.....   | 4                  | 36            | 10         | 76            | 4          | 36            | 4          | 35            |
| Filling stations.....   | 5                  | 177           | 28         | 646           | 27         | 611           | 28         | 503           |
| Men's and boys' clothing and furnishings (including tailors)..... | 8                  | 68            | 22         | 176           | 14         | 150           | 16         | 154           |
| Family clothing.....  | 1                  | 4             | 13         | 55            | 12         | 67            | 14         | 73            |
| Women's apparel and accessories (including millinery).....        | 5                  | 37            | 28         | 183           | 18         | 158           | 21         | 172           |
| Shoes.....  | 5                  | 35            | 17         | 103           | 24         | 303           | 25         | 320           |
| Hardware.....   | 8                  | 37            | 13         | 70            | 12         | 64            | 13         | 67            |
| Furniture.....  | 2                  | 51            | 8          | 90            | 8          | 65            | 6          | 63            |
| Radio and music.....  | 5                  | 51            | 7          | 73            | 5          | 28            | 5          | 29            |
| Drugs.....  | 22                 | 193           | 31         | 284           | 29         | 307           | 30         | 314           |
| Jewellery.....  | 1                  | 6             | 3          | 23            | 2          | 26            | 3          | 32            |
| Office equipment.....   | 10                 | 75            | 16         | 171           | 12         | 140           | 12         | 141           |
| Tobacco.....  | 9                  | 159           | 9          | 210           | 11         | 230           | 9          | 215           |
| Sub-Totals.....   | 143                | 1,028         | 331        | 5,038         | 293        | 5,032         | 304        | 4,978         |
| Lumber and building materials....                                 | 49                 | 1,012         | 46         | 1,018         | 38         | 814           | 37         | 807           |
| <b>Totals.....</b>  | <b>192</b>         | <b>2,940</b>  | <b>377</b> | <b>6,056</b>  | <b>331</b> | <b>5,846</b>  | <b>341</b> | <b>5,785</b>  |

<sup>1</sup> Incomplete figures, see text on pp. 624 and 625.

The sales of chain stores formed 17.7 p.c. of the total retail merchandise trade in 1930 and 17.9 p.c. in 1936. Grocery and combination store chains had 29.5 p.c. of the total sales for these businesses in 1930 and 33.0 p.c. in 1936. The proportion of chain sales to total sales in some other important lines of trade for the year 1936 were: shoe stores, 32.6 p.c.; drug stores, 20.1 p.c.; and furniture stores 12.8 p.c. Summary figures for all chain stores in Canada are given in Table 34.

### 34.—Principal Statistics for Chain Stores, 1930-36.

| Year.     | Chains. | Chain Stores (average number). | Value of Sales. | Year.     | Chains. | Chain Stores (average number). | Value of Sales.          |
|-----------|---------|--------------------------------|-----------------|-----------|---------|--------------------------------|--------------------------|
|           | No.     |                                | \$              |           | No.     |                                | \$                       |
| 1930..... | 518     | 8,097                          | 487,336,000     | 1934..... | 445     | 7,804                          | 347,186,100 <sup>1</sup> |
| 1931..... | 506     | 8,188                          | 434,199,700     | 1935..... | 445     | 7,666                          | 364,129,800              |
| 1932..... | 486     | 8,066                          | 360,806,200     | 1936..... | 457     | 7,588                          | 394,935,000              |
| 1933..... | 461     | 7,900                          | 328,902,600     |           |         |                                |                          |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

**Retail Sales of New Motor Vehicles in Canada.**—Statistics on new motor vehicle sales in Canada are collected monthly from Canadian manufacturers and assemblers, and from manufacturers in the United States of vehicles made for sale in this country. Number of units sold and retail value of sales are both reported. The retail value is the price paid by an individual purchaser at the Canadian point of manufacture and includes sales and excise taxes, charges for standard accessories, dealers' commissions, etc. Freight charges from factory to place of purchase are excluded. Duty is included in the retail value of sales of imported cars.

Sales in 1937 were up 27.1 p.c. in number and 26.3 p.c. in value over the preceding year. More than three times as many new vehicles were sold in 1937 as in 1933 when the lowest point was reached. Passenger model sales registered increases of 23.7 p.c. in number and 22.3 p.c. in value over 1936, while the improvement for commercial vehicles was even greater, resulting in increases of 42.0 p.c. in number and 43.2 p.c. in value over the preceding year.

### 35.—Retail Sales of New Motor Vehicles in Canada, calendar years, 1932-37, with Total Value for 1930.

NOTE.—The first year for which details are available is 1932. The total for 1930 was secured in connection with the Census of Merchandising and Service Establishments.

| Year.                   | Passenger Cars. |             | Trucks and Buses. |            | Totals. |             |
|-------------------------|-----------------|-------------|-------------------|------------|---------|-------------|
|                         | Number.         | Value.      | Number.           | Value.     | Number. | Value.      |
|                         |                 | \$          |                   | \$         |         | \$          |
| 1930.....               | 1               | —           | 1                 | —          | 1       | 122,165,000 |
| 1932.....               | 38,621          | 38,019,015  | 7,249             | 6,341,727  | 45,870  | 45,260,742  |
| 1933.....               | 39,568          | 39,692,630  | 5,764             | 5,757,000  | 45,332  | 45,450,230  |
| 1934.....               | 61,503          | 63,506,402  | 11,855            | 12,219,059 | 73,358  | 75,785,461  |
| 1935.....               | 83,242          | 83,429,114  | 18,219            | 18,313,335 | 101,461 | 101,742,449 |
| 1936 <sup>1</sup> ..... | 92,287          | 95,403,199  | 21,027            | 22,179,597 | 113,314 | 117,582,796 |
| 1937 <sup>2</sup> ..... | 114,153         | 116,714,488 | 29,867            | 31,771,731 | 144,020 | 148,486,219 |

<sup>1</sup> Not available.  
revision.

<sup>2</sup> Revised since the publication of the 1937 Year Book.

<sup>3</sup> Subject to

**Financing of Motor Vehicle Sales in Canada.**—Financing corporations play an important part in the retail distribution of both new and used motor vehicles in Canada. They extend credit facilities to customers who could not enter the market if required to pay with cash and to others who, though in a position to pay cash, find it more convenient to budget their expenditures on the instalment basis. They also provide a service to the motor dealers by assuming the risks and inconveniences connected with instalment sales, thus permitting the dealers to operate on a smaller capital outlay than would otherwise be necessary.

Statistics on financing are compiled monthly from returns secured from all large finance companies in Canada which are engaged in purchasing accounts, contracts or notes arising out of retail sales of motor vehicles. Aggregates of the monthly data show that sales of 176,387 motor vehicles (including both new and used models) were financed to the extent of \$75,486,464 in 1937. These figures reveal increases of 28.3 p.c. in number and 37.6 p.c. in amount over the 137,514 vehicles which were financed for \$54,859,812 in 1936. New vehicles numbering 55,949 were financed for \$40,538,414 or an average of \$725 each. There were also 120,438 used vehicles whose sales were financed to the extent of \$34,948,050 or for \$290 each.

A comparison of sales and financing of new motor vehicles is shown in Table 36; 38.8 p.c. of all new motor vehicle sales in Canada in 1937 passed through the hands of financing corporations. The corresponding amount of financing amounted to 27.3 p.c. of the total selling value of all new models. Total sales of used vehicles not being available, a similar comparison for these types cannot be made.

### 36.—Comparison of Sales and Financing of New Motor Vehicles in Canada, 1932-37.

| Year.                   | New Vehicles Sold. |               | New Vehicles Financed. |                         |            |                          |
|-------------------------|--------------------|---------------|------------------------|-------------------------|------------|--------------------------|
|                         | Number of Units.   | Retail Value. | Units.                 |                         | Financing. |                          |
|                         |                    |               | Number.                | Per cent of Total Sold. | Amount.    | Per cent of Total Sales. |
|                         |                    | \$            |                        |                         | \$         |                          |
| 1932.....               | 45,870             | 45,260,742    | 21,293                 | 46.4                    | 12,741,179 | 28.2                     |
| 1933.....               | 45,332             | 45,450,230    | 15,880                 | 35.0                    | 10,030,368 | 22.1                     |
| 1934.....               | 73,358             | 75,785,461    | 23,264                 | 31.7                    | 16,364,735 | 21.6                     |
| 1935.....               | 101,461            | 101,742,449   | 31,950                 | 31.5                    | 22,410,650 | 22.0                     |
| 1936 <sup>1</sup> ..... | 113,314            | 117,582,796   | 42,863                 | 37.8                    | 29,887,861 | 25.4                     |
| 1937 <sup>2</sup> ..... | 144,020            | 148,486,219   | 55,949                 | 38.8                    | 40,538,414 | 27.3                     |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

<sup>2</sup> Subject to revision.



**Monthly Indexes of Retail Sales.**—In recent years the Dominion Bureau of Statistics has published monthly indexes of the dollar value of retail sales based upon reports received from department stores, from chain organizations and from a number of independent firms operating in thirteen lines of business. While these reports cover only a part of the field and relate mainly to the business of department and chain stores, they embrace a sufficiently large number of stores to provide a fairly accurate indication of the current movements in retail sales for the kinds of business which are included.

Two sets of figures are shown for the general indexes of retail trade in Table 37; in the first set no adjustments have been made, while in the second, corrections are incorporated to allow for the variations in number of business days and for seasonal influences. This general index of retail sales shows that the low point in retail trade was reached in the early part of 1933. Since that time there has been a gradual improvement in the dollar volume of sales. It has already been pointed out in connection with the annual merchandising figures that the dollar value of retail sales is greatly affected by changes in price levels. This factor should be borne in mind when considering the monthly indexes of retail sales.

A comparison of the unadjusted indexes of retail sales based upon the aggregate monthly figures of the reporting firms reveals wide seasonal swings in most lines of retail business. In general, retail sales are lowest in January and February and are highest for the year in December. A secondary peak in the spring months is followed by a recession during July and August which brings the level of trade almost to the low point of January and February. Seasonal swings are not similar in extent or timing for all lines of business. The variations are least for businesses such as drug stores, grocery and meat stores, and restaurants, whereas clothing, shoe, radio and music, hardware, and furniture stores show the greatest seasonal fluctuations. (See Table 38.)

The indexes of retail sales for the individual lines of business mentioned in Table 38 are corrected to allow both for variations in the number of business days in different months and for usual seasonal influences.

### 37.—Index Numbers of Retail Sales Based on Monthly Reports of Department and Chain Stores, by Months, 1929, 1930, and 1933-37.

NOTE.—The general indexes are composite figures secured by weighting the indexes of sales for the thirteen kinds of business in proportion to their relative position in the total trade.

(Average for 1930=100.)

| Month.          | Unadjusted Indexes. |       |       |       |       |       |                    | Adjusted Indexes. |       |       |       |       |       |                    |
|-----------------|---------------------|-------|-------|-------|-------|-------|--------------------|-------------------|-------|-------|-------|-------|-------|--------------------|
|                 | 1929.               | 1930. | 1933. | 1934. | 1935. | 1936. | 1937. <sup>1</sup> | 1929.             | 1930. | 1933. | 1934. | 1935. | 1936. | 1937. <sup>1</sup> |
| Jan.....        | 94.7                | 93.7  | 54.7  | 57.7  | 57.8  | 58.5  | 62.8               | 111.8             | 110.0 | 66.9  | 68.5  | 68.3  | 68.6  | 73.8               |
| Feb.....        | 91.4                | 89.8  | 51.9  | 56.2  | 56.4  | 60.2  | 61.6               | 112.2             | 109.5 | 63.7  | 68.9  | 69.2  | 68.7  | 75.5               |
| Mar.....        | 110.0               | 94.7  | 62.1  | 69.3  | 64.9  | 64.5  | 73.3               | 111.0             | 102.7 | 66.9  | 67.6  | 69.6  | 71.0  | 75.3               |
| April.....      | 109.8               | 107.8 | 67.6  | 67.4  | 73.0  | 73.0  | 79.5               | 110.2             | 102.4 | 63.7  | 69.6  | 69.6  | 70.3  | 78.5               |
| May.....        | 115.2               | 109.1 | 70.9  | 75.1  | 72.3  | 77.2  | 83.4               | 108.8             | 102.3 | 67.6  | 71.3  | 68.3  | 72.2  | 78.6               |
| June.....       | 111.1               | 97.4  | 69.1  | 72.6  | 72.0  | 73.9  | 82.0               | 109.2             | 99.6  | 68.6  | 68.7  | 70.8  | 73.4  | 81.1               |
| July.....       | 103.2               | 90.3  | 59.1  | 60.5  | 62.5  | 65.6  | 74.0               | 114.3             | 99.6  | 67.4  | 69.1  | 69.3  | 71.9  | 78.3               |
| Aug.....        | 107.3               | 90.2  | 61.3  | 63.4  | 65.3  | 67.1  | 68.8               | 114.4             | 99.2  | 68.2  | 69.9  | 69.6  | 74.6  | 79.2               |
| Sept.....       | 106.7               | 97.3  | 69.9  | 69.7  | 69.6  | 75.2  | 81.1               | 114.2             | 98.2  | 67.3  | 69.8  | 72.5  | 75.6  | 81.2               |
| Oct.....        | 129.7               | 107.8 | 73.7  | 77.7  | 80.9  | 87.5  | 90.2               | 114.3             | 96.8  | 68.9  | 70.5  | 73.0  | 75.8  | 80.6               |
| Nov.....        | 119.7               | 98.6  | 71.4  | 74.9  | 80.1  | 77.6  | 83.9               | 108.3             | 92.5  | 67.0  | 69.9  | 72.5  | 75.6  | 79.3               |
| Dec.....        | 130.1               | 126.3 | 89.4  | 96.1  | 98.9  | 107.8 | 116.3              | 107.8             | 95.1  | 66.0  | 71.7  | 76.8  | 80.9  | 89.2               |
| Annual Averages | 111.5               | 100.0 | 66.8  | 70.1  | 71.1  | 74.0  | 79.7               | 111.4             | 100.4 | 66.9  | 69.6  | 70.8  | 73.2  | 79.2               |

<sup>1</sup> Subject to revision.

## 38.—Adjusted Index Numbers of Retail Sales Based on Monthly Reports of Department and Chain Stores, by Kinds of Business, January, 1935, to December, 1937.

NOTE.—The indexes are compiled from the returns of 36 departmental organizations and 165 chain companies operating more than 2,300 stores and a number of independents in those lines of business whose chains are of minor importance. The indexes are adjusted for variations in number of stores operated, for number of business days in each month, and for seasonal variations.

(Average for 1930=100.)

| Year and Month.       | Boots and Shoes. | Candy.      | Cltg. Men's. | Cltg. Women's. | De- part- ment. | Drugs.      | Dyers and Clnrs. | Fur- ni- ture. | Groce. and Meats. | Hard- ware. <sup>1</sup> | Music and Radio. | Restau- rants. | Vari- ety.  |
|-----------------------|------------------|-------------|--------------|----------------|-----------------|-------------|------------------|----------------|-------------------|--------------------------|------------------|----------------|-------------|
| <b>1935.</b>          |                  |             |              |                |                 |             |                  |                |                   |                          |                  |                |             |
| Jan.....              | 66-5             | 52-5        | 67-6         | 55-3           | 66-7            | 73-6        | 71-6             | 65-7           | 73-4              | 67-0                     | 44-2             | 51-7           | 79-5        |
| Feb.....              | 60-4             | 65-5        | 67-8         | 61-5           | 69-0            | 73-9        | 68-1             | 71-3           | 73-2              | 68-7                     | 44-4             | 50-8           | 83-1        |
| Mar.....              | 77-9             | 59-2        | 64-2         | 63-9           | 67-1            | 74-1        | 70-0             | 60-2           | 72-9              | 69-0                     | 47-8             | 52-0           | 80-6        |
| Apr.....              | 73-0             | 62-2        | 65-0         | 59-7           | 72-7            | 73-8        | 70-3             | 71-2           | 73-0              | 72-6                     | 45-0             | 50-9           | 87-0        |
| May.....              | 69-2             | 61-0        | 60-8         | 55-2           | 68-2            | 73-3        | 73-7             | 65-9           | 70-5              | 67-4                     | 48-8             | 50-8           | 76-6        |
| June.....             | 80-1             | 61-0        | 63-5         | 56-5           | 75-1            | 70-6        | 82-9             | 69-9           | 68-9              | 71-1                     | 43-5             | 50-2           | 83-6        |
| July.....             | 69-2             | 51-5        | 67-0         | 60-5           | 68-6            | 72-5        | 77-9             | 70-4           | 71-8              | 71-9                     | 40-4             | 48-8           | 83-3        |
| Aug.....              | 68-9             | 56-6        | 65-6         | 60-6           | 70-8            | 72-2        | 75-4             | 71-5           | 70-2              | 72-0                     | 44-0             | 50-0           | 83-3        |
| Sept.....             | 75-3             | 59-6        | 68-8         | 61-5           | 73-4            | 74-1        | 73-2             | 71-0           | 73-9              | 72-2                     | 40-8             | 51-9           | 85-5        |
| Oct.....              | 71-2             | 59-8        | 68-9         | 62-6           | 72-7            | 73-6        | 75-1             | 70-2           | 75-4              | 71-2                     | 48-0             | 53-3           | 83-9        |
| Nov.....              | 69-4             | 58-0        | 70-9         | 63-5           | 75-4            | 75-7        | 77-0             | 74-4           | 70-8              | 71-4                     | 46-2             | 51-7           | 85-2        |
| Dec.....              | 85-8             | 64-3        | 81-6         | 68-4           | 78-7            | 77-5        | 75-1             | 75-8           | 78-4              | 72-8                     | 44-0             | 54-3           | 91-7        |
| <b>Averages, 1935</b> | <b>73-2</b>      | <b>59-3</b> | <b>67-7</b>  | <b>60-8</b>    | <b>71-5</b>     | <b>73-7</b> | <b>74-2</b>      | <b>71-1</b>    | <b>72-7</b>       | <b>70-7</b>              | <b>44-8</b>      | <b>51-7</b>    | <b>83-6</b> |
| <b>1936.</b>          |                  |             |              |                |                 |             |                  |                |                   |                          |                  |                |             |
| Jan.....              | 61-7             | 58-6        | 70-6         | 57-0           | 65-9            | 73-8        | 71-8             | 70-3           | 76-5              | 68-3                     | 51-4             | 53-0           | 79-6        |
| Feb.....              | 62-8             | 66-8        | 65-9         | 59-7           | 68-5            | 74-6        | 71-3             | 71-1           | 73-1              | 69-0                     | 47-7             | 53-0           | 79-8        |
| Mar.....              | 79-1             | 57-2        | 67-0         | 60-3           | 72-0            | 73-5        | 70-7             | 70-6           | 78-3              | 74-2                     | 44-1             | 54-0           | 81-8        |
| Apr.....              | 73-8             | 65-5        | 64-3         | 63-4           | 69-8            | 75-9        | 84-8             | 75-5           | 72-4              | 75-0                     | 46-7             | 51-9           | 90-5        |
| May.....              | 84-1             | 58-2        | 66-0         | 60-1           | 73-8            | 75-1        | 86-3             | 74-8           | 70-9              | 75-4                     | 59-1             | 52-3           | 84-9        |
| June.....             | 80-8             | 61-0        | 63-2         | 58-9           | 75-0            | 73-1        | 80-5             | 70-2           | 75-2              | 75-7                     | 48-5             | 52-6           | 90-9        |
| July.....             | 67-9             | 57-7        | 62-8         | 65-3           | 71-0            | 75-6        | 82-9             | 79-3           | 74-7              | 74-3                     | 51-7             | 53-0           | 88-7        |
| Aug.....              | 68-8             | 57-3        | 65-8         | 64-2           | 70-6            | 73-5        | 78-3             | 70-9           | 77-0              | 75-6                     | 41-5             | 53-2           | 89-6        |
| Sept.....             | 73-9             | 60-4        | 75-2         | 64-0           | 77-5            | 75-3        | 73-4             | 78-3           | 77-0              | 70-0                     | 47-4             | 53-4           | 91-1        |
| Oct.....              | 75-2             | 59-8        | 77-1         | 64-2           | 77-2            | 77-8        | 72-0             | 87-0           | 75-4              | 77-8                     | 50-3             | 52-9           | 87-8        |
| Nov.....              | 79-9             | 67-5        | 77-2         | 65-8           | 76-6            | 76-5        | 84-6             | 85-0           | 77-1              | 80-9                     | 44-4             | 56-6           | 92-7        |
| Dec.....              | 79-1             | 61-0        | 86-5         | 70-9           | 82-7            | 80-4        | 88-9             | 89-5           | 83-9              | 75-7                     | 48-6             | 57-6           | 90-5        |
| <b>Averages, 1936</b> | <b>74-6</b>      | <b>60-1</b> | <b>70-1</b>  | <b>62-9</b>    | <b>74-0</b>     | <b>75-5</b> | <b>77-1</b>      | <b>78-2</b>    | <b>76-0</b>       | <b>75-2</b>              | <b>48-5</b>      | <b>53-6</b>    | <b>88-1</b> |
| <b>1937.</b>          |                  |             |              |                |                 |             |                  |                |                   |                          |                  |                |             |
| Jan.....              | 64-7             | 55-6        | 78-0         | 61-2           | 73-3            | 79-4        | 69-8             | 88-8           | 79-3              | 82-4                     | 57-1             | 55-8           | 89-4        |
| Feb.....              | 72-1             | 65-2        | 78-5         | 68-8           | 74-3            | 81-1        | 75-1             | 87-4           | 80-6              | 80-2                     | 57-9             | 57-3           | 90-3        |
| Mar.....              | 71-9             | 65-2        | 71-2         | 65-7           | 72-7            | 79-2        | 69-2             | 88-9           | 81-7              | 86-2                     | 56-2             | 57-8           | 96-9        |
| Apr.....              | 77-8             | 56-9        | 71-3         | 66-6           | 80-3            | 75-5        | 73-1             | 84-0           | 81-0              | 87-0                     | 62-1             | 56-2           | 89-8        |
| May.....              | 81-0             | 61-5        | 71-0         | 63-3           | 79-2            | 78-3        | 89-3             | 88-4           | 79-2              | 85-2                     | 63-8             | 53-4           | 92-2        |
| June.....             | 86-7             | 59-5        | 71-2         | 63-6           | 82-3            | 77-8        | 90-9             | 87-3           | 83-9              | 87-5                     | 61-7             | 53-9           | 98-2        |
| July.....             | 74-8             | 55-9        | 70-0         | 70-5           | 79-1            | 70-0        | 81-8             | 83-2           | 83-4              | 86-0                     | 54-0             | 53-8           | 95-9        |
| Aug.....              | 71-6             | 52-4        | 71-0         | 68-5           | 80-3            | 80-7        | 77-7             | 87-6           | 80-3              | 86-3                     | 44-3             | 54-8           | 93-1        |
| Sept.....             | 88-2             | 60-3        | 85-1         | 69-2           | 79-6            | 80-9        | 80-0             | 87-6           | 86-4              | 87-2                     | 45-6             | 54-0           | 95-4        |
| Oct.....              | 85-2             | 60-1        | 84-1         | 69-2           | 79-5            | 83-6        | 70-2             | 89-7           | 84-7              | 82-3                     | 49-2             | 55-3           | 92-0        |
| Nov.....              | 67-4             | 58-5        | 77-3         | 68-4           | 79-9            | 78-6        | 72-3             | 91-5           | 84-5              | 81-6                     | 50-0             | 58-3           | 94-1        |
| Dec.....              | 96-4             | 61-4        | 97-1         | 77-7           | 88-1            | 86-4        | 87-2             | 88-1           | 101-9             | 78-4                     | 50-4             | 55-0           | 108-3       |
| <b>Averages, 1937</b> | <b>78-1</b>      | <b>59-4</b> | <b>77-2</b>  | <b>67-6</b>    | <b>78-7</b>     | <b>80-3</b> | <b>78-3</b>      | <b>89-0</b>    | <b>84-4</b>       | <b>84-2</b>              | <b>54-6</b>      | <b>55-5</b>    | <b>94-6</b> |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

**Motion Picture Statistics.**—The motion picture has become the most popular form of public entertainment and the business of satisfying the demand for such amusement has assumed a corresponding importance. In 1930 the expenditure on motion picture entertainment (exclusive of amusement taxes) was \$3.77 per capita. By 1933, due to reduced patronage and lower prices of tickets, the per capita expenditure had dropped to \$2.33, while for 1935 the figure rose slightly to \$2.50. In 1936 there was a further increase to \$2.70.

Statistics for motion picture theatres in Canada were secured for the first time in connection with the Census of Merchandising and Service Establishments, 1931. According to the results of this census, there were 910 motion picture theatres in operation in 1930. During the depression a number of theatres were closed so that in 1933 only 765 were reported. During the following three years some recovery took place, 797 theatres being reported in operation in 1934, 862 in 1935, and 959 in 1936. Summary figures of motion picture theatres by provinces for 1930, 1935, and 1936 are given in Table 39 and the principal statistics by leading cities for 1935 and 1936 in Table 40.

**39.—Motion Picture Theatres, Employees, Salaries and Wages, and Total Receipts, by Provinces, 1930, 1935 and 1936.**

| Year and Province.                  | Theatres.  | Employees.   |              | Salaries and Wages. | Total Receipts.   |
|-------------------------------------|------------|--------------|--------------|---------------------|-------------------|
|                                     |            | Male.        | Female.      |                     |                   |
|                                     | No.        | No.          | No.          | \$                  | \$                |
| <b>1930.</b>                        |            |              |              |                     |                   |
| Prince Edward Island.....           | 5          | 16           | 21           | 28,200              | 188,300           |
| Nova Scotia.....                    | 56         | 198          | 69           | 204,400             | 1,814,500         |
| New Brunswick.....                  | 39         | 129          | 77           | 160,700             | 1,093,400         |
| Quebec.....                         | 148        | 1,126        | 290          | 1,593,600           | 8,301,800         |
| Ontario.....                        | 324        | 1,881        | 556          | 2,326,200           | 15,900,900        |
| Manitoba.....                       | 73         | 322          | 143          | 536,900             | 2,712,800         |
| Saskatchewan.....                   | 104        | 223          | 80           | 340,400             | 1,977,300         |
| Alberta.....                        | 85         | 307          | 72           | 428,700             | 2,323,700         |
| British Columbia <sup>1</sup> ..... | 76         | 439          | 185          | 827,600             | 4,166,800         |
| <b>Canada.....</b>                  | <b>910</b> | <b>4,641</b> | <b>1,562</b> | <b>6,946,700</b>    | <b>38,479,500</b> |
| <b>1935.<sup>2</sup></b>            |            |              |              |                     |                   |
| Prince Edward Island.....           | 4          | 13           | 10           | 10,100              | 90,900            |
| Nova Scotia.....                    | 50         | 202          | 78           | 178,300             | 1,100,200         |
| New Brunswick.....                  | 32         | 129          | 55           | 113,500             | 704,200           |
| Quebec.....                         | 141        | 960          | 292          | 878,800             | 5,840,700         |
| Ontario.....                        | 303        | 1,887        | 505          | 2,088,000           | 11,717,100        |
| Manitoba.....                       | 71         | 327          | 167          | 347,400             | 1,935,500         |
| Saskatchewan.....                   | 86         | 246          | 55           | 215,200             | 1,152,800         |
| Alberta.....                        | 81         | 322          | 65           | 326,700             | 1,680,300         |
| British Columbia <sup>1</sup> ..... | 94         | 479          | 242          | 660,500             | 3,100,800         |
| <b>Canada.....</b>                  | <b>862</b> | <b>4,565</b> | <b>1,469</b> | <b>4,766,500</b>    | <b>27,272,500</b> |
| <b>1936.<sup>3</sup></b>            |            |              |              |                     |                   |
| Prince Edward Island.....           | 4          | 14           | 9            | 11,100              | 103,200           |
| Nova Scotia.....                    | 55         | 241          | 86           | 196,800             | 1,217,600         |
| New Brunswick.....                  | 34         | 133          | 59           | 115,300             | 775,400           |
| Quebec.....                         | 154        | 1,012        | 300          | 842,100             | 6,245,200         |
| Ontario.....                        | 325        | 2,101        | 520          | 2,154,800           | 12,888,400        |
| Manitoba.....                       | 77         | 333          | 176          | 334,900             | 2,007,100         |
| Saskatchewan.....                   | 123        | 296          | 86           | 220,800             | 1,369,300         |
| Alberta.....                        | 87         | 332          | 68           | 347,900             | 1,784,100         |
| British Columbia <sup>1</sup> ..... | 100        | 499          | 254          | 699,000             | 3,270,000         |
| <b>Canada.....</b>                  | <b>959</b> | <b>4,961</b> | <b>1,558</b> | <b>4,928,700</b>    | <b>29,610,300</b> |

<sup>1</sup> Includes Yukon and Northwest Territories.  
Book.

<sup>2</sup> Subject to revision.

<sup>3</sup> Revised since the publication of the 1937 Year

## 40.—Principal Statistics for Motion Picture Theatres, by Provinces and Cities, 1935 and 1936.

Note.—Figures for 1936 are subject to revision.

| Province and City.                          | Theatres.          |            | Seating Capacity, 1936. | Receipts. <sup>1</sup> |                   | Percentage Change. | Admissions, 1936. |                             |
|---|--------------------|------------|-------------------------|------------------------|-------------------|--------------------|-------------------|-----------------------------|
|   | 1935. <sup>2</sup> | 1936.      |                         | 1935. <sup>2</sup>     | 1936.             |                    | Number.           | Average Price. <sup>3</sup> |
|   | No.                | No.        | No.                     | \$                     | \$                | p.c.               | '000              | cts.                        |
| <b>Prince Edward Island.....</b>            | 4                  | 4          | 2,148                   | 90,900                 | 103,200           | +13.5              | 378               | 27.3                        |
| <b>Nova Scotia.</b>                         |                    |            |                         |                        |                   |                    |                   |                             |
| Halifax.....                                | 7                  | 7          | 6,424                   | 395,900                | 404,000           | + 2.0              | 1,953             | 20.6                        |
| Other places.....                           | 43                 | 43         | 23,605                  | 813,609                | 813,609           | +15.5              | 3,621             | 22.5                        |
| <b>Totals, Nova Scotia.....</b>             | <b>50</b>          | <b>55</b>  | <b>30,029</b>           | <b>1,100,200</b>       | <b>1,217,600</b>  | <b>+10.7</b>       | <b>5,579</b>      | <b>21.8</b>                 |
| <b>New Brunswick.</b>                       |                    |            |                         |                        |                   |                    |                   |                             |
| Saint John.....                             | 7                  | 7          | 6,164                   | 299,100                | 312,900           | + 4.6              | 1,631             | 19.2                        |
| Other places.....                           | 25                 | 27         | 11,621                  | 405,100                | 462,500           | +14.2              | 1,975             | 23.4                        |
| <b>Totals, New Brunswick..</b>              | <b>32</b>          | <b>34</b>  | <b>17,785</b>           | <b>704,200</b>         | <b>775,400</b>    | <b>+10.1</b>       | <b>3,606</b>      | <b>21.5</b>                 |
| <b>Quebec.</b>                              |                    |            |                         |                        |                   |                    |                   |                             |
| Montreal <sup>4</sup> .....                 | 62                 | 62         | 66,215                  | 4,556,100              | 4,797,300         | + 5.3              | 22,007            | 21.9                        |
| Quebec.....                                 | 11                 | 11         | 8,464                   | 436,800                | 438,900           | + 0.5              | 2,233             | 19.8                        |
| Three Rivers.....                           | 4                  | 4          | 3,235                   | 103,400                | 119,000           | +15.1              | 519               | 22.9                        |
| Other places.....                           | 64                 | 77         | 29,001                  | 744,600                | 890,000           | +19.5              | 3,360             | 20.5                        |
| <b>Totals, Quebec.....</b>                  | <b>141</b>         | <b>154</b> | <b>107,815</b>          | <b>5,840,700</b>       | <b>6,245,200</b>  | <b>+ 6.9</b>       | <b>28,104</b>     | <b>22.2</b>                 |
| <b>Ontario.</b>                             |                    |            |                         |                        |                   |                    |                   |                             |
| Toronto.....                                | 95                 | 102        | 83,545                  | 4,772,000              | 5,193,300         | + 8.9              | 22,301            | 23.3                        |
| Hamilton.....                               | 13                 | 13         | 16,690                  | 821,800                | 885,000           | + 7.7              | 4,194             | 21.1                        |
| Ottawa.....                                 | 12                 | 12         | 11,768                  | 837,100                | 888,000           | + 6.2              | 3,923             | 22.7                        |
| London.....                                 | 6                  | 7          | 7,543                   | 443,600                | 467,400           | + 5.4              | 1,692             | 27.6                        |
| Windsor <sup>5</sup> .....                  | 3                  | 8          | 5,154                   | 365,800                | 409,300           | +11.0              | 1,836             | 23.9                        |
| Other places.....                           | 166                | 178        | 100,882                 | 4,476,800              | 5,039,800         | +12.6              | 20,038            | 25.2                        |
| <b>Totals, Ontario.....</b>                 | <b>303</b>         | <b>325</b> | <b>228,287</b>          | <b>11,717,100</b>      | <b>12,888,400</b> | <b>+10.0</b>       | <b>53,974</b>     | <b>23.9</b>                 |
| <b>Manitoba.</b>                            |                    |            |                         |                        |                   |                    |                   |                             |
| Winnipeg.....                               | 30                 | 32         | 26,506                  | 1,593,100              | 1,592,000         | - 0.1              | 7,205             | 22.0                        |
| Other places.....                           | 41                 | 45         | 15,935                  | 342,400                | 415,100           | +21.2              | 1,836             | 22.0                        |
| <b>Totals, Manitoba.....</b>                | <b>71</b>          | <b>77</b>  | <b>42,441</b>           | <b>1,935,500</b>       | <b>2,007,100</b>  | <b>+ 3.7</b>       | <b>9,091</b>      | <b>22.1</b>                 |
| <b>Saskatchewan.</b>                        |                    |            |                         |                        |                   |                    |                   |                             |
| Regina.....                                 | 5                  | 5          | 4,421                   | 318,000                | 352,000           | +10.7              | 1,331             | 26.4                        |
| Saskatoon.....                              | 6                  | 6          | 4,302                   | 271,000                | 295,000           | + 9.1              | 1,304             | 23.7                        |
| Moose Jaw.....                              | 3                  | 4          | 2,473                   | 116,000                | 133,700           | +16.3              | 523               | 23.9                        |
| Other places.....                           | 72                 | 109        | 31,491                  | 448,800                | 588,000           | +31.1              | 2,217             | 26.5                        |
| <b>Totals, Saskatchewan...</b>              | <b>86</b>          | <b>123</b> | <b>42,686</b>           | <b>1,152,800</b>       | <b>1,369,300</b>  | <b>+18.8</b>       | <b>5,411</b>      | <b>25.3</b>                 |
| <b>Alberta.</b>                             |                    |            |                         |                        |                   |                    |                   |                             |
| Calgary.....                                | 9                  | 10         | 8,597                   | 528,300                | 557,900           | + 5.6              | 2,135             | 25.5                        |
| Edmonton.....                               | 8                  | 8          | 6,553                   | 590,900                | 607,000           | + 2.7              | 2,419             | 25.1                        |
| Other places.....                           | 64                 | 69         | 20,756                  | 511,100                | 569,200           | +11.4              | 2,135             | 26.7                        |
| <b>Totals, Alberta.....</b>                 | <b>81</b>          | <b>87</b>  | <b>35,906</b>           | <b>1,630,300</b>       | <b>1,734,100</b>  | <b>+ 6.4</b>       | <b>6,739</b>      | <b>25.7</b>                 |
| <b>British Columbia.</b>                    |                    |            |                         |                        |                   |                    |                   |                             |
| Vancouver.....                              | 31                 | 31         | 29,426                  | 1,765,000              | 1,850,100         | + 4.8              | 8,950             | 20.7                        |
| Victoria.....                               | 6                  | 5          | 4,817                   | 359,200                | 389,800           | + 8.6              | 1,504             | 22.6                        |
| Other places <sup>6</sup> .....             | 57                 | 64         | 24,361                  | 976,600                | 1,080,800         | +20.9              | 4,105             | 28.8                        |
| <b>Totals, British Columbia<sup>7</sup></b> | <b>94</b>          | <b>100</b> | <b>59,104</b>           | <b>3,100,800</b>       | <b>3,270,000</b>  | <b>+ 5.5</b>       | <b>14,559</b>     | <b>23.5</b>                 |
| <b>Canada.....</b>                          | <b>862</b>         | <b>959</b> | <b>566,201</b>          | <b>27,272,500</b>      | <b>29,610,300</b> | <b>+ 8.6</b>       | <b>127,441</b>    | <b>23.2</b>                 |

<sup>1</sup> Not including amusement taxes.<sup>2</sup> Revised since the publication of the 1937 Year Book.<sup>3</sup> Total receipts divided by number of admissions. No corrections are made for juvenile attendance, matinee, and evening prices, etc.<sup>4</sup> Includes Lachine, Verdun, Westmount, and Outremont.<sup>5</sup> New limits.<sup>6</sup> Includes Yukon and Northwest Territories.

### Section 10.—Control and Sale of Alcoholic Liquors and Beverages in Canada.\*

During the years 1916 and 1917, as a war policy, legislation prohibiting the sale of alcoholic liquors, except for medicinal and scientific purposes, was passed in all the provinces except Quebec, where similar legislation was passed in 1919. The prohibition extended to the sale of beer and wine except in Quebec. Native wine, however, could be sold in Ontario.

In aid of provincial legislation prohibiting or restricting the sale of intoxicating liquors, the Dominion Government, in 1916, passed a law making it an offence to send intoxicating liquors into any province to be dealt in contrary to the law of that province. In 1919 this Act was changed to read that "on the request of the Legislative Assembly of a province a vote would be taken on the question that the importation and the bringing of intoxicating liquors into such province be forbidden". If the majority of those voting were found to be in favour of such prohibition, the Governor in Council was to declare it in force.

After the War the provinces continued under prohibition for varying periods. Plebiscites were taken from time to time to ascertain the will of the electorate as to whether the policy of prohibition, adopted as an emergency war measure, should be continued. During 1921 Quebec and British Columbia discarded the existing prohibition laws and adopted the policy of liquor sale under government control. The same course was followed by Manitoba in 1923, Alberta in 1924, Saskatchewan in 1925, Ontario and New Brunswick in 1927, and Nova Scotia in 1930. Thus Prince Edward Island is the only province still adhering to a policy of prohibition.

The provincial Liquor Control Acts have been framed to conform to conditions peculiar to the regions where they are in force and no two are exactly alike. The salient feature of all is the establishment of a provincial monopoly of the retail sale of alcoholic beverages, with the practical elimination of private profit therefrom. Partial exception is made in the retail sale of malt liquor by brewers, which certain provinces permit while reserving regulative rights and taxing such sales heavily. In all the provinces, however, spirits may be bought only at government liquor stores. The provincial monopoly extends only to the retail sale of alcoholic beverages, the manufacture being still in private hands but under the supervision of the Liquor Boards or Commissions. The original Liquor Control Acts have been modified from time to time as deemed advisable. Brief summaries of the legislation are given in the Bureau's annual report on the Control and Sale of Liquor.

**Retail Sales by Liquor Control Boards.**—Data on gross sales, other revenue, and net profits of the provincial Liquor Boards, are tabulated in Table 41. In connection with the figures on gross sales it is essential to note that for Quebec, Manitoba, and Alberta, the sales of beer made directly by the brewers to the licensees are not included. The proceeds from such sales do not pass through the Boards, but the purchasers must pay through the brewers to the Boards a tax equal to 5 p.c. of the purchases in the case of Quebec, and 12½ cents per gallon in Manitoba. In Alberta purchasers from the brewers paid a tax of 12½ cents per gallon prior to April 1, 1932, and 15½ cents per gallon thereafter to April 1, 1936.† For Manitoba and Alberta, it is possible to calculate from the taxes the gallonage of beer sold but the corresponding values are not available. For Quebec, the quantity and value of sales are published by the Liquor Commission, as shown in the footnote to Table 41.

\*Abridged from the report "The Control and Sale of Liquor in Canada", by Miss L. J. Beehler, M.A., published by the Dominion Bureau of Statistics.

†An amendment to the Alberta Liquor Control Act passed at the 1936 session of the Legislature provides that "brewers who manufacture beer in Alberta may sell only to the Liquor Board". All sales, both to beer licensees and to permit holders, are made only through the Board. Under the new arrangement the gallonage tax is no longer levied.

Further, it should be pointed out that the values as given do not represent the sales values to the final consumers as, in most provinces, the sale of beer by the glass is permissible. Of course, all the liquor sold in any province is not consumed by the residents of that province. The tourist traffic is a very important factor in this connection.

All the revenue resulting from the Liquor Control Acts is not paid to the Liquor Boards. In certain provinces, permit fees are paid directly to the governments and do not pass through the Boards. Table 41 further indicates the total revenue accruing to the governments through the control of liquor sales.

The reports of the Boards do not in all cases show the quantities of liquors sold; in comparing values for a series of years or between provinces it should be borne in mind that price variations may be an important factor.

**Apparent Consumption of Liquor in Canada.**—It is not possible to obtain accurate figures on Canadian consumption of liquor. Except in Nova Scotia, Quebec, Ontario, and Alberta, the Liquor Boards do not publish figures to show sales on a gallonage basis, and even were such data on quantity sales available for all provinces they would not necessarily represent total consumption. For example, our great tourist traffic must be considered, for it is likely that the quantities consumed by tourists reach a considerable amount. Further, there is no definite information regarding the illegal traffic in liquor, though inquiry has revealed that such illicit business has reached fairly large proportions.

In Tables 42, 43 and 44 an attempt has been made to indicate separately the apparent consumption in Canada of spirits, malt liquors, and wines. Obviously, these computations are subject to error for the reasons mentioned above, and also because no consideration has been given to increases or decreases in the quantities held in stock by the Boards or by licensees. For example, owing to exceptionally favourable conditions abroad, the Liquor Boards may in certain years buy heavily to replenish stocks or create reserves; such purchases would unduly weight the apparent consumption figures for these years. The figures in these tables have been arrived at as follows:—

**Spirits.**—Practically the total production of spirits is placed in bonded warehouses whence it is released for various purposes. The quantities shown as "entered for consumption" are released from warehouse, duty paid, presumably for consumption for beverage purposes in Canada. However, part of these may be exported. The supply of spirits available in Canada for home consumption or for export must be the sum of the quantities shown under (a) entered for consumption; (b) imports; and (c) exports in bond, and if the total domestic exports and re-exports of imported goods are deducted from this figure the remainder indicates the apparent consumption in Canada.

**Malt Liquors.**—Only a small part of the output of malt liquors is placed in warehouses. The available supply is, therefore, made up of (a) production; (b) changes in warehouse stock; and (c) imports. By deducting the domestic exports and re-exports of imported goods from this total supply, it is possible to obtain a figure to show the apparent consumption in Canada.

**Wines.**—The apparent consumption of native wines is obtained by dividing the rates of excise tax into the total tax collections. This is believed to furnish a better measure of consumption than the method formerly used, i.e., to subtract the exports from the production, since part of the product is not consumed in the year of production but is placed in storage for maturing. The apparent consumption of imported wines is arrived at by deducting from the imports into Canada, the re-exports of foreign supplies.

#### 41.—Gross Sales and Net Profits of Liquor Control Boards, Additional Revenues Paid Directly to Governments, and Total Net Revenue from Liquor Control, 1934-36.

NOTE.—For Quebec, Manitoba and Alberta gross sales do not include beer sold direct by the brewers to the licensees.

| Province.                                      | Year.                        | Receipts by Liquor Control Boards or Commissions. |                         |              | Additional Amounts for Permits, etc., Paid Direct to Provincial Governments. | Total Net Revenue from Liquor Control. |
|--|------------------------------|---|-------------------------|--------------|--|--|
|  |                              | Gross Sales.                                      | Other Revenue.          | Net Profits. |  |  |
|  |                              | \$  | \$                      | \$           | \$   | \$                                     |
| Nova Scotia—year ended Sept. 30...             | 1934                         | 2,918,612   | 8,419                   | 360,343      | 25,007   | 304,350                                |
|  | 14 months ended Nov. 30..... | 1935  | 3,806,835               | 9,025        | 25,858 <sup>1</sup>  | 697,243                                |
|  | Year ended Nov. 30.....      | 1936  | 3,831,601               | 9,314        | 25,394 <sup>2</sup>  | 998,087                                |
| New Brunswick—year ended Oct. 31               | 1934                         | 2,296,139   | 18,232                  | 557,573      | Nil  | 557,573                                |
|  | 1935                         | 2,375,961   | 17,756                  | 600,762      | Nil  | 600,762                                |
|  | 1936                         | 2,695,859   | 19,823                  | 782,742      | Nil  | 782,742                                |
| Quebec <sup>3</sup> —year ended April 30.....  | 1934                         | 11,370,604  | 1,236,139               | 5,339,536    | Nil  | 5,339,536                              |
|  | 1935                         | 11,688,510  | 1,077,330               | 6,209,100    | Nil  | 6,209,100                              |
|  | 1936                         | 12,098,163  | 1,764,770               | 4,868,400    | Nil  | 4,868,400                              |
| Ontario—year ended Oct. 31.....                | 1934                         | 27,752,675 <sup>4</sup>                           | 1,563,553               | 5,943,803    | 435,043  | 6,378,846                              |
|  | Nov. 1—Mar. 31.....          | 1935  | 8,110,589 <sup>4</sup>  | 920,686      | 2,595,881  | 2,803,292                              |
|  | Year ended Mar. 31.....      | 1936  | 18,530,658 <sup>4</sup> | 2,926,803    | 7,862,719  | 8,139,516                              |
| Manitoba <sup>7</sup> —year ended April 30.... | 1934                         | 3,767,362   | 442,710                 | 992,068      | Nil  | 992,068                                |
|  | 1935                         | 4,208,701   | 472,991                 | 1,056,028    | Nil  | 1,056,028                              |
|  | 1936                         | 4,539,094   | 494,108                 | 1,293,288    | Nil  | 1,293,288                              |
| Saskatchewan—year ended Mar. 31..              | 1934                         | 4,833,511   | 14,442                  | 918,927      | 1,242  | 920,169                                |
|  | 1935                         | 5,203,564   | 16,290                  | 1,027,573    | 1,386  | 1,028,959                              |
|  | 1936                         | 5,735,355   | 88,662                  | 1,278,731    | 1,614  | 1,280,345                              |
| Alberta <sup>7</sup> —year ended Mar. 31.....  | 1934                         | 2,697,855   | 475,013                 | 1,177,870    | 91,605   | 1,269,475                              |
|  | 1935                         | 3,224,145   | 596,815                 | 1,480,365    | 37,434   | 1,537,799                              |
|  | 1936                         | 3,726,060   | 612,027                 | 1,802,206    | 52,532   | 1,854,732                              |
| British Columbia—year ended Mar. 31.....       | 1934                         | 9,262,102   | 123,264                 | 2,270,396    | 43,949   | 2,314,345                              |
|  | 1935                         | 10,195,035  | 134,860                 | 2,448,042    | 39,301   | 2,487,343                              |
|  | 1936                         | 11,109,437  | 140,544                 | 3,015,904    | 45,925   | 3,061,829                              |

<sup>1</sup>Twelve months ended Sept. 30, 1935.

<sup>2</sup>Fourteen months ended Nov. 30, 1936.

figures on beer are published by the Quebec Liquor Commission, as follows:—

| Fiscal Year. | Beer Manufactured and Sold within the Province. |            | Beer Imported from Ontario. |           | Beer Exported from the Province. |           | Tax of 5 p.c. on Gross Sales Paid to Liquor Commission. |
|--------------|---|------------|-----------------------------|-----------|----------------------------------|-----------|---|
|              | gal.  | \$         | gal.                        | \$        | gal.                             | \$        |   |
| 1934.....    | 17,576,048                                      | 13,129,808 | 1,297,137                   | 1,010,946 | 1,294,539                        | 1,114,353 | 762,755   |
| 1935.....    | 18,288,799                                      | 13,603,405 | 1,154,871                   | 963,284   | 3,617,068                        | 3,315,035 | 894,086   |
| 1936.....    | 18,184,161                                      | 13,447,882 | 1,199,265                   | 1,055,081 | 4,158,107                        | 3,841,168 | 917,206   |

<sup>3</sup>Of this amount \$18,979,822 was sold from the liquor stores and \$8,772,854 from breweries and brewers' warehouses. In addition, sales of beer from breweries and brewers' warehouses from July 24 to October 31 totalled \$8,340,932, which amount should be taken into consideration in making comparisons with earlier years.

<sup>4</sup>In addition, sales of beer from breweries and brewers' warehouses totalled \$9,317,289, which amount should be taken into consideration in making comparisons with earlier years. Sales of domestic wine direct to customers at wineries and branch sales offices amounted to \$557,109.

<sup>5</sup>In addition, sales of beer from breweries and brewers' warehouses totalled \$29,396,420, which amount should be taken into consideration in making comparisons with earlier years. Sales of native wines direct to customers from licensed sales offices and, when permitted, from the winery premises amounted to \$1,407,933.

<sup>6</sup>In Manitoba and Alberta the value of beer sales is not given but the beer taxes paid to the Boards are tabulated below. In this connection it should be noted that the Boards also pay the beer tax on their purchases from the brewers and the beer sales of the Boards are included in the total gross sales shown above.

| Fiscal Year. | Manitoba. |              | Alberta. |    |
|--------------|-----------|--------------|----------|----|
|              | Tax.      | Accrued Tax. | Tax.     |    |
|              | \$        | \$           | \$       | \$ |
| 1934.....    | 262,479   | 42,255       | 386,634  |    |
| 1935.....    | 277,099   | 45,101       | 445,086  |    |
| 1936.....    | 280,173   | 43,239       | 459,035  |    |

## 42.—Apparent Consumption of Spirits in Canada, fiscal years ended Mar. 31, 1922-37.

| Fiscal Year. | Entered for Consumption. <sup>1</sup> | Add Exports in Bond. | Add Imports. | Deduct Re-Exports of Imported Spirits. <sup>1</sup> | Deduct Total Domestic Exports. <sup>1</sup> | Apparent Consumption. |
|--------------|---------------------------------------|----------------------|--------------|---|---|-----------------------|
|              | pt. gal.                              | pt. gal.             | pt. gal.     | pt. gal.  | pt. gal.                                    | pt. gal.              |
| 1922.....    | 730,474                               | 192,327              | 1,348,603    | 24,372  | 158,714                                     | 2,088,317             |
| 1923.....    | 729,678                               | 315,213              | 1,193,123    | 67,283  | 330,820                                     | 1,830,911             |
| 1924.....    | 899,291                               | 875,609              | 1,261,541    | 29,329  | 991,563                                     | 2,015,039             |
| 1925.....    | 1,010,316                             | 806,535              | 1,161,169    | 10,978  | 1,008,553                                   | 1,865,459             |
| 1926.....    | 1,039,735                             | 490,007              | 1,416,837    | 15,369  | 1,087,553                                   | 1,889,018             |
| 1927.....    | 1,404,111                             | 571,792              | 1,587,475    | 107,282   | 1,296,692                                   | 2,189,404             |
| 1928.....    | 1,896,357                             | 579,420              | 2,374,885    | 185,630   | 1,460,871                                   | 3,204,161             |
| 1929.....    | 2,016,502                             | 1,143,276            | 2,604,769    | 183,889   | 1,911,634                                   | 3,699,324             |
| 1930.....    | 1,926,003                             | 1,810,197            | 2,446,800    | 128,612   | 2,379,888                                   | 3,674,590             |
| 1931.....    | 1,180,536                             | 2,558,327            | 1,990,574    | 19,694  | 2,630,805                                   | 3,078,933             |
| 1932.....    | 781,612                               | 2,276,137            | 1,421,214    | 82  | 2,016,886                                   | 2,461,494             |
| 1933.....    | 759,527                               | 1,991,904            | 732,306      | 45  | 1,999,113                                   | 1,497,669             |
| 1934.....    | 933,946                               | 2,478,975            | 713,016      | 1,238   | 2,551,030                                   | 1,578,669             |
| 1935.....    | 1,063,928                             | 2,315,332            | 713,346      | 45  | 2,295,249                                   | 1,787,312             |
| 1936.....    | 1,621,286                             | 3,006,544            | 976,563      | 54  | 2,995,181                                   | 2,606,158             |
| 1937.....    | 1,900,714                             | 5,280,885            | 1,126,440    | 462   | 5,280,344                                   | 3,018,233             |

<sup>1</sup>Prior to 1933 export figures as given in the trade returns were in Imperial gallons. These were converted to proof gallons as follows: Canadian manufacture at 20 under proof; foreign origin at 25 under proof.

## 43.—Apparent Consumption of Malt Liquors, fiscal years ended Mar. 31, 1922-37.

| Fiscal Year. | Production. | Add Quantities Entered for Consumption from Warehouses. | Add Imports. | Deduct Quantities placed in Warehouses. | Deduct Exports (Domestic). | Deduct Re-Exports of Imported Goods. | Apparent Consumption. |
|--------------|-------------|---|--------------|---|----------------------------|--------------------------------------|-----------------------|
|              | gal.        | gal.  | gal.         | gal.                                    | gal.                       | gal.                                 | gal.                  |
| 1922.....    | 38,541,746  | 1,764   | 49,160       | 97,578                                  | 473,735                    | 119                                  | 38,022,238            |
| 1923.....    | 36,902,066  | 2,703   | 54,241       | 10,800                                  | 1,509,763                  | 1,736                                | 35,436,860            |
| 1924.....    | 44,080,490  | 9,789   | 96,647       | 172,674                                 | 3,192,491                  | 4,326                                | 40,817,435            |
| 1925.....    | 48,389,995  | 209,398   | 91,928       | 363,548                                 | 3,142,048                  | Nil                                  | 45,185,725            |
| 1926.....    | 52,448,853  | 344,641   | 152,255      | 394,959                                 | 3,788,164                  | Nil                                  | 48,764,596            |
| 1927.....    | 51,755,840  | 1,291,954   | 153,105      | 1,292,087                               | 4,262,583                  | 12                                   | 47,656,217            |
| 1928.....    | 58,397,913  | 1,343,986   | 234,701      | 1,326,630                               | 3,325,003                  | 333                                  | 54,825,579            |
| 1929.....    | 65,337,410  | 1,712,615   | 242,100      | 1,812,444                               | 4,110,698                  | 334                                  | 61,868,634            |
| 1930.....    | 63,450,516  | 1,738,663   | 259,003      | 1,864,625                               | 1,451,215                  | 2,117                                | 62,100,225            |
| 1931.....    | 59,073,685  | 1,831,625   | 230,995      | 1,832,803                               | 270,102                    | 4,366                                | 59,029,334            |
| 1932.....    | 52,297,431  | 1,977,892   | 195,664      | 2,020,540                               | 25,458                     | Nil                                  | 52,424,989            |
| 1933.....    | 40,664,625  | 1,491,735   | 106,587      | 1,412,309                               | 35,667                     | Nil                                  | 40,814,971            |
| 1934.....    | 40,920,623  | 974,161   | 93,002       | 1,324,494                               | 404,639                    | 12                                   | 40,258,941            |
| 1935.....    | 52,078,590  | 11,176,838  | 97,572       | 11,242,518                              | 69,994                     | 302                                  | 52,040,186            |
| 1936.....    | 57,154,948  | 875,759   | 88,551       | 974,329                                 | 61,887                     | Nil                                  | 57,063,342            |
| 1937.....    | 60,308,148  | 912,436   | 97,725       | 1,011,964                               | 112,902                    | Nil                                  | 60,193,443            |

## 44.—Apparent Consumption of Wines in Canada, fiscal years ended Mar. 31, 1922-37.

| Fiscal Year. | Native.  |           | Imported.           |                       | Apparent Consumption.<br>Native and Imported. |
|--------------|--|-----------|---------------------|-----------------------|---|
|              | Apparent Consumption<br>(Estimated from<br>Excise Tax<br>Collections). | Imports.  | Less<br>Re-Exports. | Apparent Consumption. |   |
|              |  |           |                     |                       |   |
|              | gal.   | gal.      | gal.                | gal.                  | gal.  |
| 1922.....    | 409,913  | 384,211   | 797                 | 383,414               | 793,327                                       |
| 1923.....    | 528,355  | 359,273   | 2,663               | 356,610               | 884,965                                       |
| 1924.....    | 922,715  | 598,125   | 540                 | 597,585               | 1,520,300                                     |
| 1925.....    | 806,846  | 706,717   | 753                 | 705,964               | 1,512,810                                     |
| 1926.....    | 1,182,775  | 736,311   | 1,962               | 734,349               | 1,917,124                                     |
| 1927.....    | 1,482,686  | 901,857   | 19,321              | 882,536               | 2,365,222                                     |
| 1928.....    | 2,171,887  | 1,263,438 | 132,748             | 1,130,690             | 3,302,577                                     |
| 1929.....    | 2,770,117  | 1,384,792 | 195,227             | 1,189,565             | 3,960,482                                     |
| 1930.....    | 3,020,251  | 1,365,321 | 150,054             | 1,215,265             | 5,135,526                                     |
| 1931.....    | 3,408,973  | 1,089,897 | 18,573              | 1,071,324             | 4,480,297                                     |
| 1932.....    | 3,337,556  | 900,317   | 76                  | 900,241               | 4,237,797                                     |
| 1933.....    | 2,478,387  | 684,082   | 45                  | 684,037               | 3,162,424                                     |
| 1934.....    | 2,679,619  | 623,866   | 5,783               | 518,083               | 3,197,702                                     |
| 1935.....    | 3,187,604  | 542,019   | 1,970               | 540,049               | 3,727,553                                     |
| 1936.....    | 2,005,802  | 506,707   | 61                  | 506,646               | 3,112,245                                     |
| 1937.....    | 2,683,456  | 472,584   | 173                 | 472,711               | 3,156,167                                     |



## CHAPTER XVIII.—TRANSPORTATION AND COMMUNICATIONS.

Canada is a country of continental dimensions, nearly 4,000 miles in length from east to west, with its relatively small population of 11,120,000 (estimated population as at June 1, 1937), in the main thinly distributed along the southern strip of its vast area. Different parts of the country are shut off from each other by areas of rough, rocky, forest terrain, such as the region lying between New Brunswick and Quebec, the areas north of lakes Huron and Superior, dividing the industrial region of Ontario and Quebec from the agricultural areas of the prairies and the barriers interposed by the mountains of British Columbia. To such a country with a population so distributed and producing, as do our western agriculturists, mainly for export, or, like our manufacturers, largely for consumption in distant portions of the country itself, cheap transportation is a necessity of life. Before 1850, when the water routes were the chief avenues of transportation and were closed by ice for several months each year, the business of the central portions of the country was reduced to a state of relative inactivity during the winter. The steam railway was required, therefore, for the adequate economic development of Canada, more particularly for linking up with the commercial and industrial world the vast productive areas of the Canadian West, and thus promoting their development. The construction of the Canadian Pacific railway gave to Canada, as an economic unit, length; the building of the newer transcontinental railways has given the country breadth.

Railway transportation, though essential in a country such as Canada, is nevertheless expensive for bulky and weighty commodities, and also for short distances where the cost of repeated handling amounts to more than actual transportation. For bulky freight, new enterprises have been either undertaken or are under consideration for improving water communication, such as the new and deeper Welland canal, the deepening of the St. Lawrence canals and of the channel between Montreal and Quebec, and the development of the Hudson Bay route. For freight movement over moderate distances the motor truck, operating over the growing network of improved highways, is providing an increasing proportion of the service. For inaccessible areas remote from the railways the aeroplane has established itself commercially and is a valuable addition to other transportation facilities.

In order to appraise the value of each of these agencies of transportation from this viewpoint, this chapter of the Year Book deals with the four main agencies, namely, carriers by rail, road, water, and air, in Parts II, III, IV, and V of the chapter. In each Part the arrangement is intended to show: (1) the plant, equipment, and facilities available; (2) the cost to the Canadian people; and (3) the traffic carried or services performed, in so far as statistics are available for each picture. Unfortunately this arrangement brings out some rather serious gaps in the information at present available; these are pointed out in the respective Parts.

Scarcely less important, from the social and economic viewpoints, is the development of communications in a country so vast and with population centres so scattered. The Post Office has been a great though little-recognized factor in promoting solidarity among the people of different parts of the Dominion, and this same desirable object is now being further aided by the radio, while telegraphs and telephones have done much to annihilate distance—the rural telephone, in particular, having been of great social and economic benefit in country districts. The press, again, assisted by cheap telegraph and cable rates and by low second-class mail rates

to all parts of the country, has been helpful in developing national sentiment. These means of communication are dealt with in Parts VI, VII, VIII, and IX.

Part I of this chapter includes a statement of the tendencies toward monopoly which has made it necessary to establish a measure of government control over those transportation and communication agencies which are not governmentally-owned and operated; to this is added an account of the origin and functions of the Board of Railway Commissioners.

## PART I.—GOVERNMENTAL CONTROL OVER AGENCIES OF TRANSPORTATION AND COMMUNICATION.

Problems of transportation, because they are of such vital importance in the economic life of Canada, occupy a large part of the time and thought of our Parliaments and public men. With the modern development of new forms, it is becoming increasingly important to realize that the several agencies of transportation—carriers by rail, road, water, and air—are, or should be, inter-related parts of an integral whole. Each agency has its place in the efficient provision of necessary transportation in Canada. The problem, therefore, is to adjust the conditions under which each of these agencies operates so that the resulting movement of passengers and freight may be accomplished with the maximum of economic efficiency, that is, at the least possible cost commensurate with desired convenience. The recognition of this growing necessity for viewing the problems of transportation and related communications as parts of a co-ordinated whole is indicated by the organization of the Dominion Department of Transport. This Department was organized on Nov. 2, 1936, under authority of c. 34, 1936, unifying in one Department the control and supervision of railways, canals, harbours, marine and shipping, civil aviation and radio. The Meteorological Service is also under the Department of Transport.

Private enterprises engaged in the transportation and communications business in Canada, have, in the past 50 years, shown the same tendency toward consolidation and amalgamation which has been evident elsewhere throughout the civilized world. The basic reason for such consolidation and amalgamation has been the fact that the business of transportation and communications is, generally speaking, a 'natural monopoly', *i.e.*, a type of enterprise in which service can be more efficiently and economically rendered to the public where one or a few concerns control a particular type of service throughout the country. The outstanding example of these consolidations in Canada in our time is the concentration of control of the railways of the country in the hands of the Canadian Pacific Railway Company and the Canadian National Railways.

However, since such control brings with it elements of monopoly and possible overcharge which are distasteful to the public, it has been deemed advisable in Canada, as in other countries, to set up authorities controlling the rates to be charged and the other conditions on which services to the public are to be rendered by common carriers. This control eventually, so far as the railways within the jurisdiction of the Dominion Government were concerned, was placed in the hands of the Board of Railway Commissioners. From time to time the regulatory authority of the Commission was extended to a limited extent to other utilities. A brief summary of the history and functions of this body follows on pp. 638-639.

Besides the Board of Railway Commissioners, dealing with the larger public utilities coming under the jurisdiction of the Dominion Government, there exist, in several of the provinces, bodies which undertake among their duties the supervision and control of local public utilities operating under the jurisdiction of the

provinces, and the regulation of their rates for service. Among these are the Ontario Department of Municipal Affairs (formerly the Railway and Municipal Board of Ontario, established in 1906), the Quebec Commission of Public Utilities established in 1909, the Nova Scotia Board of Commissioners of Public Utilities, and the Public Utilities Commission of Manitoba. In the three westernmost provinces these same duties are performed by provincial Departments of Railways.

### **The Board of Railway Commissioners for Canada.\***

In the early days of railway building in Canada, the provinces were more concerned with rapid development than with rate regulation. Under the Railway Clauses Consolidation Act of 1851, rates were fixed by the directors of the railway, subject to the approval of the Governor in Council. Beyond this, competition was relied upon to bring rates to a reasonable level. As time went on, however, those who believed in the efficacy of competition as a regulator were disillusioned. For example, complaints were made that the Grand Trunk gave low through transit rates, say from Chicago to New York, through Canada, and recouped itself by high non-competitive rates in Upper Canada. In 1888, the supervision of rates was assigned to the Railway Committee of the Privy Council, sitting in Ottawa.

At the turn of the century, two reports were prepared for the Department of Railways and Canals by Prof. S. J. McLean, the first setting down the experience of railway commissions in England and the United States, and the second discussing Canadian rate grievances, with a recommendation that regulation by commission be adopted in Canada. The second report found that non-competitive rates were exorbitant as compared with competitive rates and that the railways had exercised their right to vary rates without notice, to the great distress of shippers. Among the weaknesses of the Railway Committee as a rate-regulating body was its fixed station at Ottawa, which made the cost of appearing before it practically prohibitive. Besides, members of Parliament had no necessary aptitude for dealing with railway rates, and of their two functions—legislative and administrative—the legislative was to them the more important.

The Board of Railway Commissioners for Canada, as provided for by the amended Railway Act of 1903, was organized on Feb. 1, 1904. In the beginning, its membership consisted of a Chief Commissioner, a Deputy Chief and one Commissioner. In 1908 the membership was increased by the inclusion of an Assistant Chief Commissioner and two other Commissioners. According to the Act, the Board may be divided into two sections of three members but, since any two constitute a quorum, two Commissioners usually hear all but the more important cases, and, agreeing, give the decision of the Board.

The powers of the Commission, in brief, are in matters relating to the location, construction and operation of railways. The most important of these powers has to do with rate regulation. Passenger rates are divided into standard and special, freight rates into standard, special and competitive. Standard rates are maximum rates and the only ones which must be approved by the Board before they are applied. Special and competitive rates, being less than maximum rates, may be applied by railways without the Board's approval, provided that a change of rates has been advertised. But important rate adjustments usually come to the notice of the Commission, for the changed rate alters the extent of the territory in which a shipper can compete and on this account he is apt to appeal the case to the Commission. It is a knotty problem to mark the boundaries of competitive areas—

\*Revised by P. F. Baillargeon, Secretary, Board of Railway Commissioners for Canada.

to decide whether Nova Scotian manufacturers should be given rates which would allow them to compete west of Montreal, or again, whether high construction and operation costs in British Columbia should enforce a rate which would prevent her goods from moving far into the prairies. By an amendment to the Railway Act, the regulation of telephone, telegraph, and express rates was given to the Commission, but with narrower powers than were given to it in dealing with railways.

The procedure of the Board is informal, as suits the nature of its work, for experience has shown that hearings in strict legal form lead the parties to the argument to take uncompromising attitudes. If possible, matters are settled by recommendations to the railway company or the shipper; thus, during 1936, 94-96 p.c. of the applications to the Board were settled without formal hearing. The Railway Committee had kept its station at Ottawa, giving only formal hearings, so that the grievances of those who could not afford to appear in person or pay counsel went unredressed. The itineraries of the Railway Commission are arranged so that evidence may be taken at the least expense to those giving it.

The Chief or Assistant Chief Commissioner, depending upon which one is presiding, gives final judgment on points of law when, in the opinion of the Commissioners, the question is one of law. On questions of fact the findings of the Board are final and are not qualified by previous judgments of any other court. Questions of law and jurisdiction are differentiated. In the first case, the Board may, if it wishes, allow an appeal to the Supreme Court; in the second, the applicant needs no permission to present his appeal.

The Railway Committee of the Privy Council, being a Committee of the Cabinet, was responsible to Parliament. When the powers of the Committee were made over to the Railway Commission the responsibility was retained, but necessarily by a different means. There is now provision for an appeal from any decision to the Governor General in Council, who may also of his own motion rescind or vary the action of the Board, but the power to rescind or vary usually consists in referring to the Board for reconsideration. From its inception until Dec. 31, 1936, the Board gave formal hearing to 10,382 cases. Its decision was appealed in 120 cases, 71 of these being to the Supreme Court of Canada and 49 to the Governor General in Council. Of the appeals, 13 of those carried to the Supreme Court were allowed and 3 of those to the Governor General in Council.

## PART II.—RAILWAYS.

The treatment of rail transportation is divided into three sections dealing, respectively, with steam railways, electric railways, and express companies.

### Section 1.—Steam Railways.\*

The steam railway is still the most important transportation agency from the standpoint of investment and of traffic handled. Fortunately, the statistical field is more completely covered for this form of transportation than for any other, since there are fairly complete figures dealing with steam railway mileage, and equipment, finances, and traffic.

\*Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an Annual Report on Steam Railways, as well as numerous other reports, for a full list of which the reader is referred to Chapter XXIX of this volume. Certain of the financial statistics of steam railways are compiled with the co-operation of officers of the Department of Transport.

**Historical Sketch.**—Construction was begun on the first Canadian railway in 1835. This was a line only 16 miles long between St. Johns and Laprairie, Quebec, intended to expedite the journey between Montreal and New York. It was opened for traffic in 1836, being operated at first with horses, for which steam locomotives were substituted a year later. About the same time, a line 6 miles long was built in Nova Scotia from Stellarton to a loading point on Pictou harbour to haul coal from the mines to vessels. On this line also the motive power was at first provided by horses, but in the spring of 1839 the "Samson", a locomotive built in England, brought over in a sailing vessel and still preserved in Halifax, was put in operation. A railway from Montreal to Lachine was opened in 1847 and another line to St. Hyacinthe in 1848. In 1850, however, there were only 66 miles of railway in Canada.

**Commencement of the Railway Era—The Grand Trunk.**—The railway era in Canada may be said to have begun in 1851, when charters were granted providing for the construction of a main line of railway between the two Canadas. These charters were repealed when the Grand Trunk charter was granted in 1852. The result was the completion of the Grand Trunk railway between Montreal and Toronto in 1856, its extension westward to Sarnia in 1859, and eastward to Rivière du Loup in 1860. The Atlantic and St. Lawrence railway, to Portland, Maine, was leased in 1853 and in 1859, on the completion of the Victoria bridge across the St. Lawrence at Montreal, the Grand Trunk had a through route 800 miles long from Portland to Sarnia. Within the next thirty years many important railways of Ontario, including the Great Western, were acquired and the Grand Trunk lines were extended to Chicago.

**Construction of the Intercolonial.**—An intercolonial railway linking Nova Scotia and New Brunswick with Upper and Lower Canada had been proposed as early as the 1830's. In 1844 the Imperial Government made a survey for a military road, and in 1851 agreed to recommend to Parliament either a guarantee of interest or an advance of the sum required to build a railroad. Differences of opinion as to the route resulted in the project being dropped, but in 1853 Nova Scotia undertook to construct, by 1862, a trunk line from Halifax to the New Brunswick frontier, with branch lines to Pictou and Victoria Beach. In both Nova Scotia and New Brunswick, however, the scheme of an intercolonial railway broke down for lack of funds, and in 1867 there were only 374 miles of railway in the Maritimes. These, under the B.N.A. Act, passed to the Dominion Government. The latter undertook the completion of the railway, and in 1876 the line was opened to Rivière du Loup. Later on, by acquisition of, lease of, or running rights over, other lines, the Intercolonial was extended to Montreal.

**The First Transcontinental Railway—The C.P.R.**—As early as 1849 a pamphlet published by Major Carmichael-Smyth advocated the construction of a Canadian Pacific railway along a route approximating that later taken. In 1851 a Parliamentary Committee reported against the enterprise at that time. In 1871 the terms under which British Columbia entered Confederation bound the Dominion to commence the Pacific railway within two years and complete it within ten years. The building of the railway as a public work actually commenced in 1874, but was not very rapidly pushed forward. In 1880 the Government entered into a contract with the Canadian Pacific Railway syndicate, granting to the syndicate all portions of the line completed or under construction, a cash subsidy of \$25,000,000, a land grant of 25,000,000 acres, free admission of materials for construction, and protection for 20 years against competing lines. The company on its side agreed to complete the railway to a fixed standard by May 1, 1891, and thereafter to maintain it effi-

ciently. As a matter of fact, the last spike on the main line was driven on Nov. 7, 1885. Like the Grand Trunk, the Canadian Pacific Railway began to acquire branch lines as feeders in the settled parts of the country along its route.

*The Second Transcontinental—The Grand Trunk Pacific.*—About the end of the century the Grand Trunk, which already had a line as far west as Chicago, submitted to the Canadian Government a proposal whereby it might participate in the settlement and development of the West. Lines were to be leased from Chicago *via* Minneapolis to Winnipeg, and thence a new line, subsidized by the Government, would be built to the Pacific coast. The Government raised objections to so much of the line lying in the United States and a second proposal was made for a connecting line with larger subsidies from North Bay to Winnipeg. The Government submitted, in 1903, a counter proposal that the line, instead of terminating at North Bay, should be continued east to Moncton, New Brunswick, the eastern section from Moncton to Winnipeg to be constructed by the Government and leased to the Grand Trunk Pacific for a 50-year period, the railway paying no rent for the first seven years and 3 p.c. on the cost of the railway for the remaining 43 years. The western half of the railway from Winnipeg to Prince Rupert was to be built by the Grand Trunk Pacific, the Government guaranteeing interest on bonds to 75 p.c. of the cost of construction, not exceeding \$13,000 per mile on the prairie section and \$30,000 per mile on the mountain section. The Grand Trunk reluctantly accepted this proposition and construction of the National Transcontinental and Grand Trunk Pacific commenced.

*The Third Transcontinental—The Canadian Northern Railway.*—The third transcontinental railway, the Canadian Northern, was begun in 1896 with the completion by Mackenzie and Mann of the 125-mile line of the Lake Manitoba Railway and Canal Co., chartered in 1889. The charters of the Winnipeg and Hudson Bay, the Manitoba and Southeastern, the Ontario and Rainy River, and the Port Arthur, Duluth and Western were next acquired. Assisted by the Manitoba Government, which desired to establish competition with the Canadian Pacific Railway, the Canadian Northern then secured the Manitoba lines of the Northern Pacific and in 1902 completed its line from Winnipeg to Port Arthur. During the following decade, the agricultural west was filling up very rapidly and, with the public of Canada under the influence of this boom, the Canadian Northern Railway was able to secure guarantees of bonds from the Dominion and Provincial Governments to enable it to extend its lines both westward to Vancouver and eastward to Montreal and so complete the great scheme of a transcontinental road.

*Effect of the War on the Railways—The Drayton-Acworth Report.*—With two new transcontinental main lines, besides branches, under construction, Canadian railway mileage was doubled between 1900 and 1915, increasing from 17,657 miles in the former year to 34,882 miles in the latter. The builders of the new lines, as well as the Canadian Government and people, had expected that immigration of capital and labour from Europe would rapidly settle the areas tributary to the new railroads and give them abundant and lucrative traffic, as had been the case with the C.P.R. Instead, the War came, and European labour and capital were conscripted for the struggle; immigration fell off and the anticipated traffic did not develop. On the other hand the interest on the bonds had to be met, and in 1915 the Government felt it necessary to give assistance to the railways. In 1916, after having again made loans to the Grand Trunk Pacific Railway and the Canadian Northern Railway Co., a Royal Commission was appointed by Order in Council of July 13, 1916, to investigate: (1) the general problem of transportation; (2) the status of each

of the three trancontinental systems; (3) the reorganization of any of the said systems, or their acquisition by the State; and (4) other matters considered by the Commission to be relevant to the general scope of the inquiry. The majority report of the Commission, signed by Sir Henry Drayton and Mr. Acworth, has formed the basis of the subsequent railway policy of Canada. Their recommendation was that the public should take control of the Canadian Northern, of the Grand Trunk Pacific and the Grand Trunk proper, and that they should be administered on purely business principles by a board of trustees, such compensation as seemed proper to be decided by arbitration and given to the shareholders of the Canadian Northern and the Grand Trunk.

The process of the acquisition of these railways and the financial results of their operation down to the end of 1936 are described in the latter part of Subsection 2, pp. 649-657.

*The Royal Commission of 1931.*—During 1930 and 1931 both freight and passenger traffic declined until new low records were being established each succeeding month. Freight and passenger revenues consequently decreased at alarming rates and with increased capital expenditures and fixed charges, the financial condition of Canadian railways demanded readjustment. To study the situation and, if possible, to remedy it, the Government appointed a Royal Commission which, on Sept. 13, 1932, submitted its report, summarized at pp. 648-650 of the 1933 Year Book. During the following session of the Dominion Parliament legislation known as The Canadian National-Canadian Pacific Act, (c. 33) 1933, was passed. A summary of this legislation was given at p. 655 of the 1936 Year Book.

### Subsection 1.—Mileage and Equipment.

The mileage of steam railways in operation in Canada is given for 1835 to 1849 and for each year from 1850 to 1936 in Table 1, showing the first great period of construction in the 1850's, when the mileage grew from 66 to 2,065, the lull in the 1860's, the second great period of construction in the 1870's and 1880's, the lull in the 1890's, the third great period of construction between 1900 and 1917 and the subsequent falling-off in the rate of increase.

#### 1.—Record of Steam Railway Mileage as at June 30, 1835-1919, and Dec. 31, 1919-36.

| Year.       | Miles in<br>Operation. | Year.    | Miles in<br>Operation. | Year.    | Miles in<br>Operation. | Year.    | Miles in<br>Operation. | Year.                | Miles in<br>Operation. | Year.    | Miles in<br>Operation. |
|-------------|------------------------|----------|------------------------|----------|------------------------|----------|------------------------|----------------------|------------------------|----------|------------------------|
| No.         | No.                    | No.      | No.                    | No.      | No.                    | No.      | No.                    | No.                  | No.                    | No.      | No.                    |
| 1835.....   | 1                      | 1863.... | 2,189                  | 1879.... | 6,858                  | 1895.... | 15,977                 | 1911....             | 25,400                 | 1925.... | 40,350                 |
| 1836-46.... | 22                     | 1864.... | 2,189                  | 1880.... | 7,194                  | 1896.... | 16,270                 | 1912....             | 26,840                 | 1926.... | 40,350                 |
| 1847-49.... | 54                     | 1865.... | 2,240                  | 1881.... | 7,331                  | 1897.... | 16,550                 | 1913....             | 29,304                 |          |                        |
| 1850.....   | 66                     | 1866.... | 2,278                  | 1882.... | 8,697                  | 1898.... | 16,870                 | 1914....             | 30,795                 | 1927.... | 40,570                 |
| 1851.....   | 159                    | 1867.... | 2,278                  | 1883.... | 9,577                  | 1899.... | 17,250                 | 1915....             | 34,832                 | 1928.... | 41,022                 |
| 1852.....   | 205                    | 1868.... | 2,270                  | 1884.... | 10,273                 | 1900.... | 17,657                 | 1916....             | 36,985                 | 1929.... | 41,380                 |
| 1853.....   | 506                    | 1869.... | 2,524                  | 1885.... | 10,773                 | 1901.... | 18,140                 | 1917....             | 38,369                 | 1930.... | 42,047                 |
| 1854.....   | 764                    | 1870.... | 2,617                  | 1886.... | 11,793                 | 1902.... | 18,714                 | 1918....             | 38,252                 |          |                        |
| 1855.....   | 877                    | 1871.... | 2,695                  | 1887.... | 12,184                 | 1903.... | 18,988                 | 1919 <sup>1</sup> .. | 38,329                 | 1931.... | 42,280                 |
| 1856.....   | 1,414                  | 1872.... | 2,890                  | 1888.... | 12,163                 | 1904.... | 19,431                 |                      |                        | 1932.... | 42,409                 |
| 1857.....   | 1,444                  | 1873.... | 3,332                  | 1889.... | 12,628                 | 1905.... | 20,487                 | 1919 <sup>2</sup> .. | 38,495                 |          |                        |
| 1858.....   | 1,863                  | 1874.... | 4,331                  | 1890.... | 13,151                 | 1906.... | 21,423                 | 1920....             | 38,805                 | 1933.... | 42,336                 |
| 1859.....   | 1,934                  | 1875.... | 4,804                  | 1891.... | 13,538                 | 1907.... | 22,446                 | 1921....             | 39,191                 | 1934.... | 42,270                 |
| 1860.....   | 2,065                  | 1876.... | 5,218                  | 1892.... | 14,564                 | 1908.... | 22,966                 | 1922....             | 39,358                 |          |                        |
| 1861.....   | 2,146                  | 1877.... | 5,782                  | 1893.... | 15,008                 | 1909.... | 24,104                 | 1923....             | 39,654                 | 1935.... | 42,916                 |
| 1862.....   | 2,180                  | 1878.... | 6,226                  | 1894.... | 15,627                 | 1910.... | 24,781                 | 1924....             | 40,059                 | 1936.... | 42,552                 |

<sup>1</sup> First railway construction begun but line not open for traffic until 1836.  
prior years.

<sup>2</sup> Dec. 31 for this and later years.

<sup>3</sup> June 30 for this and

In total railway mileage Canada now ranks fourth with 42,552 miles, the United States, Soviet Russia and British India being the only countries with greater total mileages, and in miles per capita only Australia has a greater average, Canada's density being one mile of line for each 263 persons (exclusive of 339 miles, chiefly main lines, of Canadian railways crossing over United States territory).

The operated mileage in the different provinces is given for recent years in Table 2. Construction was most active in Manitoba, Saskatchewan and Alberta during the period covered while there has been a tendency for mileages to decline slightly in the other provinces, due to the abandonment of unprofitable lines.

2.—Operated Steam Railway Mileage, by Provinces, Dec. 31, 1925-26.

| Province and Type of Track.          | 1928.         | 1929.         | 1930.         | 1931.         | 1932.         | 1933.         | 1934.         | 1935.         | 1936.         |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                                      | miles.        | miles.        | miles.        | miles.        | miles.        | miles.        | miles.        | miles.        | miles.        |
| <b>Single Track—</b>                 |               |               |               |               |               |               |               |               |               |
| Prince Edward Island..               | 276           | 276           | 286           | 286           | 286           | 286           | 286           | 286           | 286           |
| Nova Scotia.....                     | 1,421         | 1,420         | 1,418         | 1,418         | 1,410         | 1,410         | 1,406         | 1,397         | 1,397         |
| New Brunswick.....                   | 1,935         | 1,934         | 1,934         | 1,934         | 1,934         | 1,934         | 1,930         | 1,929         | 1,871         |
| Quebec.....                          | 4,940         | 4,891         | 4,891         | 4,926         | 4,879         | 4,863         | 4,853         | 4,853         | 4,777         |
| Ontario.....                         | 10,866        | 10,872        | 10,933        | 10,905        | 10,908        | 10,880        | 10,819        | 10,821        | 10,746        |
| Manitoba.....                        | 4,293         | 4,294         | 4,420         | 4,419         | 4,420         | 4,433         | 4,499         | 4,970         | 4,380         |
| Saskatchewan.....                    | 7,551         | 7,761         | 8,166         | 8,268         | 8,438         | 8,438         | 8,303         | 8,556         | 8,624         |
| Alberta.....                         | 5,307         | 5,516         | 5,581         | 5,630         | 5,652         | 5,654         | 5,696         | 5,760         | 5,687         |
| British Columbia.....                | 4,071         | 4,024         | 4,021         | 4,067         | 4,085         | 4,041         | 4,028         | 3,642         | 3,967         |
| Yukon.....                           | 58            | 58            | 58            | 58            | 58            | 58            | 58            | 58            | 58            |
| In United States.....                | 334           | 334           | 334           | 339           | 339           | 339           | 339           | 339           | 339           |
| <b>Totals, Single Track.....</b>     | <b>41,022</b> | <b>41,380</b> | <b>42,017</b> | <b>42,280</b> | <b>42,469</b> | <b>42,436</b> | <b>42,376</b> | <b>42,916</b> | <b>42,552</b> |
| <b>Second track.....</b>             | <b>2,637</b>  | <b>2,658</b>  | <b>2,688</b>  | <b>2,688</b>  | <b>2,682</b>  | <b>2,681</b>  | <b>2,525</b>  | <b>2,507</b>  | <b>2,500</b>  |
| <b>Industrial track.....</b>         | <b>1,062</b>  | <b>1,007</b>  | <b>1,023</b>  | <b>1,006</b>  | <b>1,578</b>  | <b>1,534</b>  | <b>1,495</b>  | <b>1,463</b>  | <b>1,401</b>  |
| <b>Yard track and sidings.....</b>   | <b>10,114</b> | <b>10,168</b> | <b>10,227</b> | <b>10,277</b> | <b>10,335</b> | <b>10,278</b> | <b>10,299</b> | <b>10,266</b> | <b>10,239</b> |
| <b>Grand Totals, All Tracks.....</b> | <b>55,435</b> | <b>55,813</b> | <b>56,558</b> | <b>56,851</b> | <b>57,064</b> | <b>56,679</b> | <b>56,519</b> | <b>57,171</b> | <b>56,692</b> |

**Rolling-Stock.**—Statistics of the rolling-stock of the steam railways of Canada are given for the latest seven years in Table 3. The figures may be supplemented by the statement that between 1920 and 1936 the average capacity of box cars increased from 34·779 tons to 40·706 tons, of flat cars from 33·459 to 41·123 tons, and of all freight cars from 35·141 tons to 41·401 tons. The average tractive power of the locomotive in use in 1920 was 31,112 lb. and in 1936, 38,432 lb.

3.—Rolling-Stock of Steam Railways, calendar years 1930-36.

| Rolling-Stock.                   | 1930.        | 1931.        | 1932.        | 1933.        | 1934.        | 1935.        | 1936.        |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                  | No.          | No.          | No.          | No.          | No.          | No.          | No.          |
| <b>LOCOMOTIVES.</b>              |              |              |              |              |              |              |              |
| Passenger.....                   | 1,438        | 1,392        | 1,353        | 1,333        | 1,291        | 1,200        | 1,191        |
| Freight.....                     | 3,192        | 3,165        | 3,123        | 3,073        | 3,035        | 2,876        | 2,802        |
| Switching.....                   | 781          | 780          | 751          | 742          | 727          | 685          | 600          |
| Electric.....                    | 37           | 40           | 39           | 39           | 34           | 34           | 34           |
| <b>Totals.....</b>               | <b>5,451</b> | <b>5,377</b> | <b>5,266</b> | <b>5,187</b> | <b>5,087</b> | <b>4,795</b> | <b>4,747</b> |
| <b>PASSENGER CARS.</b>           |              |              |              |              |              |              |              |
| First class.....                 | 1,980        | 1,975        | 1,933        | 1,924        | 1,907        | 1,745        | 1,754        |
| Second class.....                | 372          | 365          | 355          | 355          | 350          | 295          | 270          |
| Combination.....                 | 492          | 490          | 469          | 463          | 461          | 382          | 372          |
| Immigrant.....                   | 703          | 644          | 643          | 634          | 628          | 566          | 419          |
| Dining.....                      | 218          | 264          | 264          | 261          | 260          | 257          | 256          |
| Parlour.....                     | 331          | 310          | 306          | 303          | 302          | 290          | 278          |
| Sleeping.....                    | 1,224        | 1,235        | 1,198        | 1,175        | 1,163        | 1,138        | 1,085        |
| Baggage, express and postal..... | 1,699        | 1,685        | 1,660        | 1,635        | 1,629        | 1,462        | 1,454        |
| Motor cars.....                  | 73           | 104          | 105          | 97           | 96           | 99           | 92           |
| Other.....                       | 264          | 530          | 526          | 507          | 490          | 455          | 457          |
| <b>Totals.....</b>               | <b>7,846</b> | <b>7,611</b> | <b>7,459</b> | <b>7,351</b> | <b>7,286</b> | <b>6,669</b> | <b>6,443</b> |

<sup>1</sup> Include Pullman Co. cars in Canadian service.



## 3.—Rolling-Stock of Steam Railways, calendar years 1930-36—concluded.

| Rolling-Stock.       | 1930.          | 1931.          | 1932.          | 1933.          | 1934.          | 1935.          | 1936.          |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                      | No.            | No.            | No.            | No.            | No.            | No.            | No.            |
| <b>FREIGHT CARS.</b> |                |                |                |                |                |                |                |
| Box.....             | 151,500        | 152,841        | 150,979        | 146,207        | 141,768        | 128,816        | 124,448        |
| Flat.....            | 17,728         | 17,266         | 16,370         | 15,837         | 15,124         | 13,501         | 12,991         |
| Stock.....           | 9,479          | 9,281          | 9,048          | 8,522          | 8,744          | 7,407          | 7,219          |
| Coal.....            | 22,251         | 23,061         | 22,722         | 22,472         | 18,115         | 17,506         | 17,463         |
| Tank.....            | 510            | 512            | 450            | 476            | 468            | 425            | 432            |
| Refrigerator.....    | 8,151          | 8,464          | 8,341          | 8,160          | 7,904          | 6,682          | 7,331          |
| Other.....           | 5,402          | 3,310          | 3,056          | 2,988          | 2,929          | 2,303          | 2,124          |
| <b>Totals.....</b>   | <b>215,027</b> | <b>214,765</b> | <b>210,996</b> | <b>204,662</b> | <b>195,052</b> | <b>176,760</b> | <b>172,008</b> |

## Subsection 2.—Finances of Steam Railways.

The tables in this subsection deal with the capital liability, capital invested, earnings, operating expenses, employees and their earnings, and governmental aid to steam railways. However, the presentation of the financial statistics of railways in Canada would not be complete without some detailed consideration of the finances of the Government-owned railways. This is given in the latter part of the subsection. Some further statistics of revenue are included in Table 9 of the following subsection, where they are shown in relation to traffic.

**Capital Liability.**—The capital liability of the steam railways of Canada is shown in Table 4 for the years 1901 to 1936. The great increase after 1922 is due to the inclusion of all Government loans to railways and investment in road and equipment of Government railways as part of the capital liability of the railways. Statistics of individual lines are given in Table 5.

## 4.—Capital Liability of Steam Railways, as at June 30, 1901-19, and Dec. 31, 1919-36.

NOTE.—Corresponding figures for each year from 1876 to 1900, inclusive, were given on p. 649 of the 1927-28 Year Book.

| Year.    | Stocks.       | Funded Debt. | Total.        | Year.                | Stocks.       | Funded Debt.  | Total.        |
|----------|---------------|--------------|---------------|----------------------|---------------|---------------|---------------|
|          | \$            | \$           | \$            |                      | \$            | \$            | \$            |
| 1901.... | 424,414,314   | 391,696,523  | 816,110,837   | 1919 <sup>1</sup> .. | 1,100,301,195 | 914,823,515   | 2,015,124,710 |
| 1902.... | 460,401,863   | 404,806,847  | 865,208,710   | 1919 <sup>2</sup> .. | 1,104,400,122 | 931,756,484   | 2,036,156,606 |
| 1903.... | 483,770,312   | 424,100,762  | 907,871,074   | 1920 <sup>1</sup> .. | 1,323,708,962 | 846,324,166   | 2,170,033,128 |
| 1904.... | 492,752,530   | 449,114,035  | 941,866,565   | 1921 <sup>1</sup> .. | 1,372,545,165 | 792,142,471   | 2,164,687,636 |
| 1905.... | 526,353,951   | 465,543,967  | 991,897,918   | 1922 <sup>1</sup> .. | 1,415,623,322 | 743,633,809   | 2,159,257,131 |
| 1906.... | 561,655,395   | 504,226,234  | 1,065,881,629 | 1923 <sup>1</sup> .. | 1,385,080,426 | 1,879,593,612 | 3,264,674,038 |
| 1907.... | 558,568,591   | 553,369,217  | 1,111,937,808 | 1924 <sup>1</sup> .. | 1,401,263,285 | 2,012,602,328 | 3,413,865,613 |
| 1908.... | 607,891,349   | 631,869,664  | 1,239,761,013 | 1925 <sup>1</sup> .. | 1,378,706,860 | 2,002,374,049 | 3,471,080,909 |
| 1909.... | 647,531,647   | 660,946,769  | 1,308,481,416 | 1926 <sup>1</sup> .. | 1,361,758,426 | 2,144,999,621 | 3,506,758,047 |
| 1910.... | 687,557,387   | 722,740,300  | 1,410,297,687 | 1927 <sup>1</sup> .. | 1,330,215,248 | 2,252,256,367 | 3,582,471,615 |
| 1911.... | 749,207,687   | 779,481,514  | 1,528,689,201 | 1928 <sup>1</sup> .. | 1,357,017,703 | 2,306,554,996 | 3,663,572,699 |
| 1912.... | 770,459,351   | 818,478,175  | 1,588,937,526 | 1929 <sup>1</sup> .. | 1,405,622,070 | 2,497,054,907 | 3,902,676,977 |
| 1913.... | 918,573,740   | 613,256,952  | 1,531,830,692 | 1930 <sup>1</sup> .. | 1,431,324,003 | 2,595,145,308 | 4,026,469,311 |
| 1914.... | 1,026,418,123 | 782,402,638  | 1,808,820,761 | 1931 <sup>1</sup> .. | 1,438,059,759 | 2,793,971,829 | 4,232,031,588 |
| 1915.... | 1,024,085,983 | 851,724,905  | 1,875,810,888 | 1932 <sup>1</sup> .. | 1,437,489,430 | 2,934,182,332 | 4,371,671,762 |
| 1916.... | 1,024,264,325 | 868,861,449  | 1,893,125,774 | 1933 <sup>1</sup> .. | 1,438,834,552 | 2,951,690,468 | 4,390,525,020 |
| 1917.... | 1,069,114,875 | 968,005,116  | 1,985,119,991 | 1934 <sup>1</sup> .. | 1,437,334,152 | 2,966,505,594 | 4,403,839,746 |
| 1918.... | 1,063,885,495 | 905,994,999  | 1,969,880,494 | 1935 <sup>1</sup> .. | 1,433,849,530 | 3,026,414,779 | 4,460,264,309 |
|          |               |              |               | 1936 <sup>1</sup> .. | 1,425,193,791 | 3,062,411,719 | 4,487,605,510 |

<sup>1</sup> June 30 for this and prior years.<sup>2</sup> Dec. 31 for this and later years.<sup>3</sup> Includes all Government loans to railways and investment in road and equipment of Dominion and provincial railways in 1923 and later years.<sup>4</sup> Does not include Canadian railway capital owned by Canadian railways.

## 5.—Mileage, Capital Liability, Earnings and Operating Expenses of Individual Steam Railways for the calendar year 1936.

| Railway.   | Single-Track Mileage.  | Capital Liability.               | Gross Earnings from Operation. | Operating Expenses. |
|--|------------------------|----------------------------------|--------------------------------|---------------------|
|  | miles.                 | \$                               | \$                             | \$                  |
| Algoma Central Terminals, Ltd.                         | 1                      | 3,095,028                        | 1                              | 1                   |
| Algoma Central and Hudson Bay <sup>1</sup>             | 323-75                 | 15,430,850                       | 1,695,502                      | 1,486,724           |
| Alma and Jonquire.                                     | 10-60                  | 629,800                          | 116,412                        | 75,453              |
| Brandon, Sask. and Hudson Bay <sup>2</sup>             | 2                      | 2                                | 18,027 <sup>2</sup>            | 37,806 <sup>2</sup> |
| British Yukon.   | 60-32                  | 4,978,879                        | 201,199                        | 132,316             |
| Canada and Gulf Terminal.                              | 38-10                  | 1,740,000                        | 72,428                         | 68,602              |
| Canada Southern (Lessor)                               | 381-00                 | 41,365,000                       | 15,242,757                     | 7,868,266           |
| Canadian National.                                     | 21,760-49 <sup>3</sup> | 127,298,110 <sup>4</sup>         | 154,178,174                    | 145,081,134         |
| Canadian Pacific.                                      | 17,222-80 <sup>5</sup> | 1,188,792,652 <sup>4</sup>       | 138,461,580                    | 111,025,982         |
| Central Vermont Railway, Inc.                          | 25-33                  | 2                                | 183,399                        | 134,581             |
| Crow's Nest Southern <sup>2</sup>                      | 2                      | 2                                | 6,150 <sup>2</sup>             | 20,006 <sup>2</sup> |
| Cumberland Railway and Coal Co.                        | 31-29                  | 1,352,508                        | 148,293                        | 112,304             |
| Detroit River Terminal Co. <sup>6</sup>                | 2                      | 4,050,834                        | 2                              | 2                   |
| Eastern British Columbia <sup>2</sup>                  | 2                      | 2                                | 2                              | 2                   |
| Essex Terminal.  | 21-31                  | 970,000                          | 204,500                        | 116,618             |
| Greater Winnipeg Water District.                       | 92-00                  | 1,843,288                        | 139,440                        | 111,769             |
| Hudson Bay.  | 510-07                 | 23,448,655                       | 354,162                        | 501,122             |
| International Bridge and Terminal Co.                  | 1-06                   | 300,000                          | 83,156                         | 50,513              |
| Maine Central.   | 5-10                   | 102,588                          | 10,616                         | 12,033              |
| Maritime Coal Railway and Power Co.                    | 12-20                  | 699,742                          | 96,408                         | 55,370              |
| Midland Railway of Manitoba.                           | 75-75                  | 4,800,000                        | 244,779                        | 347,838             |
| Morrissey, Fernie and Michel.                          | 5-37                   | 1,263,000                        | 23,697                         | 23,684              |
| Napierville Junction.                                  | 41-74                  | 1,200,000                        | 439,096                        | 293,492             |
| Nelson and Fort Sheppard.                              | 60-57                  | 2,846,509                        | 109,460                        | 70,410              |
| Nipissing Central <sup>7</sup>                         | 59-74                  | 4,174,618                        | 392,010                        | 301,182             |
| Northern Alberta.                                      | 92-43                  | 30,085,000                       | 2,027,960                      | 1,711,161           |
| Ottawa and New York.                                   | 58-77                  | 2,100,000                        | 129,962                        | 390,019             |
| Pacific Great Eastern.                                 | 247-50                 | 56,060,778                       | 610,086                        | 503,894             |
| Père Marquette (including L.E.D.R.)                    | 310-02                 | 8,122,024                        | 4,773,014                      | 2,485,424           |
| Quebec Railway Light and Power Co.                     | 25-37                  | 6,268,729                        | 264,860                        | 311,062             |
| Roberval and Saguenay.                                 | 29-01                  | 3,330,000                        | 294,226                        | 134,077             |
| St. Lawrence and Adirondack.                           | 60-69                  | 2,158,596                        | 364,010                        | 638,333             |
| Sydney and Louisburg.                                  | 70-25                  | 5,085,191                        | 1,454,260                      | 990,020             |
| Témiscouata.   | 113-00                 | 3,856,236                        | 165,083                        | 178,479             |
| Témiscaming and Northern Ontario <sup>8</sup>          | 514-69                 | 41,707,935                       | 4,743,560                      | 2,989,627           |
| Thousand Islands.                                      | 4-51                   | 60,000                           | 29,928                         | 28,028              |
| Toronto, Hamilton and Buffalo.                         | 111-03                 | 10,567,000                       | 1,652,377                      | 1,245,552           |
| Toronto Terminals.                                     | 3-10                   | 24,224,300                       | 2                              | 2                   |
| Van Buren Bridge Co.                                   | 0-28                   | 250,000                          | 3,566                          | 2,774               |
| Vancouver, Victoria and Eastern.                       | 111-38                 | 23,500,000                       | 519,413                        | 339,503             |
| Wabash (in Canada)                                     | 245-40                 | 2                                | 5,294,423                      | 3,689,636           |
| Winnipeg River <sup>7</sup>                            | 7                      | 7                                | 7                              | 7                   |
| <b>Totals (Including Trackage Rights Duplications)</b> | <b>43,686-97</b>       | <b>4,690,793,500<sup>9</sup></b> | <b>334,855,579</b>             | <b>283,399,255</b>  |
| Canadian National (Can. and U.S.)                      | 23,565-96              | See above                        | 186,610,489                    | 171,477,660         |

<sup>1</sup> Not reported.<sup>2</sup> Ceased operations during the year.<sup>3</sup> Includes 26-18 miles of joint track.

Canadian lines only for Canadian National, but Canadian and U.S. lines for Canadian Pacific.

<sup>4</sup> Including capital of leased lines.<sup>5</sup> Included with Canada Southern Ry.<sup>6</sup> Constructed and

operated by Ontario Government Railway Commission.

<sup>7</sup> Included in C.P.R.<sup>8</sup> Includes

\$203,102,989 Canadian railway capital owned by Canadian railways.

**Capital Investment.**—When comparison is made between the figures of Table 6 and those of Table 4, it is seen that the capital liability of the steam railways is considerably greater than the actual investment in physical property by the railways at the same date. This discrepancy is largely accounted for by the fact that the total of capital liabilities as shown in Table 4 includes loans and advances from the Government to cover deficits of the Canadian National Railways and unpaid accrued interest on Government loans which, up to Dec. 31, 1936, amounted to \$530,832,598 as shown in Table 16. A further factor in the discrepancy is that some of the outstanding railway stocks represent little actual investment in physical property.

### 6.—Capital Invested in Road and Equipment of Canadian Steam Railways, calendar years 1931-36.

| Investment.                       | 1931.         | 1932.         | 1933.          | 1934.         | 1935.          | 1936.          |
|-----------------------------------|---------------|---------------|----------------|---------------|----------------|----------------|
|                                   | \$            | \$            | \$             | \$            | \$             | \$             |
| New Lines—                        |               |               |                |               |                |                |
| Road.....                         | 20,761,545    | 3,175,095     | 195,729        | 10,901        | 89,713         | 119,295        |
| Equipment...                      | 632           | Nil           | 12,322         | Nil           | Nil            | Nil            |
| General.....                      | 1,588,103     | 371,262       | 620            | 86            | Cr. 56         | 756            |
| Totals.....                       | 22,350,280    | 3,546,357     | 208,671        | 10,987        | 89,657         | 120,051        |
| Additions and Betterments—        |               |               |                |               |                |                |
| Road.....                         | 18,985,855    | 3,592,509     | 3,927,865      | Cr. 5,354,703 | 2,656,051      | 6,263,284      |
| Equipment...                      | 19,113,108    | Cr. 4,090,763 | Cr. 3,930,692  | Cr. 3,494,711 | Cr. 6,519,191  | 4,376,334      |
| General.....                      | 1,916,857     | 117,254       | 17,921         | Cr. 2,811     | 5,641          | Cr. 78,887     |
| Undistributed                     | 69,754        | Cr. 24,836    | 92,590         | Cr. 163,872   | 53,862         | 1,008          |
| Totals.....                       | 40,085,574    | Cr. 405,776   | 107,684        | Cr. 9,016,097 | Cr. 3,863,637  | 10,562,839     |
| Undistributed..                   | Cr. 8,597,547 | 977,301       | Cr. 21,017,200 | 22,774,651    | Cr. 67,902,913 | Cr. 17,255,277 |
| Total Investments at Dec. 31..... | 3,382,047,218 | 3,386,165,100 | 3,365,464,255  | 3,379,233,796 | 3,307,616,903  | 3,301,044,516  |

<sup>1</sup> Details of this item are given in the Annual Report on Steam Railway Statistics issued by the Transportation and Public Utilities Branch of the Bureau of Statistics.

**Earnings and Expenses.**—Operating expenses of Canadian railways rose during 1918, 1919 and 1920, much more than operating revenues, and the operating ratio, or ratio of expenses to revenues, increased from around 70 p.c. to above 90 p.c. and remained high thereafter. The United States Government took over the operation of the United States railways when that country entered the World War and increased the rates of pay of the railway employees. The Canadian railways were also obliged to make corresponding increases and this increase in payroll has been the chief factor in increased operating ratio. Declining revenues without corresponding reductions in expenses during the past five years have also maintained the high operating ratio. The gross earnings and operating expenses of individual railways in the latest year appear in Table 5.

### 7.—Earnings and Operating Expenses of Steam Railways per Mile of Line and per Train Mile, for the years ended June 30, 1915-19, and the calendar years 1919-36.

| Year.             | Gross Earnings. | Operating Expenses. | Ratio of Expenses to Receipts. | Per Mile of Line. |                     |               | Per Revenue Train Mile. |                     |
|-------------------|-----------------|---------------------|--------------------------------|-------------------|---------------------|---------------|-------------------------|---------------------|
|                   |                 |                     |                                | Gross Earnings.   | Operating Expenses. | Net Earnings. | Gross Earnings.         | Operating Expenses. |
|                   | \$              | \$                  | p.c.                           | \$                | \$                  | \$            | \$                      | \$                  |
| 1915 (June 30)... | 199,843,072     | 147,731,099         | 73-92                          | 5,616             | 4,152               | 1,464         | 2-144                   | 1-585               |
| 1916 " "...       | 261,888,654     | 180,542,259         | 68-94                          | 6,943             | 4,823               | 2,120         | 2-358                   | 1-623               |
| 1917 " "...       | 310,771,479     | 222,890,637         | 71-72                          | 8,051             | 5,774               | 2,277         | 2-683                   | 1-925               |
| 1918 " "...       | 330,230,150     | 273,955,436         | 82-96                          | 8,581             | 7,119               | 1,462         | 3-006                   | 2-494               |
| 1919 " "...       | 382,976,901     | 341,866,509         | 89-27                          | 9,947             | 8,879               | 1,068         | 3-683                   | 3-292               |
| 1919 (Dec. 31)... | 408,568,361     | 376,789,003         | 92-26                          | 10,568            | 9,745               | 823           | 3-817                   | 3-520               |
| 1920 " "...       | 492,101,104     | 478,248,154         | 97-18                          | 12,626            | 12,270              | 356           | 4-192                   | 4-074               |
| 1921 " "...       | 458,008,891     | 422,581,205         | 92-25                          | 11,636            | 10,735              | 901           | 4-376                   | 4-038               |
| 1922 " "...       | 440,687,128     | 395,927,406         | 89-39                          | 11,196            | 10,008              | 1,188         | 4-072                   | 3-640               |
| 1923 " "...       | 478,338,047     | 413,862,813         | 86-52                          | 12,098            | 10,434              | 1,664         | 4-180                   | 3-610               |
| 1924 " "...       | 448,923,877     | 328,463,908         | 85-77                          | 11,233            | 9,548               | 1,685         | 4-119                   | 3-533               |
| 1925 " "...       | 455,267,283     | 372,149,656         | 81-70                          | 11,383            | 9,222               | 2,161         | 4-132                   | 3-378               |
| 1926 " "...       | 495,590,754     | 399,509,452         | 78-91                          | 12,278            | 9,653               | 2,625         | 4-298                   | 3-391               |
| 1927 " "...       | 499,064,207     | 407,646,280         | 81-68                          | 12,560            | 10,047              | 2,503         | 4-321                   | 3-448               |
| 1928 " "...       | 563,732,200     | 442,701,270         | 78-53                          | 13,840            | 10,791              | 3,049         | 4-461                   | 3-503               |
| 1929 " "...       | 534,106,045     | 433,077,113         | 81-08                          | 13,068            | 10,596              | 2,472         | 4-492                   | 3-643               |
| 1930 " "...       | 454,231,560     | 380,723,411         | 83-86                          | 10,897            | 9,133               | 1,764         | 4-150                   | 3-538               |
| 1931 " "...       | 358,549,382     | 321,025,588         | 89-53                          | 8,502             | 7,612               | 890           | 3-747                   | 3-435               |
| 1932 " "...       | 293,390,415     | 256,668,375         | 87-48                          | 6,922             | 6,055               | 867           | 3-507                   | 3-157               |
| 1933 " "...       | 270,278,276     | 233,133,108         | 86-26                          | 6,365             | 5,490               | 875           | 3-528                   | 3-153               |
| 1934 " "...       | 300,837,816     | 251,999,667         | 83-77                          | 7,111             | 5,956               | 1,155         | 3-738                   | 3-128               |
| 1935 " "...       | 310,107,155     | 263,942,899         | 85-11                          | 7,250             | 6,170               | 1,080         | 3-751                   | 3-193               |
| 1936 " "...       | 334,768,557     | 283,345,968         | 84-64                          | 7,839             | 6,635               | 1,204         | 4-012                   | 3-395               |

## 8.—Distribution of Operating Expenses of Steam Railways, calendar years 1933-36.

| Item of Expenditure.        | 1933.              |               | 1934.              |               | 1935.              |               | 1936.              |               |
|-----------------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|
|                             | \$                 | p.c.          | \$                 | p.c.          | \$                 | p.c.          | \$                 | p.c.          |
| Way and structures.....     | 48,226,441         | 20-69         | 53,502,807         | 21-23         | 55,250,291         | 20-93         | 60,378,275         | 21-31         |
| Equipment.....              | 47,962,564         | 20-57         | 54,041,900         | 21-43         | 57,424,600         | 21-76         | 63,755,028         | 22-30         |
| Traffic expenses.....       | 11,814,750         | 5-07          | 11,517,165         | 4-57          | 11,807,234         | 4-47          | 12,050,438         | 4-39          |
| Transportation.....         | 112,329,373        | 48-18         | 118,639,517        | 47-08         | 124,359,790        | 47-12         | 130,780,123        | 46-19         |
| General and misc. expenses. | 12,800,140         | 5-49          | 14,335,208         | 5-69          | 15,100,924         | 5-73          | 16,373,104         | 5-77          |
| <b>Totals.....</b>          | <b>233,133,108</b> | <b>100-00</b> | <b>251,999,667</b> | <b>100-00</b> | <b>263,942,899</b> | <b>100-00</b> | <b>283,345,968</b> | <b>100-00</b> |

**Railway Wages and Salaries.**—The data in Table 9 show the numbers of employees and the amounts of salaries and wages as reported by the railways for 1926 to 1936, inclusive. The Canadian National Railways brought into their railway accounts in 1928 the commercial telegraph employees, and these have been added for 1926 and 1927 in this table to make the data comparable. Because of inability of the railways to supply strictly comparable data for previous years, the numbers of employees and wages have been omitted for such, but index numbers have been computed for 1912-36 on as nearly comparable bases as possible, using 1926 data as equal to 100. The number of employees fluctuates with the volume of traffic, but not to the same extent. Salaries and wages are affected by the number of employees, rates of pay, and by the time worked. The rapid increase in the average wage in 1918 and 1919 was due to large increases in rates of pay corresponding to the "Macdoo Award" in the United States. Also the fluctuations in 1932-35 were due to reductions and restorations in basic rates of pay.

## 9.—Steam Railway Employees, Totals and Averages of Salaries and Wages, and Ratio of Salaries and Wages to Operating Revenues and Expenses, 1912-36.

| Year.             | Employees. |                        | Salaries and Wages. |                        | Average of Salaries and Wages. |                        | Ratio of Salaries and Wages to— |                                  |
|-------------------|------------|------------------------|---------------------|------------------------|--------------------------------|------------------------|---------------------------------|----------------------------------|
|                   | Number.    | Adjusted Index Number. | Amount.             | Adjusted Index Number. | Amount.                        | Adjusted Index Number. | Gross Earnings.                 | Operating Expenses. <sup>2</sup> |
|                   |            |                        | \$                  |                        | \$                             |                        | p.c.                            | p.c.                             |
| 1912 (June 30)... |            | 92-2                   |                     | 35-2                   | 604                            | 41-7                   | 43-0                            | 62-5                             |
| 1913 " "...       |            | 105-7                  |                     | 46-9                   | 648                            | 44-8                   | 45-1                            | 63-6                             |
| 1914 " "...       |            | 94-1                   |                     | 45-3                   | 702                            | 48-5                   | 46-0                            | 62-5                             |
| 1915 " "...       |            | 81-6                   |                     | 38-6                   | 690                            | 47-7                   | 47-7                            | 64-5                             |
| 1916 " "...       |            | 92-0                   |                     | 44-0                   | 699                            | 45-3                   | 41-5                            | 60-2                             |
| 1917 " "...       |            | 86-4                   |                     | 52-5                   | 887                            | 61-3                   | 41-7                            | 53-2                             |
| 1918 " "...       |            | 84-9                   |                     | 61-7                   | 1,061                          | 73-3                   | 46-1                            | 55-6                             |
| 1919 " "...       | 1          | 93-9                   | 1                   | 84-0                   | 1,316                          | 90-8                   | 54-6                            | 61-1                             |
| 1919 (Dec. 31)... |            | 102-7                  |                     | 94-6                   | 1,343                          | 92-7                   | 57-1                            | 61-9                             |
| 1920 " "...       |            | 109-5                  |                     | 117-7                  | 1,569                          | 103-4                  | 59-0                            | 60-7                             |
| 1921 " "...       |            | 99-1                   |                     | 100-3                  | 1,478                          | 102-1                  | 54-1                            | 59-6                             |
| 1922 " "...       |            | 98-0                   |                     | 94-0                   | 1,408                          | 97-9                   | 52-9                            | 59-2                             |
| 1923 " "...       |            | 103-0                  |                     | 100-9                  | 1,430                          | 98-8                   | 52-8                            | 61-1                             |
| 1924 " "...       |            | 98-1                   |                     | 95-2                   | 1,416                          | 97-8                   | 53-5                            | 62-5                             |
| 1925 " "...       |            | 95-8                   |                     | 94-3                   | 1,438                          | 99-3                   | 52-0                            | 62-6                             |
| 1926 " "...       | 179,800    | 100-0                  | 260,350,390         | 100-0                  | 1,448                          | 100-0                  | 45-7                            | 58-0                             |
| 1927 " "...       | 182,143    | 101-3                  | 273,932,396         | 105-2                  | 1,504                          | 103-9                  | 48-1                            | 58-9                             |
| 1928 " "...       | 187,710    | 104-4                  | 287,775,316         | 110-5                  | 1,533                          | 105-9                  | 47-0                            | 59-8                             |
| 1929 " "...       | 187,846    | 104-5                  | 290,722,500         | 111-7                  | 1,548                          | 106-9                  | 48-9                            | 60-2                             |
| 1930 " "...       | 174,485    | 97-0                   | 268,347,374         | 103-1                  | 1,538                          | 106-2                  | 55-4                            | 66-1                             |
| 1931 " "...       | 154,569    | 86-0                   | 229,499,505         | 88-2                   | 1,485                          | 102-6                  | 58-5                            | 65-4                             |
| 1932 " "...       | 132,678    | 73-8                   | 181,113,588         | 69-6                   | 1,365                          | 94-3                   | 66-4                            | 64-5                             |
| 1933 " "...       | 121,923    | 67-8                   | 158,320,445         | 60-8                   | 1,299                          | 89-7                   | 63-9                            | 62-5                             |
| 1934 " "...       | 127,326    | 70-8                   | 163,336,635         | 62-7                   | 1,283                          | 88-6                   | 64-3                            | 64-8                             |
| 1935 " "...       | 127,626    | 70-9                   | 172,956,218         | 66-4                   | 1,350                          | 93-8                   | 51-2                            | 60-1                             |
| 1936 " "...       | 132,781    | 73-9                   | 182,638,365         | 70-2                   | 1,375                          | 95-0                   | 49-9                            | 59-0                             |

<sup>1</sup> Owing to the inability of the railways to supply strictly comparable data for the years prior to 1926, statistics of employees and wages which were given on p. 664 of the 1936 Year Book have been omitted here; the adjusted index numbers express the relation with later years as closely as it can be approximated.

<sup>2</sup> Ratio of salaries and wages chargeable to operating expenses only for 1926 and subsequent years.

**Government Aid to Railways.**—In order that the private railways of Canada might be constructed in advance of settlement, as colonization roads, or through thinly settled districts where little traffic was available, it was necessary for Dominion and Provincial Governments and even the municipalities to extend some form of assistance. The form of aid was generally a bonus of a fixed amount per mile of railway constructed and, in the early days, grants of land other than for right-of-way were also made. Tables 10 and 11 show the areas of the land granted as subsidies and for right-of-way, station grounds and townsite purposes to steam railway companies by the Dominion and Provincial Governments; the former gives the data by type of grant and the latter by railway companies to which the grants were made.

As the country developed, the objections to the land-grant method became more apparent, and aid was more frequently given in the form of a cash subsidy per mile of line, a loan, or a subscription to the shares of the railway, as shown analytically in Table 12. Table 13 records the details of the most recent type of assistance given to private railways, *viz.*, by the guaranteeing of their bonds or of the interest thereupon. These guarantees enabled the railways receiving them to borrow money at rates of interest considerably lower than would otherwise have had to be paid.

**10.—Areas of Land Granted to Steam Railways by the Dominion and Provincial Governments to Dec. 31, 1936, by Type of Grant.**

| Government Making Grant. | Bonus Grants.     | Grants for Right-of-Way, Station Grounds and Townsite Purposes. | Total.                 |
|--------------------------|-------------------|---|------------------------|
|                          | acres.            | acres.  | acres.                 |
| Dominion.....            | 31,783,655        | 97,988  | 31,881,643             |
| Nova Scotia.....         | 160,000           | Nil   | 160,000                |
| New Brunswick.....       | 1,788,392         | Nil   | 1,788,392              |
| Quebec.....              | 2,085,710         | Nil   | 2,085,710              |
| Ontario.....             | 3,241,207         | 229,502   | 3,470,709              |
| Manitoba.....            | Nil               | 2,510   | 2,510                  |
| Saskatchewan.....        | Nil               | 4,925   | 4,925                  |
| Alberta.....             | Nil               | 323   | 323                    |
| British Columbia.....    | 8,233,410         | 12,239  | 8,245,649 <sup>1</sup> |
| <b>Totals.....</b>       | <b>47,292,374</b> | <b>347,492</b>  | <b>47,639,866</b>      |

<sup>1</sup> Includes 4,065,076 acres repurchased from B.C. Southern and Columbia and Western Railways.

**11.—Areas of Land Granted to Steam Railways by the Dominion and Provincial Governments to Dec. 31, 1936, by Railway Companies.**

| Item.  | Granted by—       |                   | Total.            |
|--|-------------------|-------------------|-------------------|
|  | Dominion.         | Provinces.        |                   |
|  | acres.            | acres.            | acres.            |
| Canadian National Railways.....              | 5,763,741         | 1,841,061         | 7,604,802         |
| Canadian Pacific and branch lines.....       | 19,861,357        | 6,324             | 19,868,181        |
| Acquired lines.....                          | 3,320,446         | 8,182,588         | 11,503,034        |
| Leased lines—lease based on—                 |                   |                   |                   |
| Interest on bonds or dividends on stock..... | 2,927,185         | 2,657,879         | 5,585,064         |
| Gross earnings.....                          | 55                | Nil               | 55                |
| Totals, Canadian Pacific System.....         | 26,109,043        | 10,847,891        | 36,956,934        |
| Other railways.....                          | 8,559             | 3,009,871         | 3,078,730         |
| <b>Totals, All Railways.....</b>             | <b>31,881,643</b> | <b>15,753,223</b> | <b>47,639,866</b> |

## 12.—Cash Subsidies Granted to Railways to Dec. 31, 1936, by Railways.

| Railway.   | Granted by—        |                   |                   | Total.             |
|--|--------------------|-------------------|-------------------|--------------------|
|  | Dominion.          | Provinces.        | Municipalities.   |                    |
|  | \$                 | \$                | \$                | \$                 |
| Canadian National Railways.....                                | 64,403,853         | 16,677,308        | 7,393,867         | 88,474,928         |
| Canadian Pacific Railway.....                                  | 25,000,000         | 937,657           | 464,761           | 26,402,418         |
| Branch lines.....  | 5,089,569          | Nil               | Nil               | 5,089,569          |
| Lines turned over to C.P.—cost to Gov-<br>ernment.....         | 36,234,310         | Nil               | Nil               | 36,234,310         |
| C.P. Extensions—cost to Government....                         | 1,500,000          | Nil               | Nil               | 1,500,000          |
| Paid to Quebec province for North Shore..                      | 2,394,000          | Nil               | Nil               | 2,394,000          |
| Loan repaid by return of land grants<br>(6,793,014 acres)..... | 10,189,521         | Nil               | Nil               | 10,189,521         |
| Acquired lines.....  | 11,091,608         | 9,054,945         | 2,527,150         | 22,673,703         |
| Leased lines—lease based on—                                   |                    |                   |                   |                    |
| Interest on bonds or dividends on stock                        | 7,488,367          | 4,224,388         | 1,545,246         | 13,258,001         |
| Fixed rental.....  | 20,224             | 24,102            | Nil               | 44,326             |
| Gross earnings.....  | 937,058            | 346,500           | 73,000            | 1,356,558          |
| Totals, Canadian Pacific Railway System                        | 99,944,597         | 14,687,592        | 4,610,137         | 119,142,326        |
| Other railways.....  | 7,935,385          | 2,126,869         | 1,297,668         | 11,359,922         |
| <b>Totals, All Railways.....</b>                               | <b>172,233,835</b> | <b>32,391,669</b> | <b>13,391,692</b> | <b>218,017,196</b> |

<sup>1</sup> Includes \$15,142,633 loan to Grand Trunk.

## 13.—Railway Bonds Guaranteed by Dominion and Provincial Governments, as at Dec. 31, 1936.

| Government.  | Outstanding<br>Dec. 31, 1936.  |
|--|--------------------------------|
|  | \$                             |
| New Brunswick.....                                     | 3,644,977                      |
| Ontario.....   | 6,725,485                      |
| Manitoba.....  | 3,000,000                      |
| Saskatchewan.....                                      | 17,904,082                     |
| Alberta.....   | 18,394,428                     |
| British Columbia.....                                  | 45,186,001                     |
| <b>Total Guaranteed by Provincial Governments.....</b> | <b>94,854,953</b>              |
| <b>Dominion Government.....</b>                        | <b>721,413,072<sup>1</sup></b> |
| <b>Grand Total.....</b>                                | <b>\$16,268,025</b>            |

<sup>1</sup> Does not include \$216,207,142 perpetual debenture stock and guaranteed stock of the Grand Trunk Railway, now part of the Canadian National system, on which interest and dividends are guaranteed by the Dominion Government, nor Government-guaranteed bonds held by the Government itself.

## FINANCIAL STATISTICS OF GOVERNMENT-OWNED RAILWAYS.

**Canadian Government Railways.**—The Intercolonial Railway, built as a condition of Confederation and completed in 1876, and the Prince Edward Island Railway, opened in April, 1875, have, since their construction, been owned and operated by the Dominion Government. In 1903 the Dominion Government undertook the construction of the National Transcontinental railway line from Moncton, N.B., to Winnipeg, to be leased to the Grand Trunk Pacific Railway Co. for a period of 50 years. However, during the Great War the company was unable to take over the operation of the road when completed in 1915. The Government itself undertook its operation and was also obliged to lease the Lake Superior branch of the Grand Trunk Pacific Railway, which was isolated from the main line. A number of eastern branch lines have been acquired in recent years. The Hudson Bay Railway is a direct liability of the Dominion Government and is being operated by the Canadian National for the Government from Apr. 1, 1935, but is not included in the data for Canadian National Railways. To Mar. 31, 1937, the total cost of this railway was \$33,941,012, and of terminal work at Churchill \$14,054,400, exclusive of the expenditure of \$6,274,218 on the terminal at Nelson.\*

\*These figures of total cost include deficits from operations during construction.

#### 14.—Canadian Government Investments in Railways,<sup>1</sup> including Loans, to Mar. 31, 1937, and for the fiscal year 1937.

NOTE.—Summarized from the Annual Report of the Department of Transport. These investments were given by individual railways on pp. 671-672 of the 1936 Year Book. Since, except for the Hudson Bay Railway and loans to the Canadian National, they have changed little in recent years, they are repeated here only in so far as the main items of interest are concerned.

| Account.   | Expenditure,<br>Fiscal Year<br>1937. | Total<br>Expenditure. |
|--|--------------------------------------|-----------------------|
| <b>Canadian Government Railways.</b>   | \$                                   | \$                    |
| ROADS ENTRUSTED TO CANADIAN NATIONAL RAILWAYS—   |                                      |                       |
| Intercolonial Railway system.....  | Cr. 31                               | 132,283,622           |
| Prince Edward Island Railway.....  | Nil                                  | 16,500,277            |
| National Transcontinental Railway.....   | Nil                                  | 168,350,661           |
| Other railways.....  | Nil                                  | 71,745,412            |
| TOTALS.....  | Cr. 31                               | 388,879,972           |
| ROADS NOT ENTRUSTED TO CANADIAN NATIONAL RAILWAYS—   |                                      |                       |
| Hudson Bay Railway.....  | \$2,381                              | 32,038,323            |
| Hudson Bay Nelson terminal.....  | Nil                                  | 6,240,201             |
| Hudson Bay Churchill terminal.....   | 116,681                              | 13,263,759            |
| TOTALS.....  | 199,062                              | 52,142,283            |
| <b>Totals, Canadian Government Railways.....</b>   | <b>199,031</b>                       | <b>441,022,255</b>    |
| <b>Other Items.</b>  |                                      |                       |
| Governor-General's cars.....   | Nil                                  | 71,530                |
| Purchase Canadian Northern stock.....  | Nil                                  | 10,000,000            |
| Loans to Canadian Northern, Grand Trunk, Grand Trunk Pacific, Canadian National, and for purchases of equipment..... | 4,067,506                            | 686,835,160           |
| Grand Trunk Railway accounts.....  | Nil                                  | 25,729,133            |
| Canadian Pacific Railway grant and value of railways transferred.....  | Nil                                  | 62,791,435            |
| Other railways.....  | Nil                                  | 1,369,007             |
| <b>Totals, Other Items.....</b>  | <b>4,067,506</b>                     | <b>786,846,280</b>    |
| <b>Grand Totals.....</b>   | <b>5,166,537</b>                     | <b>1,227,868,535</b>  |

<sup>1</sup> Not including operating losses and profits.

**The Consolidation and Organization of the Canadian National System.\***  
—In pursuance of an Act of 1917 (7-8 Geo. V, c. 24), the Government acquired the capital stock of the Canadian Northern Railways with a mileage of 9,566.5. The insolvency of the Grand Trunk Pacific led to the appointment of the Minister of Railways as receiver on Mar. 9, 1919, and in October, 1920, the road was transferred to the Canadian National Railways. The Grand Trunk Railway was acquired under c. 13 of the Statutes of the second session of 1919, providing for arbitration of the considerations to be given to its shareholders. This arbitration finally disposed of, steps were taken to consolidate the various railways under government operation and control. In October, 1922, the Grand Trunk Board and the Canadian Northern Board gave place to a single Canadian National Board, to which the former Canadian Government Railways were turned over for management and operation. The unification of the Grand Trunk and Canadian National Railways was provided for by Order in Council of Jan. 30, 1923, which also brought into effect the Act to incorporate the Canadian National Railway Co. and respecting Canadian National Railways (c. 13, 1919).

**Operating Finances of the Canadian National Railways.†**—In Table 15 "Canadian Lines" include those of the Canadian Northern system, the Grand Trunk Railway of Canada, the Grand Trunk Pacific, and the Canadian Government Railways. The "United States Lines" include those lines known as the New England line, the Grand Trunk Western, the Duluth, Winnipeg and Pacific, and,

\*For further details of the acquisition of the Canadian Northern, Grand Trunk Pacific, and Grand Trunk Railways by the Dominion Government, see pp. 602-603 of the 1926 Year Book.

†For detailed statistics of the operation and finances of the Canadian National Railways during 1936, see Steam Railway Statistics, 1936, and Canadian National Railways, 1923-36, published by the Dominion Bureau of Statistics, also the Annual Report of the Canadian National Railways.

from Feb. 1, 1930, the Central Vermont. The Hudson Bay Railway was returned to the Government while under construction, and appropriations, etc., for this were not included with the 1926 and later data.

Gross revenues, operating expenses and net revenues shown in Table 15 include only those from steam railway and commercial telegraph operations, but the deficits are for the entire system, including the operating results of the Niagara, St. Catharines and Toronto Railway (electric) and other railways operated separately, hotels, commercial telegraphs, coastal steamships and all other outside operations.

Up to 1928 there was a marked improvement over the results of the first year after consolidation (1923), when the deficit, including profit and loss adjustments, was \$54,634,323, but the light traffic in 1932 so reduced gross revenues that, with increased interest charges, the deficit increased to \$101,335,074. It was reduced slightly in 1933 to \$97,651,937, in 1934 to \$80,662,354, increased in 1935 to \$115,281,690, and in 1936 stood at \$92,311,038.

The figures of Table 15 are taken from the accounts of the railways.

15.—Gross Revenues, Operating Expenses, Net Revenues, Interest on Funded Debt, and Deficits of the Canadian National Railways,<sup>1</sup> calendar years 1923-36.

| Year.     | Railway<br>Operating<br>Revenues. <sup>2</sup> | Railway<br>Operating<br>Expenses. <sup>2</sup> | Net Operating Revenues. <sup>2</sup> |                         |            | Net Corporate<br>Income before<br>Deducting<br>Interest. |
|-----------|--|--|--------------------------------------|-------------------------|------------|--|
|           |  |  | Canadian<br>Lines.                   | United<br>States Lines. | Total.     |  |
|           | \$   | \$   | \$                                   | \$                      | \$         | \$   |
| 1923..... | 256,961,590                                    | 235,838,046                                    | 12,543,442                           | 8,580,101               | 21,123,544 | 13,501,049   |
| 1924..... | 249,590,070                                    | 221,022,049                                    | 12,494,459                           | 5,480,162               | 17,974,621 | 14,772,828   |
| 1925..... | 249,111,884                                    | 216,200,434                                    | 24,702,755                           | 5,413,695               | 30,116,450 | 30,443,852   |
| 1926..... | 270,982,222                                    | 223,801,262                                    | 36,312,349                           | 11,108,612              | 47,420,961 | 41,586,242   |
| 1927..... | 274,879,118                                    | 233,805,267                                    | 30,950,378                           | 10,614,473              | 41,575,851 | 39,325,419   |
| 1928..... | 304,501,268                                    | 249,731,696                                    | 42,638,750                           | 12,220,822              | 54,859,572 | 44,449,780   |
| 1929..... | 290,466,980                                    | 248,632,275                                    | 30,998,589                           | 10,866,116              | 41,864,705 | 32,095,275   |
| 1930..... | 290,268,998                                    | 228,288,023                                    | 10,944,523                           | 5,136,452               | 22,080,975 | 15,730,227   |
| 1931..... | 300,505,162                                    | 199,312,965                                    | 2,313                                | 1,159,384               | 1,192,167  | Dr. 5,282,850  |
| 1932..... | 161,103,594                                    | 155,208,101                                    | 5,647,334                            | 248,099                 | 5,895,433  | Dr. 4,041,040  |
| 1933..... | 148,519,742                                    | 142,512,550                                    | 4,123,908                            | 1,578,185               | 5,702,183  | Dr. 3,552,288  |
| 1934..... | 164,002,602                                    | 151,936,079                                    | 10,527,738                           | 4,493,625               | 12,669,423 | 6,305,080  |
| 1935..... | 173,184,502                                    | 158,026,249                                    | 9,502,437                            | 4,755,816               | 14,258,253 | 4,500,610  |
| 1936..... | 186,610,459                                    | 171,477,690                                    | 9,096,990                            | 6,035,809               | 15,132,799 | 5,987,277  |

| Year.     | Interest<br>on<br>Funded Debt. |  | Debit Balances to<br>Profit and Loss<br>Account. <sup>2</sup> |  | Profit and<br>Loss Debits. | Cumulative Deficits,<br>including Profit and Loss<br>Balances. <sup>2</sup> |  |
|-----------|--------------------------------|--|---|--|----------------------------|---|--|
|           | On<br>Public<br>Debt.          | On<br>Dominion<br>Government<br>Loans. | Including<br>Government<br>Loan<br>Interest.                  | Excluding<br>Government<br>Loan<br>Interest. |                            | Including<br>Government<br>Loan<br>Interest.                                | Excluding<br>Government<br>Loan<br>Interest. |
|           | \$                             | \$                                     | \$  | \$   | \$                         | \$  | \$   |
| 1923..... | 35,041,380                     | 30,157,944                             | 51,697,675  | 21,539,731                                   | 2,936,648                  | 54,634,323  | 24,476,379                                   |
| 1924..... | 38,361,704                     | 31,271,043                             | 54,860,419  | 23,589,376                                   | Cr. 385,872                | 109,108,870   | 47,679,678                                   |
| 1925..... | 40,438,235                     | 31,450,382                             | 51,444,765  | 9,994,383                                    | 206,505                    | 150,760,140   | 57,880,771                                   |
| 1926..... | 39,107,233                     | 32,090,454                             | 29,701,445  | Cr. 2,389,009                                | Cr. 6,502,004              | 173,959,581   | 48,698,758                                   |
| 1927..... | 40,526,067                     | 32,505,234                             | 30,705,912  | 4,200,678                                    | 820,938                    | 211,486,481   | 54,011,424                                   |
| 1928..... | 41,810,880                     | 32,507,337                             | 29,868,437  | Cr. 2,638,990                                | 3,446,391                  | 244,801,309   | 54,818,915                                   |
| 1929..... | 45,503,950                     | 32,090,846                             | 40,099,250  | 13,408,705                                   | 511,067                    | 291,411,326   | 68,738,087                                   |
| 1930..... | 51,316,121                     | 32,662,876                             | 68,279,770  | 35,538,894                                   | 5,453,922                  | 346,145,318   | 107,776,556                                  |
| 1931..... | 55,587,145                     | 32,643,624                             | 93,513,419  | 60,869,795                                   | 5,762,261                  | 464,420,998   | 170,410,589                                  |
| 1932..... | 56,965,279                     | 35,525,540                             | 96,582,469  | 61,006,910                                   | 4,802,615                  | 565,756,072   | 242,220,093                                  |
| 1933..... | 56,465,427                     | 36,034,141                             | 96,051,854  | 60,017,713                                   | 1,600,103                  | 668,498,029   | 303,837,090                                  |
| 1934..... | 55,811,745                     | 35,994,878                             | 85,501,273  | 49,506,095                                   | 4,161,080                  | 763,070,381   | 357,505,634                                  |
| 1935..... | 53,468,792                     | 35,940,677                             | 84,827,859  | 48,878,182                                   | 30,463,831                 | 868,552,071   | 430,837,697                                  |
| 1936..... | 49,184,623                     | 36,428,873                             | 79,626,219  | 43,197,346                                   | 12,684,819                 | 960,663,109   | 492,719,862                                  |

<sup>1</sup> Includes Central Vermont Railway from Feb. 1, 1930.

<sup>2</sup> Revenues and expenses 1923-27, adjusted to include commercial telegraph lines to be comparable with 1928-36.

<sup>3</sup> The deficit shown includes appropriation for insurance fund of \$9,739,533.

<sup>4</sup> Interest at 4 p.c. on \$34,927,098 G.T.P. debenture stock reduced under agreement to 2 p.c.



**The Debt and Interest Charges of the Canadian National Railways.**—Table 16 analyses the increase in the debt and interest charges of the system, including both Canadian and United States lines. To define clearly what is included under debt due to the Dominion Government in Table 16, the appropriations for the Canadian Government Railways have been separated from the loans and advances to the remainder of the system. The Canadian Government Railways include the Intercolonial, National Transcontinental, Prince Edward Island and several other smaller railways in the eastern provinces, together with the Quebec Bridge. The Hudson Bay Railway was included in the Canadian Government Railways until 1926, when it was transferred back to the Department of Railways and Canals for completion, and appropriations on its account were deducted. These Canadian Government Railways appropriations do not include the operating deficits of the Canadian Government Railways for 1919 and subsequent years nor the deficits of other portions of the Eastern Lines\* since July 1, 1927, but include investments for construction, purchase and working capital of the Canadian Government Railways. As the book value of these properties is included on the assets side of the balance sheet, the cost of these roads to the Dominion is included in the liabilities of the system as an offset. The construction or purchase of these roads was financed by the Dominion from the Consolidated Revenue Fund, and consequently no interest on such expenditures accrued in the railway accounts.

\*Canadian National lines east of Lévis and Diamond Junction, Que.

**16.—Long-Term Debt of Canadian National Railways (Including Appropriations for Canadian Government Railways), Showing Principal Outstanding at ends of calendar years 1922-36.**

| Year.                                      | DUE TO DOMINION GOVERNMENT.   |  |  |                         |
|--|---|--|--|-------------------------|
|  | Appropriations<br>for<br>Canadian<br>Government<br>Railways. <sup>2</sup> | Loans<br>and<br>Advances. <sup>2,3</sup> | Unpaid Accrued<br>Interest<br>on<br>Government<br>Loans. | Total.                  |
|  | \$  | \$                                       | \$   | \$                      |
| 4  | 404,272,030   | 115,607,457                              | 4,443,356  | 524,322,873             |
| 1922                                       | 442,062,571 <sup>5</sup>  | 506,045,069                              | 69,328,803   | 1,015,337,343           |
| 1923                                       | 447,643,526 <sup>5</sup>  | 571,406,082                              | 98,669,270   | 1,117,718,878           |
| 1924                                       | 451,712,485 <sup>5</sup>  | 581,406,082                              | 130,157,992  | 1,163,276,559           |
| 1925                                       | 453,935,303 <sup>5</sup>  | 581,406,082                              | 161,861,503  | 1,197,202,888           |
| 1926                                       | 437,412,033   | 601,406,082                              | 193,951,356  | 1,232,769,471           |
| 1927                                       | 450,416,387   | 601,406,082 <sup>6</sup>                 | 226,142,006 <sup>4</sup>                                 | 1,263,964,475           |
| 1928                                       | 417,270,953   | 601,406,082                              | 255,024,308  | 1,278,710,343           |
| 1929                                       | 417,150,141   | 601,406,082                              | 290,088,439  | 1,308,644,662           |
| 1930                                       | 403,443,935   | 604,406,239                              | 322,155,902  | 1,330,006,076           |
| 1931                                       | 405,209,240   | 604,406,239                              | 354,173,113  | 1,363,788,592           |
| 1932                                       | 405,170,073   | 653,604,794                              | 388,930,381  | 1,447,705,248           |
| 1933                                       | 404,378,682   | 661,832,895                              | 424,358,109  | 1,490,569,686           |
| 1934                                       | 404,279,809   | 672,580,943                              | 469,486,187  | 1,536,347,039           |
| 1935                                       | 405,062,275   | 754,600,910                              | 495,030,137  | 1,654,693,322           |
| 1936                                       | 405,062,244   | 721,084,025 <sup>7</sup>                 | 530,832,598  | 1,656,978,867           |
| Increases or decreases, 1922-36            | -37,000,327   | 214,138,056                              | 461,503,795  | 638,641,524             |
| Plus C.G.R. credits                        |   |  |  | 42,760,459 <sup>8</sup> |
| Less interest on Government loans (unpaid) |   |  |  | 461,503,795             |
| <b>Net Increase in New Funds</b>           |   |  |  | <b>219,898,188</b>      |

For footnotes, see end of table, p. 653.

16.—Long-Term Debt of Canadian National Railways (Including Appropriations for Canadian Government Railways), Showing Principal Outstanding at ends of calendar years 1922-36—concluded.

| DUE TO PUBLIC.                                  |                                   |                          |                           |                           |                            |
|---|-----------------------------------|--------------------------|---------------------------|---------------------------|----------------------------|
| Year.   | Guaranteed by—                    |                          | Unguaranteed.             | Total.                    | Grand Total. <sup>10</sup> |
|   | Dominion Government. <sup>9</sup> | Provincial Governments.  |                           |                           |                            |
|   | \$                                | \$                       | \$                        | \$                        | \$                         |
| 1922.....                                       | 331,309,904                       | 93,412,807               | 385,198,150               | 809,920,861               | 1,334,243,734              |
| 1923.....                                       | 447,572,904                       | 93,574,380               | 263,055,860               | 804,503,144               | 1,322,840,487              |
| 1924.....                                       | 470,372,904                       | 93,574,380               | 259,151,772               | 823,099,056               | 1,940,817,034              |
| 1925.....                                       | 538,572,904                       | 93,574,380               | 261,465,799               | 913,913,083               | 2,077,189,642              |
| 1926.....                                       | 581,372,904                       | 93,574,380               | 256,382,019               | 931,329,303               | 2,128,532,191              |
| 1926.....                                       | 579,872,891                       | 93,574,380               | 252,032,973 <sup>11</sup> | 925,480,244 <sup>11</sup> | 2,158,249,715              |
| 1927.....                                       | 657,181,330                       | 93,574,380               | 230,626,037               | 981,381,737               | 2,245,346,212              |
| 1928.....                                       | 681,000,655                       | 93,574,380               | 203,313,998               | 977,889,033               | 2,254,599,376              |
| 1929.....                                       | 807,048,434                       | 91,654,503 <sup>12</sup> | 220,856,554 <sup>12</sup> | 1,122,559,491             | 2,431,204,155              |
| 1930.....                                       | 854,431,995                       | 74,912,466 <sup>12</sup> | 239,221,402 <sup>12</sup> | 1,168,565,863             | 2,498,571,839              |
| 1931.....                                       | 970,562,289                       | 74,912,466 <sup>12</sup> | 230,982,452 <sup>12</sup> | 1,276,457,207             | 2,640,245,790              |
| 1932.....                                       | 965,831,382                       | 74,912,466 <sup>12</sup> | 223,773,310 <sup>12</sup> | 1,264,517,167             | 2,712,232,415              |
| 1933.....                                       | 962,962,576                       | 74,912,466 <sup>12</sup> | 217,397,113 <sup>12</sup> | 1,255,362,155             | 2,745,851,841              |
| 1934.....                                       | 963,906,119                       | 74,912,466 <sup>12</sup> | 207,511,854 <sup>12</sup> | 1,246,330,439             | 2,782,677,478              |
| 1935.....                                       | 889,741,774                       | 74,912,466 <sup>12</sup> | 190,124,761 <sup>12</sup> | 1,154,779,001             | 2,809,472,323              |
| 1936.....                                       | 537,620,214                       | 73,777,553 <sup>12</sup> | 173,214,082 <sup>12</sup> | 1,184,612,249             | 2,841,591,116              |
| Increases or decreases, 1922-36.....            | 489,747,310                       | -19,796,427              | -89,841,778               | 380,109,105               | 1,018,750,629              |
| Plus C.G.R. credits.....                        |                                   |                          |                           |                           | 42,760,459 <sup>8</sup>    |
| Less interest on Government loans (unpaid)..... |                                   |                          |                           |                           | 461,503,795                |
| Net Grand Total Increase in New Funds.....      |                                   |                          |                           |                           | 600,007,293                |

<sup>1</sup> See Table 17 for short-term debt. <sup>2</sup> Deficits of Eastern Lines from July 1, 1927, and for entire system from Jan. 1, 1932, are paid by the Dominion Government and are not included in this table. See Table 17. <sup>3</sup> Temporary loans and inter-line loans eliminated. <sup>4</sup> Amounts outstanding at dates constituent lines were taken over by Canadian National, viz.: Canadian Northern, Sept. 30, 1917; Grand Trunk Pacific, Mar. 9, 1919; Grand Trunk, May 21, 1920; Canadian Government, Mar. 31, 1919 (actual date of transfer Nov. 20, 1918). <sup>5</sup> Includes Hudson Bay \$14,531,706, eliminated from statement in 1926. <sup>6</sup> Government loans to lines other than Canadian Government Railways now comprising Eastern Lines ceased to accrue interest after July 1, 1927. Those on June 30, 1927, were: capital \$2,585,605, deficits \$8,835,176, total \$11,400,781. <sup>7</sup> Includes temporary loan for refunding purposes, \$35,865,757. <sup>8</sup> Credits for property including Hudson Bay Railway, Halifax Harbour property, etc., transferred to other Government departments or bodies. <sup>9</sup> Includes \$216,207,145 perpetual debenture stock guaranteed as to interest only, formerly Grand Trunk bonds. <sup>10</sup> The amount not included in the Dominion Government debt is the total due the public, since the total due the Government is already taken into account in Dominion debt figures. <sup>11</sup> Central Vermont included in annual report; excluded here. <sup>12</sup> St. John and Quebec Railway bonds \$3,737,978 guaranteed by New Brunswick transferred from unguaranteed to guaranteed, 1929-30.

In a rather different class are the loans and advances made by the Government to the Canadian National Railways or constituent companies on notes, bonds and receiver certificates with accrued simple interest ranging from 3½ to 6 p.c. In computing the public debt of Canada the Finance Department considers these railway loans and advances as "non-active assets" similar to investments in canals, public works, etc., and as such does not subtract them from the gross debt in computing the net debt. The railways, however, debit their accounts with the accrued interest on these Government advances, all of which remains unpaid.

The debt due to the public includes debenture stock maturing and perpetual and bonds and mortgages of the constituent railways, but does not include the capital stock of the Grand Trunk Railway held by the Government, nor the cost of acquiring the same. Likewise it does not include the capital stock of the Canadian Northern system. The stock of the Grand Trunk Pacific is all held by the Canadian National system and is, therefore, not included either.

Table 17 has been compiled to reconcile the investments in and loans to the Canadian National Railways (including Canadian Government Railways) as shown

in the Public Accounts for the fiscal year ended Mar. 31, 1937, with the debt to the Dominion Government shown in the Railways' balance sheet at Dec. 31, 1936, amounting to \$1,656,978,867 as shown for 1936 in the first half of Table 16.

**17.—Reconciliation between Public Accounts, Mar. 31, 1937, and Canadian National Railways' Balance Sheet, Dec. 31, 1936, with respect to the Railways' Obligations to the Dominion Government.**

| PUBLIC ACCOUNTS AT MAR. 31, 1937.  |                      | CANADIAN NATIONAL RAILWAYS' BALANCE SHEET,<br>DEC. 31, 1936. |                      |
|------------------------------------|----------------------|--|----------------------|
| Canadian Government Railways—      | \$                   | Temporary loans.....   | \$ 35,076,695        |
| Capital expenditure.....           | 388,879,672          | Canadian Government Railway                                  |                      |
| Stores and open account.....       | 15,748,923           | appropriation account.....                                   | 405,062,244          |
| Canadian National Railways—        |                      | Canadian National Railway loans...                           | 686,607,830          |
| Loans (non-active).....            | \$656,527,456        | Interest on loans—accrued but un-                            |                      |
| Less Canadian North-               |                      | paid.....  | 590,832,598          |
| ern stock.....                     | 10,000,000           | <b>Total.....</b>  | <b>1,656,978,867</b> |
| Temporary loans <sup>1</sup> ..... | 645,527,456          | Deduct—  |                      |
|                                    | 42,146,771           | Miscellaneous C.G.R. investments                             |                      |
|                                    |                      | and working capital not taken                                |                      |
|                                    |                      | into Public Accounts.....Cr.                                 | 573,177              |
|                                    |                      | Expenditures by C.N.R. for Hud-                              |                      |
|                                    |                      | son Bay Rly. paid from loans by                              |                      |
|                                    |                      | Dominion.....Cr.   | 600,870              |
|                                    |                      | Repayment of temporary loans,                                |                      |
|                                    |                      | January-March, 1937.....                                     | 35,076,695           |
|                                    |                      | Unpaid interest.....   | 590,832,598          |
| <b>Total.....</b>                  | <b>1,092,303,121</b> | <b>Total.....</b>  | <b>1,092,303,121</b> |

<sup>1</sup> Excludes assistance under Supplementary Public Works Construction Act, c. 34, 1935, as follows: purchase of railway equipment, \$3,854,489; increased employment in shops for equipment repairs, \$1,183,593; total, \$5,038,082.

Table 18 analyses the funds received and expended by the Canadian National Railways. In addition to the funds available under long-term debt, as shown in Table 16, the railways have frequently had short-term loans as well as appropriations from Consolidated Fund Account for Eastern Lines and other cash deficits. The figures given in Table 18 differ from the figures given in the annual reports of the railways by reason of certain accounting adjustments.

**18.—Funds Received and Expended by Canadian National Railways, calendar years 1923-36.**

**FUNDS RECEIVED.**

| Year.                          | Net<br>Capital<br>Received<br>through Long-<br>Term Debt. <sup>1</sup> | Short-<br>Term<br>Notes,<br>Dominion<br>Government. <sup>2</sup> | Dominion<br>Government<br>Contributions<br>For Cash<br>Deficits. | Paided Debt<br>Discount<br>Amortized<br>through<br>Income and<br>Profit and<br>Loss<br>Accounts. | Increase (or<br>Decrease)<br>in Working<br>Capital and<br>Other Balance<br>Sheet<br>Accounts. <sup>3</sup> | Total.             |
|--------------------------------|--|--|--|--|--|--------------------|
|                                | \$   | \$   | \$   | \$   | \$   | \$                 |
| Cash on hand Jan. 1, 1923..... |  |  |  |  |  | 20,790,857         |
| 1923.....                      | 84,145,051   | 10,000,000   | Nil  | 132,487  | 1,555,536  | 95,833,074         |
| 1924.....                      | 97,893,401   | -10,000,000  | Nil  | 352,182  | -18,920,866  | 69,324,717         |
| 1925.....                      | 16,473,823   | Nil  | Nil  | 631,227  | 26,127,772   | 42,232,827         |
| 1926.....                      | 14,158,108   | Nil  | Nil  | 574,099  | 494,219  | 15,226,486         |
| 1927.....                      | 53,581,709   | Nil  | 2,117,936  | 553,133  | -1,369,435   | 54,953,303         |
| 1928.....                      | -4,838,504   | 43,500,000   | 4,200,357  | 566,630  | 20,398,449   | 69,776,941         |
| 1929.....                      | 140,608,313  | 1,329,600  | 4,762,217  | 1,087,079  | -26,479,555  | 121,307,654        |
| 1930.....                      | 48,165,462   | 10,823,942   | 6,476,667  | 658,695  | -10,686,467  | 76,811,251         |
| 1931.....                      | 105,896,354  | -20,645,291  | 8,712,762  | 894,482  | 6,387,116  | 100,745,423        |
| 1932.....                      | 37,219,349   | -35,008,251  | 60,058,507 <sup>4</sup>  | 913,404  | -405,640   | 62,777,369         |
| 1933.....                      | -986,911   | Nil  | 58,955,388   | 914,311  | 10,012,670   | 68,895,958         |
| 1934.....                      | 1,588,480  | Nil  | 48,407,901   | 647,117  | 2,600,892  | 53,444,390         |
| 1935.....                      | -87,961,388  | 74,726,975   | 47,421,464   | 1,108,096  | 42,528,808   | 77,823,957         |
| 1936.....                      | 33,247,729   | -38,861,218  | 43,303,394   | 6,533,340  | -3,044,065   | 41,179,680         |
| <b>Totals.....</b>             | <b>538,411,043</b>   | <b>35,865,757</b>  | <b>284,416,593</b>   | <b>15,767,341</b>  | <b>75,572,388</b>  | <b>970,823,979</b> |

For footnotes see end of table, p. 655.

## 18.—Funds Received and Expended by Canadian National Railways, calendar years 1923-36—concluded.

## FUNDS EXPENDED.

| Year.                           | Investments.   |                          |                   | System Net Loss,<br>Excluding Interest on<br>Government Loans. <sup>1</sup> |                             | Total.      |
|---------------------------------|--|--------------------------|-------------------|---|-----------------------------|-------------|
|                                 | Railway<br>Fixed<br>Property,<br>Equipment,<br>Hotels and<br>Separately<br>Operated<br>Properties. | Affiliated<br>Companies. | Sinking<br>Funds. | Income<br>Deficit.  | Profit and<br>Loss Charges. |             |
|                                 | \$   | \$                       | \$                | \$  | \$                          | \$          |
| 1923.....                       | 54,564,673   | 1,815,640                | 7,007,397         | 21,539,731  | 2,936,648                   | 88,264,069  |
| 1924.....                       | 41,814,466   | 2,473,153                | Cr. 3,361,686     | 23,589,876  | Cr. 365,872                 | 64,129,489  |
| 1925.....                       | 18,949,524   | 6,271,577                | 1,098,426         | 9,994,333   | 206,505                     | 36,520,415  |
| 1926.....                       | 24,462,539   | 1,658,228                | 3,639,196         | Cr. 2,389,000   | Cr. 6,502,004               | 20,268,950  |
| 1927.....                       | 46,096,935   | 4,128,619                | 1,192,647         | 4,200,678   | 820,988                     | 56,430,867  |
| 1928.....                       | 44,034,153   | 13,026,571               | 3,158,122         | Cr. 2,638,900   | 3,440,391                   | 61,020,837  |
| 1929.....                       | 88,499,908   | Cr. 6,135,117            | 297,988           | 13,408,705  | 511,067                     | 96,582,551  |
| 1930.....                       | 66,560,353   | 12,006,022               | 2,622,350         | 35,585,894  | 5,453,922                   | 121,738,543 |
| 1931.....                       | 34,257,067   | 1,871,140                | 574,253           | 60,800,795  | 5,702,261                   | 102,864,516 |
| 1932.....                       | 799,159  | 950,736                  | 142,593           | 61,006,910  | 4,802,615                   | 67,702,322  |
| 1933.....                       | 952,996  | 2,833,998                | 1,834,702         | 60,017,712  | 1,600,103                   | 67,239,512  |
| 1934.....                       | Cr. 1,015,889  | Cr. 326,107              | 2,174,172         | 49,506,095  | 4,161,080                   | 54,499,951  |
| 1935.....                       | 687,087  | 30,789                   | Cr. 11,938,698    | 48,878,182  | 30,453,831                  | 68,111,191  |
| 1936.....                       | 6,939,551  | 58,330                   | Cr. 11,417,613    | 49,197,547  | 12,684,818                  | 51,462,463  |
| Totals.....                     | 428,022,551  | 46,723,581               | Cr. 1,135,861     | 426,767,599   | 65,952,353                  | 966,830,196 |
| Cash on hand Dec. 31, 1936..... |  |                          |                   |   |                             | 13,973,753  |
|                                 |  |                          |                   |   |                             | 970,823,979 |

<sup>1</sup> This is the net increase in par value as shown in Table 17, less issue expense and discount. Interest on Government loans is not included.

<sup>2</sup> Temporary loans and inter-line loans are excluded in the first two columns of Funds Received and included in the fifth column. "Other Balance Sheet Accounts" include profit and loss balances.

<sup>3</sup> Deficit of lines other than Eastern Lines for 1932 not paid until 1933.

<sup>4</sup> Includes charges for property abandonments, obsolete equipment and writing down land values, etc., not required in cash amounting to \$72,520,298, included in the fifth column of Funds Received.

<sup>5</sup> Includes credit \$8,138,492 cancellation of G.T.P. 4 p.c. debenture stock interest of which credit \$5,348,152 relates to the period prior to 1923.

Table 19 shows the assets of the Canadian National Railways at Dec. 31, 1922, and at Dec. 31, 1936, with the increase or decrease for the fourteen-year period.

## 19.—Assets of the Canadian National Railways System, as at Dec. 31, 1922 and 1936.

| Account.   | Dec. 31, 1922. | Dec. 31, 1936. | Increase (+)<br>or<br>Decrease (-). |
|--|----------------|----------------|-------------------------------------|
|  | \$             | \$             | \$                                  |
| <b>INVESTMENTS—</b>                              |                |                |                                     |
| Investments in road and equipment.....           | 1,765,323,644  | 2,095,114,004  | +329,790,360                        |
| Improvements on leased railway property.....     | 1,492,123      | 4,248,904      | +2,756,841                          |
| Sinking funds.....                               | 4,029,855      | 504,054        | -4,125,801                          |
| Deposits in lieu of mortgaged property sold..... | 6,171,808      | 5,487,731      | -684,077                            |
| Miscellaneous physical property.....             | 34,767,914     | 59,814,644     | +25,046,730                         |
| Investments in affiliated companies.....         | 24,253,323     | 31,642,437     | +7,389,114                          |
| Other investments.....                           | 5,789,464      | 741,308        | -5,048,066                          |
| TOTALS, INVESTMENTS.....                         | 1,842,428,131  | 2,197,553,232  | +355,125,101                        |

**19.—Assets of the Canadian National Railways System, as at Dec. 31, 1922 and 1936—concluded.**

| Account.  | Dec. 31, 1922.       | Dec. 31, 1936.       | Increase (+)<br>or<br>Decrease (-). |
|---|----------------------|----------------------|-------------------------------------|
|   | \$                   | \$                   | \$                                  |
| <b>CURRENT ASSETS—</b>  |                      |                      |                                     |
| Cash.....   | 14,651,422           | 6,643,890            | -8,007,532                          |
| Special deposits.....   | 6,139,435            | 7,329,893            | +1,190,458                          |
| Loans and bills receivable.....                               | 11,600               | -                    | -11,600                             |
| Traffic and car service balances receivable.....              | 2,528,622            | 1,625,703            | -902,919                            |
| Net balances receivable from agents and conductors.....       | 5,386,673            | 4,671,504            | -715,169                            |
| Miscellaneous accounts receivable.....                        | 16,857,420           | 4,116,325            | -12,741,095                         |
| Dominion Government—balance due on deficit contributions..... | Nil                  | 15,814,625           | +15,814,625                         |
| Materials and supplies.....                                   | 41,408,999           | 25,958,847           | -15,450,652                         |
| Interest and dividends receivable.....                        | 377,003              | 507,347              | +130,344                            |
| Rents receivable.....   | 112,260              | 56,424               | -55,845                             |
| Other current assets.....                                     | 106,775              | 641,672              | +534,897                            |
| <b>TOTALS, CURRENT ASSETS.....</b>                            | <b>87,580,218</b>    | <b>67,365,730</b>    | <b>-20,214,488</b>                  |
| <b>DEFERRED ASSETS—</b>                                       |                      |                      |                                     |
| Working fund advances.....                                    | 166,847              | 201,016              | +34,169                             |
| Insurance and other funds.....                                | 352,458              | 11,777,408           | +11,424,920                         |
| Other deferred assets.....                                    | 11,808,962           | 6,655,458            | -5,150,504                          |
| <b>TOTALS, DEFERRED ASSETS.....</b>                           | <b>12,325,297</b>    | <b>18,633,882</b>    | <b>+6,308,585</b>                   |
| <b>UNADJUSTED DEBITS—</b>                                     |                      |                      |                                     |
| Rents and insurance premiums paid in advance....              | 322,059              | 223,657              | -98,402                             |
| Discount on capital stock.....                                | 634,960              | 189,500              | -445,460                            |
| Discount on funded debt.....                                  | 1,919,635            | 11,882,787           | +9,963,152                          |
| Other unadjusted debits.....                                  | 12,820,903           | 4,520,181            | -8,300,722                          |
| <b>TOTALS, UNADJUSTED DEBITS.....</b>                         | <b>15,697,557</b>    | <b>16,816,125</b>    | <b>+1,118,568</b>                   |
| <b>Grand Totals.....</b>                                      | <b>1,958,031,203</b> | <b>2,300,368,969</b> | <b>+342,337,766</b>                 |

**Capital Revision of the Canadian National Railways.**—The Canadian National Railways Capital Revision Act, c. 22 of the Statutes of 1937, dealt with certain Government liabilities of the system. It created the Canadian National Railways Securities Trust as a medium for maintaining in perpetuity the Government claims against the system for loans made, amounting to \$643,860,558, and accrued unpaid interest of \$574,781,637. This total of \$1,218,642,195 included a claim of \$43,949,039 for interest on loans not included in the Canadian National accounts. No-par value capital stock of the Securities Trust was issued to the Government in exchange for these claims at an initial stated value equal to the amount of loans used for capital purposes, namely, \$270,037,438. Capital stocks held by the Government were cancelled to the extent of \$247,628,339, and claim for an old grant of the Province of Canada, amounting to \$15,142,633 was abandoned.

All stock ownership of the various railways was placed under the control of the Canadian National Railway Company, the Government in turn receiving stock of the latter company.

A great deal of confusion has been evident when the liability accounts of the National Railways and those of the Dominion were brought together, and to avoid duplication in future, the Act provided that liabilities of the National Railways to the Government (excepting temporary financing) will be shown under the descriptive heading of "Dominion Government—Proprietor's Equity"; this is because such liabilities are all included in the net debt of Canada. At Jan. 1, 1937, this account appears as follows:—

|   |                          |
|---|--------------------------|
| Dominion Government—Proprietor's Equity—  |                          |
| 1,000,000 shares of no-par value capital stock of the Canadian National Railway Company issued in exchange for residual value of Canadian Northern Capital stock.....                               | \$ 18,000,000.00         |
| 5,000,000 shares of no-par value capital stock issued by Securities Trust to the Government in consideration of the advances—claims for unpaid interest and collateral held by the Government. .... | 270,037,437.88           |
| Dominion Government capital expenditures for Canadian Government Railways.....  | 388,290,263.52           |
|   | <u>\$ 678,327,701.40</u> |

This new account will reflect annually all capital losses due to abandonments and the like that are not included in the annual deficit of the Railway as submitted to Parliament.

Deficits will be paid from the Consolidated Fund of Canada, in conformity with the provisions of the Canadian National-Canadian Pacific Act, 1936, which provides that deficits shall not be funded. Any temporary assistance by the Government on capital account will be repaid through the proceeds of securities sold by the Canadian National Railways.

Finally, the Act provides that an appendix shall be included in the Public Accounts of Canada to show the historical record of Government assistance to Railways, and a note to this effect will appear on the balance sheet of the Canadian National Railways in connection with the "Proprietor's Equity".

### Subsection 3.—Steam Railway Traffic.

In addition to an analysis of passenger and freight traffic statistics for all steam railways, a separate analysis is given of the operations and traffic of the Canadian National Railways, since, being controlled by the Dominion Government, the information is considered of special interest.

**Passenger and Freight Traffic.**—The maximum volume of passenger traffic, as indicated by passengers carried one mile, was reached in the calendar year 1919 and the maximum of freight traffic in 1928. In recent years both freight and passenger traffic, especially the latter, have been affected by the increase in the use of motor vehicles and this traffic decrease was much aggravated by the general decline in commercial activity after 1929, but improvements were made in 1934, 1935, and 1936.

The average haul for freight in Table 20 is the average for all railways, which eliminates the effects of consolidations of railways and of interchanging freight between Canadian railways. The average revenue per passenger increased in 1918 and 1919 with increases in rates, but the increases between 1924 and 1930 were largely due to decreases in the short haul traffic. The increases in freight train loading and train revenues have been due to the use of larger and more powerful locomotives.

**20.—Summary Analysis of Statistics of Passenger and Freight Services and Receipts, for the calendar years 1920-36.**

NOTE.—Corresponding figures for the years 1915-19 were given at pp. 652-653 of the 1937 Year Book and for 1910-15 at pp. 628-629 of the 1923-23 Year Book.

PASSENGERS.

| Year.     | Revenue<br>Passenger<br>Train<br>Miles. <sup>1</sup> | Passenger<br>Car<br>Miles. <sup>1</sup> | Passengers<br>Carried. <sup>2</sup> | Passengers<br>Carried<br>One<br>Mile. | Passengers<br>Carried One<br>Mile per<br>Mile of Line. |
|-----------|--|---|-------------------------------------|---------------------------------------|--|
|           | No.  | No.                                     | No.                                 | No.                                   | No.  |
| 1920..... | 47,383,411   | 341,580,467                             | 51,318,422                          | 3,522,494,856                         | 90,376   |
| 1921..... | 45,015,951   | 343,970,653                             | 46,793,231                          | 2,960,553,955                         | 75,219   |
| 1922..... | 44,337,087   | 319,234,566                             | 44,333,620                          | 2,814,113,531                         | 71,497   |
| 1923..... | 45,039,829   | 336,793,915                             | 44,834,337                          | 3,076,341,444                         | 77,895   |
| 1924..... | 46,785,081   | 338,092,333                             | 42,921,800                          | 2,872,333,579                         | 72,355   |
| 1925..... | 46,201,823   | 343,170,184                             | 41,458,084                          | 2,910,760,047                         | 72,771   |
| 1926..... | 46,271,124   | 352,327,020                             | 42,686,166                          | 2,998,932,309                         | 74,595   |
| 1927..... | 47,551,838   | 365,940,546                             | 41,840,550                          | 3,051,754,030                         | 75,522   |
| 1928..... | 48,918,897   | 380,717,433                             | 40,592,792                          | 3,140,800,693                         | 77,110   |
| 1929..... | 49,076,458   | 379,458,005                             | 39,070,893                          | 2,897,214,817                         | 70,583   |
| 1930..... | 47,915,171   | 350,905,607                             | 34,698,767                          | 2,423,874,877                         | 58,123   |
| 1931..... | 41,954,843   | 301,350,517                             | 26,390,812                          | 1,748,210,593                         | 41,452   |
| 1932..... | 34,995,135   | 289,396,089                             | 21,099,532                          | 1,438,959,501                         | 33,877   |
| 1933..... | 31,942,329   | 235,680,077                             | 19,172,193                          | 1,393,041,245                         | 32,804   |
| 1934..... | 31,665,689   | 243,236,816                             | 20,530,718                          | 1,530,010,962                         | 36,179   |
| 1935..... | 31,997,918   | 248,061,414                             | 20,031,539                          | 1,584,524,044                         | 37,042   |
| 1936..... | 33,221,771   | 242,618,884                             | 20,497,616                          | 1,729,065,974                         | 40,415   |

| Year.     | Average<br>Receipts<br>per Passenger<br>Mile. | Average<br>Receipts<br>per<br>Passenger. | Average<br>Passenger<br>Journey. | Average<br>Number of<br>Passengers<br>per Train. | Passenger-<br>Train<br>Revenue per<br>Passenger-<br>Train Mile. |
|-----------|---|--|----------------------------------|--|---|
|           | cents.  | \$                                       | miles.                           | No.  | \$  |
| 1920..... | 2-92  | 2-00                                     | 65                               | 64   | 2-36  |
| 1921..... | 3-04  | 1-92                                     | 63                               | 57   | 2-30  |
| 1922..... | 2-82  | 1-79                                     | 63                               | 55   | 2-10  |
| 1923..... | 2-76  | 1-90                                     | 69                               | 64   | 2-61  |
| 1924..... | 2-79  | 1-87                                     | 67                               | 59   | 2-34  |
| 1925..... | 2-90  | 1-89                                     | 70                               | 60   | 2-33  |
| 1926..... | 2-71  | 1-90                                     | 70                               | 61   | 2-41  |
| 1927..... | 2-99  | 1-96                                     | 73                               | 61   | 2-38  |
| 1928..... | 2-67  | 2-06                                     | 77                               | 61   | 2-33  |
| 1929..... | 2-77  | 2-06                                     | 74                               | 56   | 2-33  |
| 1930..... | 2-76  | 1-92                                     | 70                               | 48   | 2-02  |
| 1931..... | 2-72  | 1-79                                     | 66                               | 39   | 1-68  |
| 1932..... | 2-54  | 1-73                                     | 68                               | 37   | 1-57  |
| 1933..... | 2-29  | 1-66                                     | 73                               | 39   | 1-50  |
| 1934..... | 2-24  | 1-67                                     | 75                               | 43   | 1-61  |
| 1935..... | 2-18  | 1-72                                     | 79                               | 44 <sup>3</sup>                                  | 1-61 <sup>3</sup>   |
| 1936..... | 2-08  | 1-75                                     | 84                               | 49   | 1-68  |

<sup>1</sup> Includes express, baggage, mail, etc., cars.  
publication of the 1937 Year Book.

<sup>2</sup> Duplications included.

<sup>3</sup> Revised since the

## 26.—Summary Analysis of Statistics of Passenger and Freight Services and Receipts, for the calendar years 1920-36—concluded.

## FREIGHT.

| Year.     | Revenue Freight Train Miles. | Revenue Freight Train Car Miles. <sup>1</sup> | Freight Carried. <sup>2</sup> | Freight Carried One Mile. | Freight Carried One Mile per Mile of Line. |
|-----------|------------------------------|---|-------------------------------|---------------------------|--|
|           | No.                          | No.   | tons.                         | tons.                     | tons.                                      |
| 1920..... | 62,195,802                   | 1,966,050,793                                 | 100,050,046                   | 31,894,411,479            | 818,309                                    |
| 1921..... | 62,454,742                   | 1,832,652,061                                 | 83,730,829                    | 26,021,680,554            | 678,311                                    |
| 1922..... | 56,548,954                   | 2,007,851,472                                 | 87,309,036                    | 30,267,885,883            | 771,542                                    |
| 1923..... | 61,346,243                   | 2,260,866,213                                 | 102,358,933                   | 34,067,658,527            | 861,022                                    |
| 1924..... | 56,348,679                   | 2,038,662,618                                 | 91,599,639                    | 30,513,819,106            | 768,049                                    |
| 1925..... | 56,122,416                   | 2,194,066,348                                 | 94,624,599                    | 31,965,204,683            | 799,150                                    |
| 1926..... | 60,176,220                   | 2,362,653,807                                 | 105,221,906                   | 34,153,466,033            | 849,525                                    |
| 1927..... | 62,084,741                   | 2,411,057,514                                 | 108,011,855                   | 34,901,662,515            | 863,710                                    |
| 1928..... | 68,930,042                   | 2,732,428,092                                 | 118,622,960                   | 41,810,660,776            | 1,021,678                                  |
| 1929..... | 61,271,673                   | 2,422,571,513                                 | 115,187,028                   | 35,025,895,433            | 856,945                                    |
| 1930..... | 63,537,500                   | 2,077,437,173                                 | 96,194,017                    | 29,604,545,125            | 710,197                                    |
| 1931..... | 44,341,022                   | 1,786,711,340                                 | 74,129,694                    | 25,707,373,092            | 609,555                                    |
| 1932..... | 38,763,206                   | 1,553,450,051                                 | 60,807,482                    | 23,136,666,295            | 545,843                                    |
| 1933..... | 34,647,975                   | 1,456,244,715                                 | 57,364,025                    | 21,092,594,200            | 496,705                                    |
| 1934..... | 38,734,761                   | 1,625,727,881                                 | 68,036,506                    | 23,230,451,031            | 551,220                                    |
| 1935..... | 39,012,286                   | 1,666,592,064                                 | 69,141,100                    | 24,235,107,157            | 566,550                                    |
| 1936..... | 50,319,782 <sup>3</sup>      | 1,795,275,640                                 | 75,846,566                    | 29,414,113,720            | 618,482                                    |

| Year.     | Freight Receipts per Ton per Mile. | Receipts per Ton Hauled. <sup>4</sup> | Average Length of Freight Haul. | Average Train Load, Revenue Tons. | Average Load per Loaded Car Mile. | Revenue per Freight Train Mile. |
|-----------|------------------------------------|---------------------------------------|---------------------------------|-----------------------------------|-----------------------------------|---------------------------------|
|           | cents.                             | \$                                    | miles.                          | tons.                             | tons.                             | \$                              |
| 1920..... | 1-071                              | 3-41                                  | 319                             | 457                               | 23-05                             | 4-69                            |
| 1921..... | 1-200                              | 3-82                                  | 343                             | 447                               | 22-12                             | 5-37                            |
| 1922..... | 1-039                              | 3-61                                  | 348                             | 481                               | 23-03                             | 5-00                            |
| 1923..... | 0-987                              | 3-29                                  | 333                             | 512                               | 26-44                             | 5-05                            |
| 1924..... | 1-019                              | 3-43                                  | 337                             | 494                               | 25-45                             | 5-03                            |
| 1925..... | 1-012                              | 3-42                                  | 338                             | 519                               | 25-11                             | 5-25                            |
| 1926..... | 1-043                              | 3-39                                  | 325                             | 519                               | 25-07                             | 5-41                            |
| 1927..... | 1-029                              | 3-39                                  | 329                             | 514                               | 25-30                             | 5-29                            |
| 1928..... | 0-994                              | 3-49                                  | 351                             | 567                               | 25-05                             | 5-54                            |
| 1929..... | 1-009                              | 3-34                                  | 304                             | 523                               | 24-52                             | 5-74                            |
| 1930..... | 1-090                              | 3-36                                  | 308                             | 509                               | 24-34                             | 5-55                            |
| 1931..... | 1-013                              | 3-51                                  | 347                             | 514                               | 24-63                             | 5-20                            |
| 1932..... | 0-937                              | 3-56                                  | 350                             | 517                               | 23-57                             | 4-84                            |
| 1933..... | 0-955                              | 3-51                                  | 368                             | 521                               | 24-92                             | 4-98                            |
| 1934..... | 0-975                              | 3-34                                  | 343                             | 522                               | 24-69                             | 5-09                            |
| 1935..... | 0-972                              | 3-41                                  | 351                             | 523                               | 24-60                             | 5-13                            |
| 1936..... | 0-969                              | 3-38                                  | 348                             | 526                               | 24-73                             | 5-10                            |

<sup>1</sup> Includes enboose miles.<sup>2</sup> Duplication eliminated, see Table 23 for details of freight carried.<sup>3</sup> Revised classification includes mileage previously classed as "mixed".<sup>4</sup> Revised since publication of the 1937 Year Book, to exclude duplications.

Operation of the Canadian National Railways.—The Canadian National system's steam mileage at Dec. 31, 1936, including lines in the United States, but exclusive of the Northern Alberta Railways and Toronto Terminals Railway (which are controlled jointly by the Canadian National and the Canadian Pacific Railways), was 23,566. Including the Thousand Islands Railway, 4-51, and the Muskegon Railway and Navigation Co., 5-25, controlled but separately operated, the total steam mileage was 23,576. Including 120-52 miles of electric lines, the grand total was 23,696-24.

The Maritime Freight Rates Act (17 Geo. V, c. 44), effective July 1, 1927, ordered that the accounts of the Canadian National lines east of Lévis and Diamond Junction, Quebec, be kept separate from those of the remainder of the Canadian National system. These lines were designated the "Eastern Lines" of the Canadian National Railways. The Act ordered that specified freight rates on the Eastern



Lines be reduced by 20 p.c. Other railways were allowed to make similar reductions in their freight rates in that territory and to bill on the Board of Railway Commissioners of Canada for the difference in freight receipts due to such reductions. The differences between the reduced rates and the normal rates are treated as revenues by the Canadian National Railways and paid by the Dominion Government. The totals paid to all railways under the Act were: \$1,353,464, \$2,758,893, \$3,092,677, \$3,615,218, \$2,554,673, \$1,922,073, \$1,989,130, \$2,529,394, \$2,348,399, and \$2,505,823, respectively, for the years 1927-36.

The Quebec Bridge across the St. Lawrence above Quebec city, with a main span of 1,800 ft., carrying a single-track railway and accommodation for motor and pedestrian traffic, forms a connecting link in the Canadian National Railways system and is operated as a part of it.

Table 21 shows some of the more important train traffic statistics of Canadian National Railways operation for the years 1935 and 1936.

21.—Canadian National Railways (Canadian and U.S. Lines) Train Traffic Statistics, for the calendar years 1935 and 1936.<sup>1</sup>

| Item.   | 1935.              | 1936.                |
|---|--------------------|----------------------|
| <b>Train Mileage—</b>   |                    |                      |
| Passenger trains.....   | 17,752,240         | 18,174,203           |
| Freight trains.....   | 26,499,513         | 28,312,940           |
| Unit cars in passenger service.....                                   | 1,607,714          | 1,470,800            |
| Unit cars in freight service.....                                     | 1,992              | 5,504                |
| <b>Totals, Train Miles<sup>2</sup>.....</b>                           | <b>45,861,459</b>  | <b>47,962,947</b>    |
| <b>Passenger Train Car Mileage—</b>                                   |                    |                      |
| Coaches and combination.....  | 47,503,104         | 50,083,050           |
| Parlour, sleeping and dining cars.....                                | 37,977,123         | 39,010,018           |
| Baggage, mail, express, etc.....                                      | 48,610,941         | 50,515,230           |
| <b>Totals, Passenger Train Car Miles<sup>2</sup>.....</b>             | <b>134,160,168</b> | <b>140,568,198</b>   |
| <b>Freight Train Car Mileage—</b>                                     |                    |                      |
| Loaded freight-car miles.....   | 630,951,060        | 687,515,569          |
| Empty freight-car miles.....  | 292,163,484        | 308,777,449          |
| Caboose miles.....  | 25,105,030         | 27,000,778           |
| <b>Totals, Freight Train Car Miles<sup>2</sup>.....</b>               | <b>948,220,174</b> | <b>1,023,293,796</b> |
| <b>Passenger Traffic—</b>   |                    |                      |
| Passengers carried (earning revenue).....                             | 9,721,268          | 10,098,973           |
| Passengers carried (earning revenue) one mile.....                    | 770,037,180        | 831,271,084          |
| Passenger-train miles per mile of road.....                           | 791                | 791                  |
| Average passenger journey—miles.....                                  | 76.21              | 82.31                |
| Average amount received per passenger..... \$                         | 1.713              | 1.685                |
| Average amount received per passenger mile..... \$                    | 0.0216             | 0.0205               |
| Average number of passengers per train mile.....                      | 41.31              | 45.74                |
| Average number of passengers per car mile.....                        | 9.28               | 9.56                 |
| Total passenger-train earnings per train mile..... \$                 | 1.56               | 1.58                 |
| Total passenger-train revenue per mile of road..... \$                | 1,278.29           | 1,317.22             |
| <b>Freight Traffic—</b>   |                    |                      |
| Tons of revenue freight carried.....                                  | 38,807,716         | 43,451,052           |
| Tons of revenue freight carried one mile.....                         | 13,508,555,208     | 14,813,796,415       |
| Tons of non-revenue freight carried one mile.....                     | 1,607,903,733      | 1,761,295,539        |
| Total tons (all classes) freight carried one mile.....                | 15,206,858,941     | 16,575,091,954       |
| Tons of revenue freight carried one mile per mile of road.....        | 568,318            | 628,923              |
| Total tons (all classes) freight carried one mile of road.....        | 640,106            | 704,224              |
| Average number of tons revenue freight per train mile.....            | 599.78             | 532.20               |
| Average number of tons (all classes) freight per train mile.....      | 571.32             | 555.80               |
| Average number of tons (all classes) freight per loaded car mile..... | 23.09              | 24.11                |
| Average haul revenue freight—miles.....                               | 348.10             | 340.90               |
| Freight revenue per train mile..... \$                                | 5.05               | 5.14                 |
| Freight revenue per mile of road..... \$                              | 5,657.38           | 6,176.73             |
| Freight revenue per ton..... \$                                       | 3.44796            | 3.34882              |
| Freight revenue per ton mile..... \$                                  | 0.00991            | 0.00982              |

<sup>1</sup> Excludes electric lines.

<sup>2</sup> Work service excluded.

Commodities Hauled.—In Table 22, the duplications from two or more railways handling the same freight have been eliminated. The peak year was 1928 when agricultural products were particularly heavy. The 1936 statistics show an increase of 6,705,466 tons, or 9.7 p.c. over the 1935 total.

## 22.—Commodities Hauled as Freight on Steam Railways during the calendar years 1932-36.

NOTE.—In this table duplications are eliminated, i.e., the same freight handled by two or more railways is counted only once. In this respect these figures differ from those in the corresponding table in the 1926 and previous Year Books.

| Group and Product.   | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| <b>Agricultural Products.</b>                                | tons.             | tons.             | tons.             | tons.             | tons.             |
| Wheat.....   | 11,203,710        | 8,900,296         | 8,454,195         | 8,367,973         | 8,489,009         |
| Corn.....  | 387,813           | 456,074           | 435,111           | 296,711           | 486,471           |
| Oats.....  | 1,032,709         | 839,008           | 1,073,430         | 858,724           | 879,304           |
| Barley.....  | 423,854           | 385,400           | 635,990           | 455,490           | 911,444           |
| Rye.....   | 113,007           | 75,900            | 40,901            | 55,001            | 58,506            |
| Flaxseed.....  | 60,348            | 42,150            | 20,814            | 28,762            | 54,352            |
| Other grain.....   | 73,300            | 59,808            | 46,022            | 31,746            | 31,717            |
| Flour.....   | 1,607,100         | 1,554,312         | 1,481,241         | 1,368,244         | 1,400,529         |
| Other mill products.....                                     | 1,487,706         | 1,327,833         | 1,460,786         | 1,464,264         | 1,664,477         |
| Hay and straw.....   | 323,347           | 250,961           | 495,307           | 415,787           | 300,175           |
| Cotton.....  | 92,271            | 109,925           | 124,504           | 115,676           | 130,102           |
| Apples (fresh).....  | 268,085           | 321,001           | 322,730           | 288,999           | 249,881           |
| Other fruit (fresh).....                                     | 372,228           | 310,424           | 366,386           | 394,769           | 423,156           |
| Potatoes.....  | 438,008           | 412,784           | 504,210           | 467,069           | 455,173           |
| Other fresh vegetables.....                                  | 247,143           | 232,277           | 261,632           | 234,297           | 275,803           |
| Other agricultural products.....                             | 781,112           | 631,101           | 907,976           | 928,702           | 1,033,223         |
| <b>Totals, Agricultural Products.....</b>                    | <b>18,901,621</b> | <b>16,138,833</b> | <b>16,629,926</b> | <b>15,716,120</b> | <b>16,995,826</b> |
| <b>Animal Products.</b>                                      |                   |                   |                   |                   |                   |
| Horses.....  | 45,081            | 41,341            | 63,382            | 53,707            | 71,436            |
| Cattle and calves.....                                       | 378,472           | 408,879           | 475,712           | 500,044           | 590,311           |
| Sheep.....   | 58,705            | 56,725            | 52,619            | 48,559            | 48,488            |
| Hogs.....  | 252,791           | 249,457           | 230,313           | 200,177           | 242,567           |
| Dressed meats (fresh).....                                   | 434,668           | 457,980           | 525,446           | 469,815           | 457,812           |
| Dressed meats (cured, salted, canned).....                   | 133,863           | 167,105           | 188,326           | 140,528           | 135,335           |
| Other packing-house products (edible).....                   | 218,702           | 219,430           | 230,677           | 120,412           | 130,412           |
| Poultry.....   | 106,486           | 118,960           | 107,673           | 80,663            | 91,962            |
| Eggs.....  | 131,415           | 130,423           | 123,168           | 99,443            | 92,317            |
| Butter.....  | 188,208           | 166,648           | 157,321           | 135,052           | 135,123           |
| Cheese.....  | 66,365            | 59,878            | 62,534            | 63,301            | 72,167            |
| Wool.....  | 37,267            | 50,086            | 38,985            | 47,783            | 48,765            |
| Hides and leather.....                                       | 94,811            | 121,425           | 119,110           | 139,447           | 134,013           |
| Other animal products (non-edible).....                      | 78,725            | 76,693            | 91,167            | 106,112           | 131,647           |
| <b>Totals, Animal Products.....</b>                          | <b>2,180,459</b>  | <b>2,319,626</b>  | <b>2,445,703</b>  | <b>2,311,197</b>  | <b>2,431,245</b>  |
| <b>Mineral Products.</b>                                     |                   |                   |                   |                   |                   |
| Anthracite coal.....   | 2,544,545         | 2,302,021         | 2,786,704         | 2,620,229         | 2,740,701         |
| Bituminous coal.....   | 8,139,883         | 7,926,628         | 9,555,322         | 9,174,105         | 9,937,016         |
| Lignite coal.....  | 2,607,094         | 2,348,738         | 2,467,519         | 2,574,057         | 2,749,419         |
| Coke.....  | 1,043,237         | 1,125,900         | 1,328,019         | 1,242,068         | 1,351,663         |
| Iron ore.....  | 8,367             | 7,668             | 12,652            | 15,089            | 11,474            |
| Copper ore and concentrates.....                             | 44,982            | 14,791            | 20,109            | 12,534            | 11,114            |
| Other ores and concentrates.....                             | 598,929           | 926,486           | 2,001,416         | 2,078,721         | 2,687,307         |
| Base bullion, matte, pig and ingot (non-ferrous metals)..... | 346,331           | 461,950           | 799,803           | 864,727           | 975,909           |
| Sand and gravel.....   | 1,402,073         | 677,868           | 1,054,855         | 1,179,721         | 1,286,601         |
| Stone (crushed, ground, broken).....                         | 733,025           | 500,439           | 735,356           | 576,911           | 1,069,223         |
| Slate, dimension or block stone.....                         | 175,951           | 79,657            | 84,449            | 139,709           | 106,824           |
| Crude petroleum.....   | 373,832           | 394,021           | 463,488           | 460,556           | 510,701           |
| Asphalt (natural, by-product petroleum).....                 | 115,357           | 89,308            | 126,693           | 181,940           | 185,177           |
| Salt.....  | 269,378           | 257,413           | 289,290           | 288,459           | 280,890           |
| Other mineral products.....                                  | 1,010,505         | 1,209,154         | 1,945,133         | 2,676,793         | 2,840,608         |
| <b>Totals, Mineral Products.....</b>                         | <b>19,563,194</b> | <b>18,382,639</b> | <b>23,660,188</b> | <b>24,093,652</b> | <b>26,782,690</b> |
| <b>Forest Products.</b>                                      |                   |                   |                   |                   |                   |
| Logs, posts, poles, piling.....                              | 792,310           | 740,532           | 949,184           | 1,156,773         | 1,090,497         |
| Cordwood and other firewood.....                             | 1,186,067         | 1,393,579         | 1,568,609         | 1,421,851         | 1,367,039         |
| Ties.....  | 45,353            | 32,830            | 43,043            | 56,495            | 57,317            |
| Pulpwood.....  | 1,300,749         | 1,395,709         | 2,032,577         | 2,146,535         | 1,973,201         |
| Lumber, timber, box, crate and cooperage material.....       | 2,119,762         | 2,395,952         | 2,866,283         | 3,058,689         | 3,441,123         |
| Other forest products.....                                   | 276,303           | 306,325           | 440,364           | 422,024           | 401,875           |
| <b>Totals, Forest Products.....</b>                          | <b>5,720,550</b>  | <b>6,264,957</b>  | <b>7,891,120</b>  | <b>8,263,367</b>  | <b>8,301,652</b>  |

22.—Commodities Hauled as Freight on Steam Railways during the calendar years 1932-36—concluded.

| Group and Product.   | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
|  | tons.             | tons.             | tons.             | tons.             | tons.             |
| <b>Manufactures and Miscellaneous.</b>                                       |                   |                   |                   |                   |                   |
| Gasolene.....  | 1,358,944         | 1,150,067         | 1,233,554         | 1,200,347         | 1,222,559         |
| Petroleum oils and other petroleum products (except asphalt and gasolene)... | 724,127           | 654,401           | 742,067           | 746,311           | 766,283           |
| Sugar.....   | 275,074           | 280,986           | 306,764           | 310,590           | 332,455           |
| Iron, pig and bloom.....   | 84,127            | 96,470            | 178,652           | 176,539           | 235,977           |
| Rails and fastenings.....  | 46,512            | 19,788            | 78,268            | 76,057            | 87,876            |
| Iron and steel (bar, sheet, structural pipe)                                 | 482,688           | 420,167           | 703,674           | 944,279           | 1,208,435         |
| Castings, machinery and boilers.....   | 155,348           | 145,400           | 162,083           | 181,658           | 237,314           |
| Cement.....  | 507,006           | 350,577           | 485,313           | 432,694           | 534,028           |
| Brick and artificial stone.....  | 155,899           | 118,768           | 195,755           | 207,344           | 264,392           |
| Lime and plaster.....  | 191,912           | 182,285           | 193,794           | 204,078           | 232,018           |
| Sewer pipe and drain tile.....   | 35,413            | 19,666            | 10,750            | 26,237            | 28,759            |
| Agricultural implements and vehicles other than automobiles.....             | 57,483            | 64,071            | 104,484           | 150,466           | 168,299           |
| Automobiles, trucks and parts.....   | 774,383           | 938,248           | 1,427,551         | 1,772,595         | 1,815,404         |
| Household goods and settlers' effects.....                                   | 45,690            | 52,427            | 68,660            | 42,311            | 40,760            |
| Furniture.....   | 41,742            | 42,173            | 40,672            | 45,260            | 54,601            |
| Liquor, beverages.....   | 137,339           | 141,829           | 236,608           | 253,426           | 295,950           |
| Fertilizers, all kinds.....  | 409,010           | 428,050           | 525,347           | 569,206           | 667,585           |
| Newsprint paper.....   | 1,536,223         | 1,469,657         | 1,939,326         | 1,966,278         | 2,366,404         |
| Other paper.....   | 302,354           | 349,650           | 342,280           | 368,683           | 410,019           |
| Paper board, pulpboard and wall board (paper).....                           | 174,637           | 163,834           | 205,281           | 228,075           | 253,222           |
| Wood-pulp.....   | 560,720           | 750,886           | 802,486           | 854,019           | 994,833           |
| Fish (fresh, frozen, cured, etc.).....                                       | 66,906            | 70,314            | 67,501            | 74,294            | 80,703            |
| Canned goods (all canned food products except meats).....                    | 341,378           | 363,606           | 390,081           | 420,430           | 480,440           |
| Other manufactures and miscellaneous.....                                    | 3,770,280         | 3,950,099         | 4,723,238         | 5,426,354         | 6,298,783         |
| Merchandise (all L.C.L. freight).....  | 2,256,563         | 2,012,711         | 2,230,379         | 2,149,228         | 2,262,745         |
| <b>Totals, Manufactures and Misc..</b>                                       | <b>14,562,258</b> | <b>14,239,129</b> | <b>17,409,568</b> | <b>18,853,764</b> | <b>21,335,753</b> |
| <b>Grand Totals.....</b>   | <b>60,967,482</b> | <b>57,364,025</b> | <b>68,036,565</b> | <b>69,141,100</b> | <b>75,846,566</b> |

**Railway Accidents.**—The numbers of passengers, employees and others killed or injured in steam railway accidents are given in summary form from 1920 to 1936 in Table 23, and in detailed analysis for 1934 to 1936 in Table 24. All injuries to passengers are included, no matter how slight, but for employees only injuries which keep the employee from his work for at least three days during the ten days following the accident are recorded.

23.—Numbers of Passengers, Employees and Others Killed or Injured on Steam Railways, calendar years 1920-36.

NOTE.—For the years ended June 30, 1888 to 1919, see Canada Year Books, 1910, p. 378, and 1922-23, p. 635.

| Year.     | Passengers. |          | Employees. |          | Others. |          | Totals. |          |
|-----------|-------------|----------|------------|----------|---------|----------|---------|----------|
|           | Killed.     | Injured. | Killed.    | Injured. | Killed. | Injured. | Killed. | Injured. |
| 1920..... | 29          | 481      | 167        | 7,719    | 197     | 480      | 393     | 8,680    |
| 1921..... | 5           | 259      | 156        | 6,583    | 193     | 394      | 354     | 7,236    |
| 1922..... | 11          | 369      | 122        | 8,361    | 208     | 517      | 341     | 9,247    |
| 1923..... | 15          | 437      | 107        | 9,382    | 165     | 539      | 347     | 10,358   |
| 1924..... | 19          | 432      | 127        | 8,862    | 210     | 514      | 362     | 9,608    |
| 1925..... | 5           | 401      | 105        | 8,256    | 199     | 642      | 309     | 9,299    |
| 1926..... | 20          | 446      | 127        | 10,622   | 312     | 638      | 459     | 11,700   |
| 1927..... | 14          | 569      | 131        | 11,057   | 256     | 695      | 401     | 12,321   |
| 1928..... | 15          | 359      | 140        | 12,626   | 353     | 790      | 507     | 13,505   |
| 1929..... | 20          | 551      | 118        | 12,453   | 299     | 809      | 431     | 13,843   |
| 1930..... | 15          | 548      | 103        | 9,678    | 345     | 837      | 463     | 11,063   |
| 1931..... | 3           | 390      | 55         | 5,966    | 202     | 630      | 260     | 7,195    |
| 1932..... | 7           | 342      | 77         | 4,631    | 242     | 598      | 326     | 5,571    |
| 1933..... | 8           | 319      | 53         | 4,409    | 219     | 645      | 280     | 5,373    |
| 1934..... | 16          | 432      | 57         | 5,170    | 242     | 589      | 315     | 6,200    |
| 1935..... | 10          | 440      | 70         | 5,221    | 271     | 625      | 351     | 6,286    |
| 1936..... | 6           | 691      | 93         | 6,338    | 282     | 703      | 381     | 7,732    |

The number of passengers killed in accidents dropped from 10 in 1935 to 6 in 1936. None of these was killed in collisions or derailments. The passengers injured in accidents which resulted from the movement of trains (Table 24), as distinct from all accidents, increased from 432 in 1935 to 657. The number of employees killed increased from 43 in 1935 to 83 and the number injured increased from 1,026 to 1,293. The number of other persons killed in train accidents increased from 269 to 273. The number of motorists killed decreased from 106 to 105 and the number injured increased from 213 to 266. Railway employees were absent from their duties because of injuries received in accidents (train and non-train) for 181,662 days as against 150,615 days in 1935.

These accidents include all accidents in which railway trains were involved and accidents on railway property. The classification of accidents used in the Bureau's vital statistics classes collisions between motor vehicles and trains as motor vehicle accidents; also provincial statistics of motor vehicle accidents class these as motor vehicle accidents and consequently adjustments should be made when compiling total accidental deaths of all kinds or comparing results of accidents of different kinds, such as train and motor vehicle.

#### 24.—Numbers of Persons Killed or Injured on Steam Railways in the calendar years 1934-36.

(A) IN ACCIDENTS RESULTING FROM MOVEMENT OF TRAINS, LOCOMOTIVES, OR CARS

| Item.  | 1934.      |              | 1935.      |              | 1936.      |              |
|--|------------|--------------|------------|--------------|------------|--------------|
|  | Killed.    | Injured.     | Killed.    | Injured.     | Killed.    | Injured.     |
| Description of Persons—                                  |            |              |            |              |            |              |
| Passengers.....  | 16         | 417          | 10         | 432          | 6          | 657          |
| Employees.....   | 43         | 1,119        | 43         | 1,026        | 83         | 1,293        |
| Trespassers.....   | 158        | 235          | 145        | 237          | 150        | 186          |
| Non-trespassers.....                                     | 77         | 273          | 123        | 294          | 122        | 358          |
| Postal clerks, expressmen, etc.....                      | 1          | 62           | 1          | 74           | 1          | 78           |
| <b>Totals.....</b>                                       | <b>295</b> | <b>2,106</b> | <b>322</b> | <b>2,063</b> | <b>362</b> | <b>2,572</b> |
| Description of Accident (Employees and Passengers only)— |            |              |            |              |            |              |
| Coupling and uncoupling.....                             | 2          | 45           | 3          | 43           | 3          | 68           |
| Collisions.....  | 16         | 99           | 4          | 46           | 27         | 265          |
| Derailments.....   | 6          | 53           | 2          | 62           | 6          | 76           |
| Parting of trains.....                                   | Nil        | 7            | Nil        | 10           | Nil        | Nil          |
| Locomotives or cars breaking down.....                   | Nil        | 2            | Nil        | Nil          | Nil        | Nil          |
| Falling from trains or cars.....                         | 4          | 88           | 14         | 87           | 7          | 137          |
| Getting on or off trains.....                            | 4          | 316          | 6          | 283          | 5          | 285          |
| Struck by trains, etc.....                               | 18         | 73           | 18         | 63           | 23         | 56           |
| Overhead obstruction.....                                | Nil        | 1            | Nil        | 1            | Nil        | 2            |
| Other causes.....  | 9          | 852          | 6          | 863          | 18         | 1,061        |
| <b>Totals.....</b>                                       | <b>59</b>  | <b>1,536</b> | <b>53</b>  | <b>1,458</b> | <b>89</b>  | <b>1,950</b> |

(B) IN ACCIDENTS OTHER THAN THOSE RESULTING FROM MOVEMENT OF TRAINS, LOCOMOTIVES, OR CARS.

| Description of Persons.    | 1934.     |              | 1935.     |              | 1936.     |              |
|----------------------------|-----------|--------------|-----------|--------------|-----------|--------------|
|                            | Killed.   | Injured.     | Killed.   | Injured.     | Killed.   | Injured.     |
| Stationmen.....            | 1         | 486          | 1         | 491          | 2         | 592          |
| Shopmen.....               | 4         | 1,291        | 6         | 1,377        | 1         | 1,518        |
| Trainmen and trackmen..... | 5         | 2,016        | 19        | 2,105        | 6         | 2,706        |
| Other employees.....       | 4         | 267          | 1         | 222          | 1         | 229          |
| Passengers.....            | Nil       | 15           | Nil       | 8            | Nil       | 34           |
| Others.....                | 6         | 19           | 2         | 20           | 9         | 81           |
| <b>Totals.....</b>         | <b>20</b> | <b>4,094</b> | <b>29</b> | <b>4,223</b> | <b>19</b> | <b>5,160</b> |

## Section 2.—Electric Railways.\*

The cheap and reasonably rapid conveyance of human beings is a necessity of modern urban life. One important means by which this necessity is supplied throughout Canada is the electric street railway, operated by hydro-electric energy in the majority of cases.

**Historical.**—Replacing the horse-car systems, used in Montreal and Toronto as early as 1861, electric street railways were first seen in operation in Canada in 1885, when a successful experimental railway was constructed and operated at the Toronto exhibition grounds. Before many years their safety and convenience resulted in the discarding of the older systems. An electric system 7 miles in length was opened at St. Catharines in 1887, using the double overhead trolley. The second electric railway in Canada commenced operations in Vancouver, in June, 1890. This was followed by the completion of the Ottawa Electric Railway in 1891, and the electrification of the Montreal and Toronto systems in 1892. The street railways of other eastern cities were generally electrified during the 1890's, while in the newer western cities electricity was used from the commencement. In the cities of Eastern Canada, electric street railways are generally operated by private companies under city franchises, while in a considerable number of cities in Ontario and the West the street railways are owned and operated by the municipalities, a fact indicated in Table 27.

Many difficulties are met in operating the cars during the winter season, owing to the heavy falls of snow. This, however, has been overcome by the use of sweepers, scrapers, and ploughs. The single overhead trolley system has been found the most suitable and is in general use. During the past few years an increasing number of motor buses have been used; in 1924 only 48 were operated, but by 1936 the number had increased to 605.

In addition to street railways in the cities there are several systems serving suburban areas and also doing an inter-urban business, but this latter class of service is fast being supplanted by bus service. Indeed the development of motor vehicles, while providing competition for all forms of rail transportation, has affected electric railways more seriously than steam railways. The dependence of the former upon short-distance passenger traffic renders them particularly susceptible to the competition of motor vehicles. Since the War, a number of electric railways have been abandoned, first main track mileage has declined 28 p.c. since 1925 (see Table 28, p. 667), while even in the larger cities electric railways have generally been obliged to increase their tariffs owing to the slow growth or actual decline of traffic.

### Subsection 1.—Equipment of Electric Railways.

Table 25 shows details of the track mileage and of the rolling-stock of electric railways in the four latest years. Statistics of the first and second main track mileage in each year since 1919 will be found in Table 28 of Subsection 3, and of the mileage operated by individual companies in Table 27 of Subsection 2.

\* Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an annual report on Electric Railways in Canada.

## 25.—Mileage and Equipment of Electric Railways, calendar years 1933-36.

| Item.                               | 1933. <sup>1</sup> | 1934. <sup>1</sup> | 1935. <sup>1</sup> | 1936.  | Equipment.                          | 1933.        | 1934.        | 1935.        | 1936.        |
|-------------------------------------|--------------------|--------------------|--------------------|--------|-------------------------------------|--------------|--------------|--------------|--------------|
|                                     | miles.             | miles.             | miles.             | miles. |                                     | No.          | No.          | No.          | No.          |
| Length of first main track.....     | 1,298              | 1,286              | 1,268              | 1,247  | Passenger Cars—<br>Closed.....      | 3,416        | 3,438        | 3,395        | 3,329        |
| Length of second main track.....    | 559                | 557                | 558                | 553    | Open.....                           | 32           | 19           | 21           | 17           |
| Totals, Main Track..                | 1,857              | 1,843              | 1,826              | 1,800  | Combination passenger and baggage.. | 12           | 9            | 11           | 9            |
| Length of sidings and turnouts..... | 275                | 272                | 270                | 272    | Without electrical equipment.....   | 313          | 282          | 280          | 250          |
| Totals, Computed as Single Track..  | 2,132              | 2,115              | 2,096              | 2,072  | <b>Totals, Passenger Cars.....</b>  | <b>3,773</b> | <b>3,748</b> | <b>3,707</b> | <b>3,605</b> |
|                                     |                    |                    |                    |        | Baggage, express and mail cars..... | 21           | 22           | 23           | 23           |
|                                     |                    |                    |                    |        | Freight cars.....                   | 298          | 276          | 270          | 296          |
|                                     |                    |                    |                    |        | Buses.....                          | 531          | 537          | 552          | 605          |
|                                     |                    |                    |                    |        | Snow ploughs.....                   | 66           | 66           | 69           | 72           |
|                                     |                    |                    |                    |        | Sweepers.....                       | 159          | 158          | 162          | 162          |
|                                     |                    |                    |                    |        | Miscellaneous.....                  | 326          | 344          | 340          | 348          |
|                                     |                    |                    |                    |        | Locomotives.....                    | 45           | 47           | 46           | 46           |

<sup>1</sup> Revised since publication of the 1937 Year Book.

## Subsection 2.—Finances of Electric Railways.

Table 26 below gives financial statistics of electric railways for each year since 1919 and Table 27 financial statistics of individual companies in the latest year.

## 26.—Financial Statistics of Electric Railways, calendar years 1919-36.

NOTE.—Available figures for the years 1903-13 are given at pp. 651 and 682 of the 1936 Year Book and for the years 1901-07 at pp. 608 and 609 of the 1936 Year Book.

| Calendar Year. | Capital Liability. |              |             | Investment in Road and Equipment. | Gross Earnings. | Operating Expenses. | Ratio of Expenses to Receipts. | Employees. | Salaries and Wages. |
|----------------|--------------------|--------------|-------------|-----------------------------------|-----------------|---------------------|--------------------------------|------------|---------------------|
|                | Stocks.            | Funded Debt. | Total.      |                                   |                 |                     |                                |            |                     |
|                | \$                 | \$           | \$          | \$                                | \$              | \$                  | p.c.                           | No.        | \$                  |
| 1919.....      | 91,757,418         | 81,283,922   | 173,041,340 | 1                                 | 40,698,586      | 31,385,702          | 77-12                          | 16,940     | 20,211,576          |
| 1920.....      | 91,321,955         | 79,501,449   | 170,826,404 | 1                                 | 47,047,246      | 37,242,453          | 79-15                          | 17,341     | 24,235,932          |
| 1921.....      | 91,169,885         | 86,017,551   | 177,187,436 | 1                                 | 44,536,632      | 35,945,316          | 80-71                          | 17,015     | 23,970,728          |
| 1922.....      | 76,940,185         | 111,309,789  | 188,258,974 | 186,519,452                       | 40,660,455      | 35,086,872          | 72-47                          | 18,099     | 24,983,119          |
| 1923.....      | 76,674,183         | 122,305,485  | 199,069,870 | 197,171,429                       | 50,191,387      | 36,171,923          | 72-07                          | 17,779     | 25,039,285          |
| 1924.....      | 76,482,085         | 137,285,575  | 213,767,660 | 210,915,798                       | 49,439,559      | 36,125,213          | 73-07                          | 17,379     | 24,964,441          |
| 1925.....      | 58,507,242         | 163,201,978  | 221,769,220 | 219,321,511                       | 49,626,231      | 35,426,487          | 71-39                          | 16,933     | 24,543,856          |
| 1926.....      | 57,779,518         | 158,029,002  | 215,808,520 | 222,424,345                       | 51,723,199      | 36,453,709          | 70-50                          | 16,961     | 24,686,549          |
| 1927.....      | 58,873,778         | 163,678,939  | 222,552,717 | 227,979,861                       | 53,506,401      | 37,616,568          | 70-39                          | 18,090     | 25,891,020          |
| 1928.....      | 50,653,071         | 170,649,165  | 221,302,236 | 230,694,258                       | 55,632,761      | 38,782,719          | 69-71                          | 18,697     | 26,494,062          |
| 1929.....      | 54,453,321         | 167,969,494  | 222,422,815 | 249,110,655                       | 58,268,980      | 40,085,140          | 68-79                          | 18,801     | 26,084,061          |
| 1930.....      | 53,048,929         | 171,040,010  | 224,088,939 | 240,203,974                       | 54,719,259      | 39,125,515          | 71-50                          | 18,340     | 26,954,994          |
| 1931.....      | 45,155,649         | 170,662,447  | 215,818,096 | 234,364,553                       | 49,088,310      | 35,367,068          | 72-05                          | 17,135     | 24,647,391          |
| 1932.....      | 40,101,930         | 163,210,824  | 203,312,554 | 225,747,251                       | 43,339,381      | 31,516,943          | 72-72                          | 15,961     | 21,534,419          |
| 1933.....      | 39,851,230         | 160,247,640  | 200,098,870 | 223,704,367                       | 39,383,965      | 27,917,265          | 72-73                          | 14,883     | 18,692,236          |
| 1934.....      | 39,851,230         | 158,276,141  | 198,127,371 | 224,368,598                       | 40,048,138      | 28,036,754          | 70-01                          | 14,544     | 18,546,750          |
| 1935.....      | 36,827,740         | 170,393,399  | 207,191,069 | 215,007,166                       | 40,442,329      | 28,009,013          | 69-26                          | 14,831     | 18,649,517          |
| 1936.....      | 36,727,740         | 168,334,513  | 205,062,253 | 214,820,798                       | 41,391,927      | 28,807,311          | 69-60                          | 14,280     | 18,958,832          |

<sup>1</sup> Not available.

27.—Mileage, Capital, Earnings, Operating Expenses, Passengers, Employees, and Salaries and Wages of Electric Railways in Canada, calendar year 1936.

| Name of Railway.   | Mileage<br>Operated<br>(Total<br>Main<br>Track). | Capital<br>Liability.    | Gross<br>Earnings. | Operating<br>Expenses. | Fare<br>Passengers<br>Carried. | Em-<br>ployees. | Salaries<br>and<br>Wages. |
|--|--|--------------------------|--------------------|------------------------|--------------------------------|-----------------|---------------------------|
|  | miles.   | \$                       | \$                 | \$                     | No.                            | No.             | \$                        |
| Brantford Municipal.....   | 18-79  | 806,209                  | 104,587            | 98,745                 | 2,021,093                      | 54              | 59,263                    |
| British Columbia.....  | 302-14   | 23,438,206               | 5,081,932          | 3,995,963              | 69,475,881                     | 1,942           | 3,003,816                 |
| Calgary Municipal.....   | 77-02  | 2,855,644                | 683,113            | 506,184                | 10,192,927                     | 211             | 301,408                   |
| Canadian Pacific.....  | 75-30  | 4,368,500 <sup>1</sup>   | 394,888            | 375,700                | 775,210                        | 193             | 245,326                   |
| Cape Breton Tramways.....  | 21-30  | 5,400                    | 83,755             | 78,948                 | 1,013,213                      | 34              | 48,056                    |
| Cornwall St. Rly., Light<br>and Power Co.....  | 5-50   | 330,000                  | 134,174            | 75,246                 | 1,431,245                      | 48              | 54,853                    |
| Edmonton Radial.....   | 52-50  | 964,041                  | 681,558            | 519,015                | 13,904,716                     | 274             | 366,777                   |
| Fort William Street.....   | 25-49  | 804,000                  | 118,783            | 124,638                | 1,900,844                      | 70              | 76,734                    |
| Guelph Radial <sup>2</sup> .....   | 6-41   | 340,742                  | 60,090             | 60,810                 | 863,559                        | 29              | 33,748                    |
| Hamilton Street <sup>3</sup> , &c.....   | 40-17  | 3,205,000                | 1,005,560          | 854,458                | 18,414,846                     | 343             | 443,442                   |
| Hall Electric.....   | 20-73  | 292,000                  | 171,899            | 146,266                | 2,070,748                      | 89              | 83,057                    |
| International Transit.....   | 6-14   | 150,000                  | 42,040             | 35,722                 | 824,783                        | 18              | 23,412                    |
| Kitchener Public Utilities<br>St. Rly. Dept. <sup>1</sup> .....                            | 9-41   | 116,180                  | 101,179            | 76,353                 | 2,240,440                      | 33              | 50,719                    |
| Lethbridge Municipal.....  | 11-00  | 455,167                  | 34,598             | 36,330                 | 607,591                        | 16              | 24,168                    |
| Levis Tramways Co.....   | 11-50  | 1,115,000                | 108,334            | 101,710                | 1,564,405                      | 76              | 70,458                    |
| London and Port Stanley<br>(Lessees).....  | 26-70  | 1,775,194 <sup>1</sup>   | 304,241            | 284,045                | 402,044                        | 91              | 121,673                   |
| London and Port Stanley<br>(Lessors).....  | -  | 1,313,661                | -                  | -                      | -                              | -               | -                         |
| London Street.....   | 9-46   | 1,067,480                | 493,589            | 421,027                | 8,352,899                      | 198             | 232,649                   |
| Montreal Tramways.....   | 274-51   | 55,321,700               | 13,463,554         | 7,658,967              | 198,026,807                    | 4,085           | 5,061,172                 |
| Montreal and Southern<br>Counties.....   | 54-01  | 500,000 <sup>4</sup>     | 287,019            | 350,468                | 2,103,653                      | 182             | 197,016                   |
| Nelson Municipal.....  | 3-38   | 7                        | 15,039             | 25,033                 | 365,178                        | 14              | 13,914                    |
| New Brunswick Power Co.<br>Niagara, St. Catharines<br>and Toronto.....                     | 23-00  | 2,817,120 <sup>5</sup>   | 281,494            | 263,181                | 5,555,583                      | 124             | 128,262                   |
| North Yonge Railways <sup>1</sup> , <sup>6</sup><br>Nova Scotia Light and<br>Power Co..... | 10-25  | 925,000 <sup>7</sup>     | 573,407            | 523,195                | 3,198,721                      | 275             | 327,965                   |
| Nova Scotia Light and<br>Power Co.....   | 24-91  | 2,438,186 <sup>8</sup>   | 511,563            | 389,673                | 9,253,962                      | 174             | 278,504                   |
| Oshawa.....  | 9-00   | 40,000                   | 247,908            | 149,506                | 638,762                        | 76              | 93,460                    |
| Ottawa.....  | 51-74  | 3,678,899                | 1,326,291          | 815,545                | 21,179,180                     | 425             | 549,601                   |
| Port Arthur Civic.....   | 19-53  | 469,634                  | 135,048            | 109,921                | 2,156,921                      | 54              | 72,180                    |
| Quebec Railway, Light<br>and Power Co. <sup>1</sup> .....                                  | 28-14  | "                        | 856,566            | 814,975                | 14,530,494                     | 400             | 415,232                   |
| Regina Municipal.....  | 28-62  | 2,008,018                | 280,965            | 201,878                | 5,199,890                      | 104             | 139,832                   |
| Sandwich, Windsor and<br>Amherstburg.....  | 61-02  | 6,816,205                | 576,342            | 514,136                | 8,431,055                      | 206             | 313,748                   |
| Saskatoon Municipal.....   | 23-35  | 1,314,536                | 232,664            | 166,123                | 3,795,742                      | 82              | 107,328                   |
| Shawinigan Falls Term-<br>inal.....  | 3-39   | 368,727                  | 99,883             | 61,341                 | "                              | 19              | 29,533                    |
| Suburban Rapid Transit<br>Co.....  | 10-67  | 600,000 <sup>11</sup>    | 116,133            | 89,241                 | 1,985,670                      | 14              | 13                        |
| Sudbury, Copper Cliff<br>Suburban.....   | 7-90   | 217,100                  | 90,915             | 68,583                 | 1,053,430                      | 22              | 30,456                    |
| Toronto Transportation<br>Commission <sup>1</sup> .....                                    | 214-90   | 26,375,000               | 10,436,936         | 6,243,420              | 154,064,056                    | 3,206           | 4,627,384                 |
| Township of York<br>and Town of Weston, <sup>10</sup>                                      | 14-06  | 996,534                  | 205,106            | 158,282                | 4,137,870                      | 10              | 10                        |
| Winnipeg.....  | 102-66   | 55,700,721 <sup>12</sup> | 2,844,690          | 2,197,605              | 40,380,213                     | 1,079           | 1,298,155                 |
| Winnipeg, Selkirk and<br>Lake Winnipeg.....  | 30-66  | 900,000 <sup>13</sup>    | 140,410            | 134,163                | 817,842                        | 34              | 35,522                    |
| Totals.....  | 1,799-86   | 205,062,353              | 11,391,927         | 28,897,311             | 614,590,897                    | 14,289          | 18,958,832                |

<sup>1</sup> Municipally owned. <sup>2</sup> \$4,204,725 held by Canadian Pacific Railway. <sup>3</sup> Operated by the Hydro-Electric Power Commission of Ontario. <sup>4</sup> Provincially owned. <sup>5</sup> Debentures of the London Rly. Commission. <sup>6</sup> \$310,500 held by Canadian National Rlys. and \$189,500 included in stock outstanding of Canadian National Rlys. <sup>7</sup> Not reported. <sup>8</sup> Investment in road and equipment. <sup>9</sup> Held by Canadian National Rlys. <sup>10</sup> Operated by Toronto Transportation Commission. <sup>11</sup> Citadel division operations only. Total capital and operations of the Montmorency division are included in steam railways. <sup>12</sup> Represents all divisions of the company. <sup>13</sup> Operated by Winnipeg Electric Railway.

## Subsection 3.—Traffic of Electric Railways.

The most important traffic statistics for electric railways are given for each year since 1919 in Table 28. Passenger traffic on individual railways is included in Table 27 above. Accidents to passengers and employees are given in Table 29.

## 28.—Summary Statistics of Electric Railway Operation, calendar years 1919-36.

NOTE.—Owing to lack of comparability in some particulars, figures prior to 1919 are omitted here but they may be found at p. 681 of the 1936 Year Book for the years 1911-18 and at p. 676 of the 1933 Year Book for years 1901-10.

| Year.     | Mileage in Operation. |                    | Car Mileage. |           |             | Passengers. | Freight.  |
|-----------|-----------------------|--------------------|--------------|-----------|-------------|-------------|-----------|
|           | First Main Track.     | Second Main Track. | Passenger.   | Other.    | Total.      |             |           |
|           | miles.                | miles.             | miles.       | miles.    | miles.      | No.         | tons.     |
| 1919..... | 1,679-14              | 484-63             | 107,248,202  | 2,958,142 | 110,206,344 | 749,324,380 | 2,374,612 |
| 1920..... | 1,601-12              | 509-35             | 111,043,210  | 3,438,196 | 114,481,406 | 804,711,333 | 2,687,314 |
| 1921..... | 1,679-73              | 499-53             | 107,141,100  | 4,435,789 | 111,576,949 | 719,305,441 | 2,282,202 |
| 1922..... | 1,716-96              | 513-22             | 118,468,912  | 3,307,277 | 116,711,189 | 738,908,949 | 2,441,212 |
| 1923..... | 1,728-07              | 511-82             | 115,708,713  | 3,095,705 | 119,374,416 | 737,282,058 | 3,141,982 |
| 1924..... | 1,729-13              | 524-01             | 116,438,733  | 3,364,359 | 119,803,072 | 726,497,729 | 2,543,869 |
| 1925..... | 1,729-53              | 543-47             | 115,715,733  | 3,905,418 | 119,621,151 | 725,491,101 | 2,701,823 |
| 1926..... | 1,676-54              | 553-39             | 118,566,321  | 4,305,724 | 122,855,055 | 745,710,386 | 3,486,183 |
| 1927..... | 1,644-51              | 562-04             | 127,062,864  | 4,520,823 | 131,583,717 | 781,398,104 | 3,265,237 |
| 1928..... | 1,645-58              | 565-56             | 128,888,905  | 4,800,084 | 133,689,589 | 803,023,615 | 3,588,372 |
| 1929..... | 1,629-12              | 565-27             | 134,666,561  | 4,533,070 | 139,199,634 | 833,496,566 | 3,682,411 |
| 1930..... | 1,500-52              | 571-37             | 136,240,958  | 3,773,642 | 140,014,600 | 792,701,493 | 2,872,929 |
| 1931..... | 1,370-03              | 572-69             | 131,200,894  | 2,682,505 | 133,883,489 | 720,468,361 | 1,977,441 |
| 1932..... | 1,306-30              | 560-02             | 123,672,220  | 2,213,081 | 125,885,301 | 642,831,002 | 1,506,561 |
| 1933..... | 1,207-63              | 559-57             | 117,109,127  | 2,062,669 | 119,162,796 | 588,385,094 | 1,547,202 |
| 1934..... | 1,286-16              | 557-14             | 117,678,030  | 2,357,595 | 120,035,625 | 699,143,903 | 1,939,883 |
| 1935..... | 1,268-31              | 557-53             | 118,268,764  | 2,552,535 | 120,821,349 | 600,728,313 | 2,087,897 |
| 1936..... | 1,247-09              | 552-77             | 119,779,505  | 2,465,384 | 122,244,889 | 614,880,857 | 2,265,023 |

<sup>1</sup> Revised since publication of the 1937 Year Book. <sup>2</sup> The Toronto Transportation Commission, which operated for the last four months of 1921 only and did not report, would increase this number by about 80,000,000 or possibly bring it up to the 1920 record.

## 29.—Numbers of Passengers, Employees, and Others Killed or Injured on Electric Railways, calendar years 1919-36, with Totals from 1894 to June 30, 1919.

NOTE.—Details for years ended June 30, 1900-19, are given on p. 611 of the 1926 Year Book.

| Calendar Year.                    | Passengers. |          | Employees. |          | Others. |          | Totals. |          |
|-----------------------------------|-------------|----------|------------|----------|---------|----------|---------|----------|
|                                   | Killed.     | Injured. | Killed.    | Injured. | Killed. | Injured. | Killed. | Injured. |
| Totals, 1894 to June 30, 1919.... | 259         | 23,502   | 162        | 5,069    | 833     | 10,608   | 1,254   | 39,419   |
| 1919.....                         | 4           | 1,717    | 20         | 951      | 58      | 1,505    | 91      | 4,173    |
| 1920.....                         | 9           | 1,063    | 7          | 658      | 75      | 1,434    | 91      | 4,090    |
| 1921.....                         | 5           | 1,110    | 9          | 609      | 35      | 666      | 48      | 2,335    |
| 1922.....                         | 6           | 2,260    | 10         | 873      | 31      | 700      | 47      | 3,833    |
| 1923.....                         | 6           | 2,465    | 11         | 1,652    | 45      | 790      | 62      | 4,907    |
| 1924.....                         | 2           | 2,279    | 6          | 1,262    | 54      | 824      | 62      | 4,365    |
| 1925.....                         | 9           | 2,272    | 5          | 1,736    | 37      | 744      | 51      | 4,752    |
| 1926.....                         | 3           | 2,420    | 7          | 1,642    | 66      | 879      | 76      | 4,941    |
| 1927.....                         | Nil         | 2,090    | 7          | 1,508    | 71      | 1,260    | 78      | 4,858    |
| 1928.....                         | 1           | 2,735    | 12         | 1,114    | 86      | 1,139    | 99      | 4,988    |
| 1929.....                         | 5           | 2,508    | 5          | 1,200    | 93      | 1,372    | 103     | 5,380    |
| 1930.....                         | 8           | 2,790    | 6          | 1,003    | 50      | 1,269    | 64      | 5,062    |
| 1931.....                         | 1           | 2,245    | 3          | 758      | 61      | 1,144    | 65      | 4,147    |
| 1932.....                         | 3           | 2,086    | 2          | 565      | 74      | 879      | 79      | 3,542    |
| 1933.....                         | Nil         | 1,388    | 1          | 353      | 32      | 1,184    | 33      | 2,902    |
| 1934.....                         | 4           | 1,666    | 2          | 279      | 49      | 734      | 55      | 2,679    |
| 1935.....                         | 1           | 1,517    | 2          | 358      | 61      | 652      | 64      | 2,557    |
| 1936.....                         | Nil         | 1,503    | 2          | 280      | 41      | 651      | 43      | 2,434    |

## Section 3.—Express Companies.\*

"Express service is an expedited freight service on passenger trains". But express companies do not own the means of performing their services; they use railway facilities by virtue of contracts with the railway companies. Express companies in Canada have had close relations with the railways practically from the beginning. A brief history of the various express companies will be found on pp. 611-612 of the 1926 Year Book.

\* Revised and checked by G. S. Wong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch issues an annual report on Express Statistics.



Goods are sent by express for quick transit, so that express rates do not compete with freight rates. Thus in its first tariff the Dominion Express Co., in pursuance of its contract with the Canadian Pacific Railway, gave a rate of  $2\frac{1}{2}$  times the maximum first-class railway freight rate for the same goods carried the same distance. The majority of the contracts between express and railway companies for carrying express freight are on the basis of a percentage of the gross express revenue. The rates are subject to the approval of the Board of Railway Commissioners.

**Express Company Operations.**—During 1936, the latest year for which statistics are available, three Canadian and one American express organizations operated in Canada. The Canadian Pacific Express Co., formerly the Dominion Express Co., is a subsidiary of the Canadian Pacific Railway and handles the express business on the railways and the inland and ocean steamship lines of the parent company. The express business of the Canadian National system and Northern Alberta railway is handled by departments of the respective railways. The Railway Express Agency, Inc., operates over the Canadian sections of United States railways and over the route from Skagway to points in Yukon. These companies are all organized under powers conferred by Acts of the Dominion Parliament and their business consists in the expeditious shipment of valuable live stock, and such perishable commodities as fresh fish, fruit, etc., the forwarding of parcels and baggage and the issue of money orders, travellers cheques, letters of credit and other forms of financial paper. No statistics are available regarding the volume of traffic carried by express. Much of the traffic, of course, consists of parcels and small lots which would make statistical classification and measurement very difficult. However, there is also an important movement in car lots of live stock, fresh fish, fruit, vegetables and other perishable commodities. The total capital liabilities of the three Canadian companies and departments stood at \$6,239,535 on Dec. 31, 1936.

In the following tables the amounts paid by express companies to the carriers, i.e., railways, steamship lines, etc., for transporting the express matter, are shown under the heading "express privileges". Of the total of 63,146 miles operated in 1936, 42,192 were over steam railways, 280 over electric railways, 14,227 on ocean steamship services (mainly by the Canadian Pacific lines), 5,188 miles on inland or coastal steamboat routes, 397 by aircraft, and 862 miles over highways by motor trucks.

### 30.—Summary Statistics of Revenues and Expenses of Express Companies, calendar years 1919-36.

NOTE.—Corresponding figures for the years ended June 30, 1911-13, were published at p. 673 of the 1927-28 Year Book.

| Calendar Year. | Gross Earnings. | Operating Expenses. | Express Privileges.    | Net Operating Revenue. |
|----------------|-----------------|---------------------|------------------------|------------------------|
|                | \$              | \$                  | \$                     | \$                     |
| 1919.....      | 24,933,219      | 13,227,652          | 12,936,615             | - 1,231,048            |
| 1920.....      | 30,512,504      | 16,120,880          | 16,009,460             | - 1,617,836            |
| 1921.....      | 32,504,894      | 15,601,187          | 16,549,915             | 353,792                |
| 1922.....      | 38,697,332      | 13,596,618          | 14,881,789             | 519,925                |
| 1923.....      | 27,635,700      | 13,217,780          | 14,342,410             | - 65,510               |
| 1924.....      | 26,196,017      | 12,723,651          | 13,557,168             | - 84,802               |
| 1925.....      | 25,876,342      | 12,336,485          | 13,312,960             | 226,897                |
| 1926.....      | 26,554,378      | 12,442,257          | 13,406,863             | 645,258                |
| 1927.....      | 26,532,182      | 12,548,374          | 13,275,355             | 708,453                |
| 1928.....      | 27,674,270      | 13,032,376          | 13,450,187             | 1,182,707              |
| 1929.....      | 27,758,385      | 13,480,028          | 13,598,575             | 679,782                |
| 1930.....      | 24,352,181      | 12,759,439          | 12,880,060             | - 787,318              |
| 1931.....      | 20,115,285      | 11,292,957          | 10,969,184             | - 2,086,856            |
| 1932.....      | 16,870,806      | 9,479,802           | 7,307,980 <sup>1</sup> | 83,024                 |
| 1933.....      | 15,226,015      | 8,497,892           | 6,005,225              | 122,898                |
| 1934.....      | 16,206,171      | 8,473,601           | 7,268,616              | 463,954                |
| 1935.....      | 16,592,746      | 8,960,675           | 7,352,912              | 279,158                |
| 1936.....      | 17,169,315      | 9,414,746           | 7,478,874              | 275,695                |

<sup>1</sup> Decrease due largely to revision of basis of payment by Canadian Pacific Express Co.

## 31.—Revenues, Expenses, and Operating Mileage of Express Companies, by Companies, calendar years 1935 and 1936.

| Company.                        | Gross Earnings.   | Operating Expenses. | Express Privileges. | Net Operating Revenue. | Mileage Operated. |
|---------------------------------|-------------------|---------------------|---------------------|------------------------|-------------------|
|                                 | \$                | \$                  | \$                  | \$                     | miles.            |
| 1935.                           |                   |                     |                     |                        |                   |
| Canadian National Railways..... | 8,434,764         | 4,517,589           | 3,757,068           | 160,107                | 24,192            |
| Canadian Pacific Express.....   | 7,560,810         | 4,188,077           | 3,278,997           | 93,136                 | 33,184            |
| Northern Alberta Railways.....  | 107,027           | 36,113              | 59,132              | 11,782                 | 928               |
| Railway Express Agency.....     | 490,145           | 218,296             | 257,716             | 14,133                 | 4,688             |
| <b>Totals.....</b>              | <b>16,592,746</b> | <b>8,960,675</b>    | <b>7,352,913</b>    | <b>279,158</b>         | <b>62,992</b>     |
| 1936.                           |                   |                     |                     |                        |                   |
| Canadian National Railways..... | 8,628,310         | 4,686,520           | 3,835,381           | 106,409                | 24,104            |
| Canadian Pacific Express.....   | 7,920,998         | 4,464,075           | 3,323,849           | 139,074                | 33,250            |
| Northern Alberta Railways.....  | 121,009           | 35,940              | 65,895              | 16,234                 | 928               |
| Railway Express Agency.....     | 492,938           | 225,211             | 253,749             | 13,978                 | 4,864             |
| <b>Totals.....</b>              | <b>17,163,255</b> | <b>9,411,746</b>    | <b>7,478,874</b>    | <b>275,695</b>         | <b>63,146</b>     |

## 32.—Business Transacted by Express Companies in Financial Paper, calendar years 1932-36.

| Description.                      | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                                   | \$                | \$                | \$                | \$                | \$                |
| Money orders, domestic.....       | 35,999,391        | 34,696,463        | 40,115,447        | 44,560,510        | 52,581,553        |
| Money orders, foreign.....        | 479,738           | 511,561           | 431,553           | 502,438           | 577,720           |
| Travellers cheques, domestic..... | 2,538,537         | 2,549,571         | 2,352,438         | 2,697,849         | 3,150,798         |
| Travellers cheques, foreign.....  | 974,465           | 839,333           | 952,267           | 1,186,495         | 1,593,840         |
| "C.O.D." cheques.....             | 4,448,486         | 4,186,825         | 4,640,004         | 4,839,649         | 5,007,286         |
| Telegraphic transfers.....        | 324,118           | 271,682           | 252,457           | 249,173           | 212,800           |
| Other forms.....                  | 746,319           | 531,322           | 461,760           | 492,997           | 424,863           |
| <b>Totals.....</b>                | <b>45,511,024</b> | <b>43,579,612</b> | <b>50,234,896</b> | <b>54,829,081</b> | <b>63,543,920</b> |

## PART III.—ROAD TRANSPORTATION.\*

Since the recent development of highways in Canada has been almost exclusively for the purpose of providing roadbed for motor vehicle traffic, highways and motor vehicles have been treated since the 1937 edition as related features of transportation, instead of being dealt with in separate parts of the chapter as in former editions. After an introductory section which briefly summarizes provincial regulations regarding motor vehicles and motor traffic, the whole subject of road transportation is dealt with under the headings of facilities, finances, and traffic, similarly to the treatment of other forms of transportation.

## Section 1.—Provincial Motor Vehicle and Traffic Regulations.†

**NOTE.**—In this Section, it is obviously impossible to include the great mass of detailed regulations in force in each province. The purpose in view is to provide only the more important general information. For detailed regulations for specific provinces the sources of information are given on pp. 670-671. See also "The Highway and Motor Vehicle in Canada", an annual bulletin published by the Dominion Bureau of Statistics and obtainable from the Dominion Statistician, price 25 cents.

**General.**—The licensing of motor vehicles and the regulation of motor vehicle traffic lies within the legislative jurisdiction of the Provincial Governments in

\*Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an annual report "The Highway and Motor Vehicle in Canada".

†The information in this Section has been revised from material provided by the officials in charge of the administration of Motor Vehicle and Traffic Acts and Regulations in the individual provinces.

Canada. Regulations which apply in all the provinces may be summarized as follows:—

*Operators' Licences.*—The operator of a motor vehicle must be over a specified age (usually 16 years) and must carry a licence, obtainable only after prescribed qualification tests and renewable annually. Special licences are required for chauffeurs.

*Motor Vehicle Regulations.*—In general, all motor vehicles and trailers must be registered annually, usually for the calendar year, with the payment of specified fees, and must carry two registration plates, one on the front and one on the back of the vehicle (one only, for the back, in the case of trailers). A change in ownership of the vehicle must be recorded with the registration authority. However, exception from registration is granted for a specified period (usually at least 90 days) in any year to visiting private vehicles registered in another province or a State which grants reciprocal treatment. Further regulations require a safe standard of efficiency in the mechanism of the vehicle and in its brakes, and provide for its equipment with non-glare headlights and a proper rear light, with a satisfactory locking device, a muffler, a windshield wiper, and a rear-vision mirror.

*Traffic Regulations.*—In all the provinces, vehicles keep to the right-hand side of the road. Motorists are everywhere required to observe traffic signs, lights, etc., placed at strategic points on highways and roads. While permissible speeds vary in different provinces, slower speeds are always required in cities, towns and villages, in passing schools and public playgrounds, at road intersections, railway crossings, or at other places or times where the view of the highway for a safe distance ahead is in any way obscured. Motor vehicles must not pass a street car which has stopped to take on or discharge passengers except where safety zones are provided. Accidents resulting in personal injury or property damage must be reported to a provincial or municipal police officer and any driver involved must not leave the scene of accident until he has rendered all possible aid.

*Penalties.*—These ascend in scale from small fines for minor infractions of any of the regulations to a suspension of the operator's driving permit, impounding of the car or imprisonment for serious infractions, recklessness, driving without an operator's licence, and especially for attempting, while intoxicated, to operate a motor vehicle.

There is such wide variation in the different provinces regarding the basis of licences and fees, the regulation of public commercial vehicles, details of traffic rules, speed, and the use of motor vehicles, that it is impossible even to outline them satisfactorily in the space available here. The most important features are summarized in the annual bulletin referred to in the headnote to this Section, p. 669. The authorities responsible for the administration of motor vehicles and the legislation governing vehicles and traffic are given below for each province.

*Prince Edward Island.*—*Administration.*—The Provincial Secretary, Charlottetown. *Legislation.*—The Highway Traffic Act (c. 2, 1936) and amendments.

*Nova Scotia.*—*Administration.*—Motor Vehicle Branch, Department of Highways, Halifax. *Legislation.*—The Motor Vehicle Act (c. 6, 1932) and amendments.

*New Brunswick.*—*Administration.*—Motor Vehicle Branch, Department of Public Works, Fredericton. *Legislation.*—The Motor Vehicle Act (c. 20, 1934).

*Quebec.*—*Administration.*—Motor Vehicle Bureau, Office of the Provincial Treasurer, Quebec. *Legislation.*—The Motor Vehicle Act (c. 35, R.S.Q. 1925) and amendments.

*Ontario.*—*Administration.*—Motor Vehicles Branch, Department of Highways, Toronto. *Legislation.*—The Highway Traffic Act (c. 251, R.S.O. 1927) and amendments.

**Manitoba.**—*Enforcement.*—Attorney General. *Registrations.*—Treasurer, Tax Commission Office, Winnipeg. *Legislation.*—The Highway Traffic Act (c. 19, 1930) and amendments.

**Saskatchewan.**—*Administration.*—Motor Licence Division, Provincial Tax Commission, Revenue Building, Regina. *Legislation.*—The Vehicles Act (c. 68, 1935) and amendments.

**Alberta.**—*Administration.*—Motor Vehicle Branch, Department of the Provincial Secretary, Edmonton. *Legislation.*—The Vehicles and Highway Traffic Act (c. 31, 1924) and amendments.

**British Columbia.**—*Administration.*—Motor Vehicle Branch, Commissioner of Provincial Police, Victoria. *Legislation.*—The Motor Vehicle Act (c. 195, R.S.B.C. 1936) and the Highway Act (c. 116, R.S.B.C. 1936) and amendments.

**Yukon.**—*Administration.*—Territorial Secretary, Dawson, Yukon. Information regarding regulations may also be obtained from the Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa. *Legislation.*—The Motor Vehicle Ordinance, No. 14, 1914, and amendments.

## Section 2.—Roads and Vehicles.

The facilities for road transportation are dealt with in two subsections devoted, respectively, to roads and highways and to motor vehicles.

### Subsection 1.—Roads and Highways.

**Historical.**—A brief description of the early colonization roads in Canada was given at p. 733 of the 1934-35 Year Book.

**Recent Highway Development.**—With the rapid increase in the percentage of motor-car owners to population (see pp. 672-673) the demand for improved roads has become more and more insistent since the War. Furthermore, the advantages to be gained by attracting touring motorists have been a powerful incentive to governing bodies to improve trunk roads and scenic highways within their jurisdictions. One sphere where the motor car has been of special economic advantage has been in rural areas, where its speed and economy are a great improvement over the old horse-drawn vehicle. As a result, in the Census of 1931 every second farm reported a farm-owned motor vehicle (1.96 farms per farm-owned motor vehicle). This widespread rural ownership of automobiles has resulted in the improvement of secondary rural roads.

The table of road mileages, p. 672, includes all roads under provincial jurisdiction and local roads in the Maritime Provinces and Ontario and estimates of local roads in the four western provinces. There are great stretches of country in the northern portions of Quebec, Ontario, the Prairie Provinces, and British Columbia with very few people and very few roads, but the southern portions are well supplied. The Trans-Canada Highway is now under construction, running from the Atlantic to the Pacific oceans entirely in Canadian territory.

A start has been made on the compilation of statistics of urban streets. For 1936 the mileage reported was 11,662, of which 2,340 was asphalt, 2,387 was gravel and crushed stone surface, and 3,054 was unsurfaced. The remaining 3,881 miles was water-bound macadam, bituminous and other surfaces. These statistics do not include all urban streets, but places not included would increase the totals very little.

## 1.—Classification of Canadian Highways, by Provinces, 1936.

| Province.          | Year Ended—   | Earth.         | Gravel and Stone. | Water-Bound Macadam. | Portland Cement Concrete. | Bituminous Macadam. | Bituminous Concrete. | Asphalt.   | Total.         |
|--------------------|---------------|----------------|-------------------|----------------------|---------------------------|---------------------|----------------------|------------|----------------|
|                    |               | miles.         | miles.            | miles.               | miles.                    | miles.              | miles.               | miles.     | miles.         |
| P.E. Island.....   | Dec. 31, 1935 | 3,500          | 196               | 1                    | 4                         | 1                   | 12                   | 1          | 3,712          |
| Nova Scotia.....   | Nov. 30, 1935 | 10,554         | 4,041             | 1                    | 1                         | 31                  | 107                  | 1          | 14,825         |
| New Brunswick..    | Oct. 31, 1936 | 4,453          | 5,951             | 1                    | 1                         | 13                  | 197                  | 1          | 11,614         |
| Quebec.....        | June 30, 1936 | 17,468         | 14,593            | 1,263                | 173                       | 185                 | 678                  | 1          | 34,834         |
| Ontario.....       | Mar. 31, 1937 | 19,996         | 45,189            | 244                  | 1,776                     | 2,043               | 1,112                | 298        | 70,897         |
| Manitoba.....      | Mar. 31, 1937 | 29,782         | 4,268             | 1                    | 31                        | 1                   | 23                   | 273        | 34,377         |
| Saskatchewan....   | Apr. 30, 1937 | 151,748        | 2,463             | 1                    | 1                         | 1                   | 132                  | 1          | 154,350        |
| Alberta.....       | Mar. 31, 1937 | 60,140         | 2,343             | 1                    | 1                         | 1                   | 1                    | 71         | 62,802         |
| British Columbia   | Mar. 31, 1937 | 13,427         | 8,185             | 42                   | 46                        | 947                 | 1                    | 71         | 23,037         |
| <b>Totals.....</b> |               | <b>311,093</b> | <b>88,229</b>     | <b>1,549</b>         | <b>2,030</b>              | <b>3,219</b>        | <b>2,321</b>         | <b>713</b> | <b>410,448</b> |

<sup>1</sup> None reported.

<sup>2</sup> Includes 839 miles of oil-treated gravel and stone and 400 miles of other surface.

## Subsection 2.—Motor Vehicles.

**Registration.**—The increase in the use of motor vehicles in Canada has been very rapid; this is shown by the statistics of Table 2. In Table 3 the numbers of motor vehicles registered in 1935 and 1936 are given by provinces, classified as passenger cars, commercial cars or trucks, motor buses, and motor cycles.

The average population per vehicle registered was 8.9 in 1936. Canada ranked fourth in this respect, the United States being first with 4.5. On the basis of the total registration of 1,240,124, only four countries had larger numbers in 1936, viz., United States, United Kingdom, France, and Germany.

## 2.—Numbers of Motor Vehicles Registered in Canada, by Provinces, calendar years 1920-36.

**NOTE.**—Registrations given here include passenger cars, trucks, buses, motor cycles, service cars, etc., but not trailers or dealers' licences. Registrations in Yukon are included in the total for Canada. Figures for the years 1904-19 were given at p. 668 of the 1937 Year Book.

| Year.     | P.E. Island. | Nova Scotia. | New Brunswick. | Quebec. | Ontario. | Manitoba. | Saskatchewan. | Alberta. | British Columbia. | Canada. <sup>1</sup> |
|-----------|--------------|--------------|----------------|---------|----------|-----------|---------------|----------|-------------------|----------------------|
| 1920..... | 1,418        | 12,450       | 11,121         | 41,562  | 177,561  | 38,257    | 60,325        | 38,015   | 28,009            | 408,790              |
| 1921..... | 1,750        | 14,060       | 13,460         | 54,670  | 206,521  | 40,336    | 61,184        | 39,852   | 32,900            | 464,805              |
| 1922..... | 2,154        | 16,029       | 13,611         | 60,940  | 239,296  | 41,870    | 60,645        | 40,366   | 34,385            | 509,382              |
| 1923..... | 2,440        | 18,232       | 16,662         | 71,320  | 278,752  | 42,063    | 63,224        | 42,323   | 40,854            | 575,985              |
| 1924..... | 2,571        | 20,606       | 19,840         | 84,949  | 306,770  | 43,875    | 66,896        | 48,238   | 48,407            | 645,263              |
| 1925..... | 2,947        | 22,745       | 18,863         | 97,418  | 342,174  | 50,884    | 77,940        | 54,538   | 56,427            | 724,048              |
| 1926..... | 3,448        | 25,740       | 21,421         | 107,994 | 356,349  | 53,292    | 95,967        | 65,101   | 67,810            | 832,268              |
| 1927..... | 4,371        | 29,914       | 24,457         | 128,104 | 433,504  | 63,412    | 105,088       | 73,806   | 77,327            | 936,661              |
| 1928..... | 5,404        | 35,194       | 27,970         | 148,090 | 487,337  | 70,878    | 119,672       | 88,398   | 86,203            | 1,009,343            |
| 1929..... | 6,116        | 39,972       | 31,736         | 169,105 | 540,207  | 77,259    | 128,426       | 98,720   | 95,571            | 1,187,331            |
| 1930..... | 7,376        | 43,029       | 34,699         | 178,548 | 562,506  | 78,850    | 127,193       | 101,119  | 98,938            | 1,232,489            |
| 1931..... | 7,744        | 43,758       | 33,627         | 177,465 | 562,216  | 75,210    | 107,830       | 94,642   | 97,932            | 1,200,668            |
| 1932..... | 6,982        | 41,013       | 28,041         | 165,730 | 531,597  | 70,840    | 91,275        | 86,781   | 91,042            | 1,113,533            |
| 1933..... | 6,940        | 40,648       | 26,867         | 160,012 | 520,353  | 68,590    | 84,944        | 86,041   | 88,554            | 1,083,178            |
| 1934..... | 7,206        | 41,932       | 29,094         | 165,526 | 542,245  | 70,430    | 91,461        | 89,360   | 92,021            | 1,129,532            |
| 1935..... | 8,231        | 43,952       | 31,217         | 170,644 | 564,076  | 70,660    | 94,792        | 93,870   | 98,411            | 1,176,116            |
| 1936..... | 7,632        | 46,179       | 33,402         | 181,628 | 590,226  | 74,940    | 102,270       | 97,468   | 106,079           | 1,240,124            |

<sup>1</sup> Includes registrations in Yukon.

## 3.—Types of Motor Vehicles Registered in Canada, by Provinces, calendar years 1935 and 1936.

| Province.                 | Passenger Cars. <sup>1</sup> | Commercial Cars or Trucks. <sup>2</sup> | Motor Buses. | Motor Cycles. | Total.    |
|---------------------------|------------------------------|---|--------------|---------------|-----------|
|                           | No.                          | No.                                     | No.          | No.           | No.       |
| 1935.                     |                              |   |              |               |           |
| Prince Edward Island..... | 7,420                        | 702                                     | 3            | 16            | 8,231     |
| Nova Scotia.....          | 35,820                       | 7,776                                   | 44           | 312           | 43,953    |
| New Brunswick.....        | 26,185                       | 4,801                                   | 58           | 173           | 31,217    |
| Quebec.....               | 139,497                      | 28,153                                  | 505          | 2,489         | 170,644   |
| Ontario.....              | 489,610                      | 98,256                                  | 704          | 4,500         | 584,076   |
| Manitoba.....             | 59,470                       | 10,520                                  | 80           | 590           | 70,660    |
| Saskatchewan.....         | 75,727                       | 18,636                                  | 64           | 365           | 94,792    |
| Alberta.....              | 76,882                       | 16,417                                  | 91           | 480           | 93,870    |
| British Columbia.....     | 78,999                       | 17,570                                  | 298          | 1,544         | 98,411    |
| Yukon.....                | 134                          | 119                                     | 1            | 9             | 263       |
| Totals.....               | 989,744                      | 174,040                                 | 1,848        | 10,481        | 1,176,116 |
| 1936.                     |                              |   |              |               |           |
| Prince Edward Island..... | 6,746                        | 852                                     | 13           | 21            | 7,632     |
| Nova Scotia.....          | 37,478                       | 8,338                                   | 87           | 296           | 46,179    |
| New Brunswick.....        | 27,731                       | 5,407                                   | 83           | 178           | 33,402    |
| Quebec.....               | 148,374                      | 30,193                                  | 563          | 2,498         | 181,628   |
| Ontario.....              | 514,211                      | 70,693                                  | 769          | 4,553         | 590,226   |
| Manitoba.....             | 61,730                       | 12,380                                  | 170          | 660           | 74,940    |
| Saskatchewan.....         | 81,519                       | 20,220                                  | 87           | 444           | 102,270   |
| Alberta.....              | 79,538                       | 17,310                                  | 91           | 520           | 97,468    |
| British Columbia.....     | 84,002                       | 20,078                                  | 304          | 1,635         | 106,079   |
| Yukon.....                | 140                          | 145                                     | 2            | 13            | 290       |
| Totals.....               | 1,041,529                    | 185,616                                 | 2,154        | 10,825        | 1,240,124 |

<sup>1</sup> Includes taxicabs.<sup>2</sup> Includes tractors, road machines, flushers, municipal fire engines, etc.

**Apparent Consumption of Automobiles in Canada.**—The apparent consumption of automobiles in Canada in any year may be computed by deducting the number exported from the sum of the production and imports. Prior to 1925 the figures of apparent consumption do not show a pronounced trend but between 1925 and 1929 they increased substantially. From 1929 to 1932 the decrease was rapid and continuous but was practically halted in 1933, in which year production showed some improvement but mainly on account of the export demand. In 1936 the apparent consumption showed an increase of 3.4 p.c. over the figure for 1935.

## 4.—Apparent Consumption of Automobiles in Canada, 1917-36.

| Year.     | Production. | Imports. | Total Supply. | Exports. | Re-Exports. | Total Exports. | Apparent Consumption. |
|-----------|-------------|----------|---------------|----------|-------------|----------------|-----------------------|
|           | No.         | No.      | No.           | No.      | No.         | No.            | No.                   |
| 1917..... | 93,510      | 16,656   | 110,466       | 9,492    | 567         | 10,059         | 100,407               |
| 1918..... | 82,408      | 10,812   | 93,220        | 10,361   | 322         | 10,683         | 82,537                |
| 1919..... | 87,835      | 11,750   | 99,585        | 22,949   | 305         | 23,254         | 76,331                |
| 1920..... | 94,144      | 9,145    | 103,289       | 23,012   | 542         | 23,554         | 79,735                |
| 1921..... | 66,246      | 7,270    | 73,516        | 10,726   | 254         | 10,980         | 62,536                |
| 1922..... | 101,007     | 11,591   | 112,598       | 37,058   | 268         | 38,226         | 74,372                |
| 1923..... | 147,202     | 11,822   | 159,024       | 69,920   | 438         | 70,358         | 88,666                |
| 1924..... | 132,680     | 9,301    | 141,881       | 56,655   | 326         | 56,981         | 84,900                |
| 1925..... | 161,970     | 14,632   | 176,602       | 74,151   | 341         | 74,492         | 102,110               |
| 1926..... | 204,727     | 28,544   | 233,271       | 74,324   | 870         | 74,694         | 158,577               |
| 1927..... | 179,054     | 36,630   | 215,684       | 57,414   | 438         | 57,852         | 157,832               |
| 1928..... | 242,054     | 47,408   | 289,462       | 79,388   | 467         | 79,855         | 209,607               |
| 1929..... | 262,625     | 44,724   | 307,349       | 101,711  | 671         | 102,382        | 204,967               |
| 1930..... | 153,372     | 23,233   | 176,605       | 44,583   | 818         | 45,371         | 131,234               |
| 1931..... | 82,559      | 8,788    | 91,297        | 13,813   | 726         | 14,539         | 76,758                |
| 1932..... | 60,789      | 1,449    | 62,238        | 12,534   | 488         | 13,022         | 49,216                |
| 1933..... | 65,852      | 1,781    | 67,633        | 20,403   | 497         | 20,900         | 46,733                |
| 1934..... | 116,852     | 2,905    | 119,757       | 43,368   | 399         | 43,767         | 75,990                |
| 1935..... | 172,877     | 4,111    | 176,988       | 64,330   | 291         | 64,621         | 112,367               |
| 1936..... | 162,159     | 9,903    | 172,062       | 55,570   | 267         | 55,837         | 116,225               |

### Section 3.—Finances of Road Transportation.

The cost of road transportation to the people of Canada might be summarized under the following headings: expenditures on roads and highways; expenditures of individuals and corporations upon owned motor vehicles; and expenditures for freight and passenger services rendered by motor vehicle public carriers such as taxi, bus, and motor transport companies. Since expenditures on roads and highways are made almost entirely by governmental bodies, fairly complete statistics are available regarding them, but, owing to the tremendous number of individuals and organizations which would have to be canvassed, no statistics are available regarding expenditures under the other two headings. By applying theoretical unit values to the automobiles registered, an estimate may be obtained of their total present value, which for 1936 was \$416,000,000.

The annual expenditure for the purchase of new motor vehicles is given for the year 1930 and since 1932 in the chapter on Internal Trade at p. 627. Unfortunately, this series as yet covers only a few years, several of which were years of depression, so that its significance will increase with a longer and more representative period. The retail value of new cars sold in 1932 was \$45,261,000, while in 1937 it had risen to \$148,486,000. The average for the seven years, 1930 and 1932-37, was \$93,795,000.

Some indication of the annual expenditures for the servicing of motor vehicles may be obtained from the statistics of retail merchandising appearing on pp. 626-627. Sales of gasoline are given on p. 678. No statistics are available regarding the earnings of motor transport and bus companies.

**Expenditures on Roads and Highways.**—Roads in Canada, except in the Territories and the National Parks are under the jurisdiction of provincial and municipal authorities. Unfortunately, there are no comprehensive or comparable statistics available regarding expenditures prior to 1928. Expenditures by the Dominion Government, outside of the National Parks, have taken the form of subsidies to the provinces for specific highways and have been made under the Canada Highways Act, 1919, (see p. 669 of the 1929 Year Book) largely in the few years immediately after the War and under relief legislation during the depression, to aid in providing useful employment. The present report includes expenditures on roads in the National Parks by the Dominion Government, also those on road construction work undertaken through the Department of National Defence to relieve unemployment in the western provinces. These expenditures, direct and as road subsidies, are shown in Table 5. The net expenditures here are the expenditures less subsidies received or collectable. They cover only national and provincial highways, secondary highways and other important roads to which the Provincial Governments contribute, together with the bridges or ferries necessary to such highways. The figures do not include expenditures on roads or streets within urban municipalities nor expenditures by rural municipalities on local roads to which no contribution is made by the Provincial Governments. Although the record of expenditures on roads by municipalities is incomplete, the expensive roads to construct and maintain are under provincial jurisdiction, so that only a small percentage of the total expenditures is omitted. In the Maritime Provinces all road expenditures are made by the Provincial Governments.

In accordance with an agreement of the Conference of British Commonwealth Statisticians, which met in Ottawa in 1935, an effort was made to collect statistics regarding urban streets and roadways beginning with 1935. The resulting statistics

appear in an appendix to the report "The Highway and Motor Vehicle in Canada", issued by the Bureau of Statistics. As these first results are considered preliminary, they are not included in the table. The total for 1936 was \$11,363,566, of which \$3,056,209 was for new construction and major improvements.

5.—Capital, Maintenance and General Expenditures on Provincial Highways or Provincially Subsidized Highways in Canada, calendar years 1932-36.

| Province.                 | 1932.      | 1933.      | 1934.      | 1935.      | 1936.                   |
|---------------------------|------------|------------|------------|------------|-------------------------|
| CAPITAL EXPENDITURES.     |            |            |            |            |                         |
|                           | \$         | \$         | \$         | \$         | \$                      |
| Prince Edward Island..... | 278,111    | 68,254     | 233,863    | 998,087    | 1                       |
| Nova Scotia.....          | 1,742,887  | 2,888,304  | 1,202,410  | 5,133,188  | 6,587,411               |
| New Brunswick.....        | 2,658,576  | 791,056    | 1,233,890  | 3,789,587  | 5,735,915               |
| Quebec.....               | 11,551,902 | 8,587,085  | 6,555,143  | 6,466,134  | 8,033,000               |
| Ontario.....              | 23,043,693 | 10,270,035 | 34,330,626 | 20,769,357 | 8,965,720               |
| Manitoba.....             | 112,348    | 102,707    | 115,965    | 150,724    | 2,291                   |
| Saskatchewan.....         | 340,527    | 225,860    | 1,054,220  | 468,023    | 1,905,231               |
| Alberta.....              | 1,270,096  | 235,541    | 1,104,891  | 2,052,858  | 1,369,544               |
| British Columbia.....     | 6,004,369  | 738,705    | 125,182    | 2,619,022  | 2,730,104 <sup>2</sup>  |
| Totals.....               | 50,031,509 | 23,851,579 | 46,144,295 | 42,438,560 | 31,966,915 <sup>2</sup> |

MAINTENANCE EXPENDITURES.

|                           |            |            |            |            |                         |
|---------------------------|------------|------------|------------|------------|-------------------------|
|                           | \$         | \$         | \$         | \$         | \$                      |
| Prince Edward Island..... | 175,473    | 270,505    | 315,476    | 448,842    | 1                       |
| Nova Scotia.....          | 1,719,748  | 1,894,967  | 1,804,066  | 1,734,352  | 1,893,037               |
| New Brunswick.....        | 901,040    | 742,394    | 925,082    | 1,390,077  | 714,445                 |
| Quebec.....               | 5,432,742  | 3,988,343  | 3,571,805  | 3,821,273  | 5,022,914               |
| Ontario.....              | 8,672,078  | 5,729,138  | 7,901,232  | 7,565,596  | 5,836,251               |
| Manitoba.....             | 572,519    | 397,517    | 483,863    | 452,040    | 420,551                 |
| Saskatchewan.....         | 528,428    | 1,361,721  | 1,556,862  | 1,208,051  | 1,079,309               |
| Alberta.....              | 945,249    | 780,533    | 705,586    | 1,194,032  | 1,154,391               |
| British Columbia.....     | 2,509,854  | 2,085,557  | 1,657,673  | 3,837,524  | 4,013,475 <sup>2</sup>  |
| Totals.....               | 21,461,337 | 16,659,473 | 19,014,588 | 21,716,770 | 20,134,970 <sup>2</sup> |

PLANT AND GENERAL EXPENDITURES.

|                           |           |           |                        |                        |                        |
|---------------------------|-----------|-----------|------------------------|------------------------|------------------------|
|                           | \$        | \$        | \$                     | \$                     | \$                     |
| Prince Edward Island..... | 18,851    | 31,095    | 1                      | 1                      | 1                      |
| Nova Scotia.....          | 50,699    | 5         | 5                      | 5                      | 5,000                  |
| New Brunswick.....        | 100,238   | 1         | 1                      | 1                      | 1                      |
| Quebec.....               | 675,353   | 1,401,587 | 1,679,693              | 1,679,693              | 1,679,693              |
| Ontario.....              | 706,441   | 866,459   | 860,529                | 860,529                | 860,529                |
| Manitoba.....             | 21,914    | 88,130    | 88,130                 | 88,130                 | 88,130                 |
| Saskatchewan.....         | 138,108   | 135,050   | 77,234                 | 77,234                 | 77,234                 |
| Alberta.....              | 17,500    | 40,938    | 26,747                 | 26,747                 | 26,747                 |
| British Columbia.....     | 138,243   | 184,393   | 192,849 <sup>2</sup>   | 192,849 <sup>2</sup>   | 192,849 <sup>2</sup>   |
| Totals.....               | 1,867,377 | 2,747,658 | 2,436,092 <sup>2</sup> | 2,436,092 <sup>2</sup> | 2,436,092 <sup>2</sup> |

DOMINION-PROVINCIAL DISTRIBUTION OF ALL EXPENDITURES.

|  |            |            |            |            |            |
|--|------------|------------|------------|------------|------------|
|  | \$         | \$         | \$         | \$         | \$         |
| Dominion—Net expenditures and subsidies.....   | 15,782,625 | 3,698,705  | 9,824,601  | 10,092,310 | 5,229,410  |
| Provincial—Net expenditures and subsidies..... | 48,137,903 | 31,553,347 | 43,556,087 | 51,006,944 | 48,877,721 |
| Municipal—Net expenditures and subsidies.....  | 7,572,318  | 5,253,002  | 11,778,105 | 5,743,784  | 3,424,847  |

<sup>1</sup> No report on 1935 basis.

<sup>2</sup> Total expenditures divided between construction, maintenance, and general.

<sup>3</sup> None reported.

<sup>4</sup> Does not include Prince Edward Island.

Provincial Funded Debt Incurred for Highways.—Table 6 shows the funded debts of the provinces incurred for highway development. These amounts should not be confused with estimates of the total investment in highways. The



cost of constructing a new road is considerably greater than that of putting a permanent surface on an old road; the latter has been the purpose of much of the provincial expenditure.

#### 6.—Provincial Government Funded Highway Debt and Annual Charges Thereon, 1934-36.

NOTE.—Provincial Governments report for years ended at various dates. The figures given here are for the reported years approximating most nearly to the calendar year stated.

| Province.             | Amounts.    |                        |                        | Annual Interest and Sinking Funds. |                     |                     |
|-----------------------|-------------|------------------------|------------------------|------------------------------------|---------------------|---------------------|
|                       | 1934.       | 1935.                  | 1936.                  | 1934.                              | 1935.               | 1936.               |
|                       | \$          | \$                     | \$                     | \$                                 | \$                  | \$                  |
| Prince Edward Island. | 1,004,774   | 1,004,774 <sup>1</sup> | 1,004,774 <sup>1</sup> | 86,000                             | 86,000 <sup>1</sup> | 86,000 <sup>1</sup> |
| Nova Scotia.          | 34,622,886  | 30,496,495             | 33,980,000             | 1,188,297                          | 1,215,396           | 1,348,625           |
| New Brunswick.        | 40,740,876  | 45,474,355             | 47,612,809             | 2,161,925                          | 1,845,855           | 1,782,787           |
| Quebec.               | 60,677,000  | 70,811,283             | 70,811,283             | 2,706,840                          | 5,101,607           | 4,514,084           |
| Ontario.              | 203,785,482 | 217,075,787            | 224,639,350            | 10,189,274                         | 10,853,789          | 13,030,543          |
| Manitoba.             | 17,795,541  | 17,794,182             | 17,794,182             | 905,647                            | 893,293             | 884,795             |
| Saskatchewan.         | 20,048,905  | 33,630,938             | 33,799,488             | 1,599,961                          | 1,505,109           | 1,600,936           |
| Alberta.              | 34,126,136  | 35,861,450             | 37,025,514             | 1,939,880                          | 2,039,309           | 1,150,614           |
| British Columbia.     | 40,380,728  | 40,141,070             | 41,297,772             | 2,076,897                          | 2,047,043           | 3,378,548           |
| Totals.               | 462,182,328 | 492,290,324            | 507,965,172            | 22,854,691                         | 25,587,461          | 28,276,832          |

<sup>1</sup> 1934 data.

**Provincial Government Revenue.**—The taxation of motor vehicles, garages, chauffeurs, etc., is becoming a lucrative source of Provincial Government income. In every province the following licences or permits, duly issued by the provincial authorities, are required: motor vehicles of all kinds, trailers (in all provinces except Alberta), operators or drivers, paid chauffeurs, dealers, garages, and gasoline and service stations. A sales tax on gasoline is also levied by each province. The following table shows the provincial revenue for the years 1935 and 1936, indicating, at the same time, the more important sources from which it is derived. Dominion Government revenues from import duties, excise, and sales taxes are not included.

#### 7.—Provincial Revenues from the Taxation of the Distribution and Operation of Motor Vehicles, calendar years 1935 and 1936.

NOTE.—See the headnote to Table 6.

| Province.         | Passenger Cars. | Trucks.   | Motor Cycles.       | Dealers' Licences. | Operators and Chauffeurs. | Mileage Tax on Motor Buses and Trucks. | Gasoline Tax. | Total, including Miscellaneous Revenue. |
|-------------------|-----------------|-----------|---------------------|--------------------|---------------------------|--|---------------|---|
|                   | \$              | \$        | \$                  | \$                 | \$                        | \$                                     | \$            | \$                                      |
| 1935.             |                 |           |                     |                    |                           |  |               |   |
| P.E. Island.      | 81,363          | 15,987    | 84                  | 540                | 3,540                     | 1                                      | 178,687       | 282,438                                 |
| Nova Scotia.      | 621,368         | 244,920   | 1                   | 4,793              | 86,559                    | 1,427                                  | 1,422,542     | 2,435,987                               |
| New Brunswick.    | 484,987         | 221,052   | 1                   | 3,572              | 83,032                    | 3,839                                  | 1,006,421     | 1,853,120                               |
| Quebec.           | 2,856,781       | 1,553,129 | 9,358               | 1,100              | 972,605                   | 22,043                                 | 5,666,442     | 11,219,167                              |
| Ontario.          | 5,231,236       | 2,470,328 | 12,018              | 31,129             | 758,736                   | 263,676                                | 15,021,004    | 24,405,547                              |
| Manitoba.         | 612,700         | 141,410   | 2,350               | 8,200              | 93,900                    | 36,356                                 | 1,795,900     | 2,711,856                               |
| Saskatchewan.     | 986,487         | 214,023   | 1                   | 13,675             | 58,878                    | 100,798                                | 1,862,300     | 3,244,666                               |
| Alberta.          | 1,018,126       | 334,296   | 1,949               | 10,770             | 18,394                    | 167,041                                | 2,045,272     | 3,614,381                               |
| British Columbia. | 1,512,006       | 461,309   | 8,108               | 12,967             | 157,843                   | 21,918                                 | 2,830,087     | 4,750,659                               |
| Yukon.            | 1,310           | 1,190     | 27                  | 2                  | 2                         | 2                                      | 2             | 2,802                                   |
| Totals.           | 13,407,069      | 5,657,650 | 22,894 <sup>1</sup> | 92,746             | 2,233,487                 | 616,098 <sup>2</sup>                   | 31,532,646    | 54,623,623                              |

<sup>1</sup> None reported.

<sup>2</sup> Tax not applicable.

<sup>3</sup> Incomplete figure, see footnote 1.

**7.—Provincial Revenues from the Taxation of the Distribution and Operation of Motor Vehicles, calendar years 1935 and 1936—concluded.**

| Province.          | Passenger Cars.   | Trucks.          | Motor Cycles. | Dealers' Licences. | Operators and Chauffeurs. | Mileage Tax on Motor Buses and Trucks. | Gasoline Tax.     | Total, including Miscellaneous Revenue. |
|--------------------|-------------------|------------------|---------------|--------------------|---------------------------|--|-------------------|---|
| 1936.              | \$                | \$               | \$            | \$                 | \$                        | \$                                     | \$                | \$                                      |
| P.E. Island.....   | 88,877            | 16,345           | 111           | 490                | 3,978                     | 235                                    | 200,554           | 312,050                                 |
| Nova Scotia.....   | 717,610           | 362,159          | 1,862         | 4,139              | 101,818                   | 782                                    | 1,790,209         | 3,008,827                               |
| New Brunswick..... | 490,952           | 239,251          | 1             | 4,330              | 95,753                    | 3,002                                  | 1,119,129         | 2,046,628                               |
| Quebec.....        | 3,037,397         | 1,715,644        | 9,492         | 31,551             | 966,495                   | 93,270                                 | 6,272,004         | 12,312,957                              |
| Ontario.....       | 6,255,979         | 2,988,552        | 13,651        | 34,348             | 924,004                   | 270,785                                | 16,019,857        | 27,194,813                              |
| Manitoba.....      | 624,000           | 154,600          | 2,700         | 1                  | 102,400                   | 43,330                                 | 2,051,200         | 3,024,030                               |
| Saskatchewan.....  | 1,059,180         | 240,216          | 1             | 15,592             | 33,760                    | 94,097                                 | 1,951,834         | 3,521,871                               |
| Alberta.....       | 1,040,747         | 498,852          | 2,104         | 17,526             | 136,858                   | 276,952                                | 2,330,088         | 4,380,074                               |
| British Columbia.. | 1,639,110         | 536,165          | 8,854         | 13,742             | 177,033                   | 77,239                                 | 2,717,201         | 5,221,059                               |
| Yukon.....         | 1,370             | 1,460            | 39            | 2                  | 2                         | 2                                      | 2                 | 3,189                                   |
| <b>Totals.....</b> | <b>14,955,222</b> | <b>6,806,274</b> | <b>38,843</b> | <b>122,022</b>     | <b>2,602,129</b>          | <b>859,692</b>                         | <b>34,532,426</b> | <b>61,026,358</b>                       |

<sup>1</sup> None reported.

<sup>2</sup> Tax not applicable.

<sup>3</sup> Incomplete figure, see footnote 1.

### Section 4.—Road Traffic.

Up to the present the motor vehicle has affected passenger traffic more than freight traffic of the steam and electric railways. This diversion of passenger traffic has been effected largely by the private automobile, although the motor bus is rapidly becoming more important and now operates between all large centres. The motor truck also carries a considerable amount of freight, although no statistics showing the tonnage handled are as yet available. The difficulties of collecting statistics from the very large number of unorganized operators concerned are obvious.

Widely differing opinions are held regarding the extent to which the motor vehicle has cut into railway traffic.\* A definite conclusion cannot be reached until reliable statistics regarding motor vehicle traffic are available. While undoubtedly the passenger motor vehicle now carries a certain amount of passenger traffic which would otherwise be carried by steam or electric railways, the error should be avoided of considering all the passenger movement by motor vehicles as a loss to the railways. Much of that movement is due to the convenience and cheapness of motor vehicle travel and would not take place at all under less favourable circumstances.

Similar considerations apply also, though less importantly, to freight moved by motor trucks. Part of the short-haul truck traffic has displaced the horse-drawn vehicle rather than the railway. Furthermore, traffic diverted from the railways to motor vehicles has been offset to some extent by new traffic for the railways created by the automobile industry, consisting of raw and finished products of manufacture, motor fuel and oil, and materials for construction and maintenance of roads suitable for motor travel.

On the other hand a phase of this new competition with railway transportation has been its effect on freight rates. The railway rate structure took into consideration the value of the goods handled, *i.e.*, bulk and low-value commodities were carried at relatively low rates, while manufactured and high-class commodities were at higher rates, the difference in rates having little relation to the difference in costs of transportation. Such a structure allowed raw materials to be moved

\* Counsel for the railways before the Transport Committee of the Senate of Canada, presented arguments showing a serious loss of revenue by the railways from motor vehicle competition. On the other hand, in *Automobile Facts and Figures, 1936*, published by the Automobile Manufacturers' Association, estimates of railway and motor traffic are given which, in the field of freight movement, rather minimize the seriousness of the motor truck competition, if conditions of motor traffic in Canada may be assumed to be similar to those of the United States.

cheaply and the railways were compensated by higher rates on the finished commodities. The motor truck is changing this; the motor truck operator carries these high-class commodities at rates closer to actual costs and does not attempt to carry raw materials except in special cases. His costs are reduced by a right-of-way being supplied for which he pays only a part of the cost and, if his rates are much above the actual cost, the manufacturer can quite easily supply his own transportation. Some branch lines of the railways are practically deserted except for a short time each year when snow interferes with motor vehicle operation. Consequently, railway losses include both losses from freight diverted and also from reductions in rates for high-class freight in attempts to retain such traffic without compensating increases in low-class freight rates.

**Gasolene Consumption.**—All provinces require retail sales of gasolene to be reported and a tax is imposed on all gasolene consumed by motor vehicles using the highways and streets and also on that used for an increasing number of other purposes. The taxable gasolene is, however, still largely consumed by motor vehicles and indicates in a general way the increase or decrease in the use of motor vehicles. Net sales are the differences between the total or gross sales reported and the quantities on which the tax is refunded in whole or in part, or on which the tax is not imposed at the time of sale.

8.—Sales of Gasolene in Canada, by Provinces, calendar years 1932-36.

| Province.                     | 1932.              | 1933.              | 1934.              | 1935.              | 1936.              |
|-------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                               | gal.               | gal.               | gal.               | gal.               | gal.               |
| Prince Edward Island.....     | 2,602,351          | 2,518,812          | 2,639,856          | 2,832,750          | 3,088,010          |
| Nova Scotia.....              | 19,021,309         | 18,034,875         | 20,016,109         | 22,374,254         | 25,947,957         |
| New Brunswick.....            | 13,671,304         | 12,574,097         | 13,640,825         | 15,185,003         | 17,477,029         |
| Quebec.....                   | 91,128,040         | 87,077,418         | 93,511,453         | 102,177,505        | 109,835,482        |
| Ontario.....                  | 233,945,231        | 228,415,717        | 252,976,407        | 272,680,687        | 282,827,724        |
| Manitoba.....                 | 26,185,160         | 24,895,531         | 27,094,263         | 28,482,062         | 30,581,927         |
| Saskatchewan.....             | 33,635,929         | 31,537,173         | 36,784,519         | 39,160,282         | 45,066,233         |
| Alberta.....                  | 41,300,236         | 40,323,781         | 45,194,297         | 47,442,090         | 60,887,814         |
| British Columbia.....         | 39,468,159         | 38,089,475         | 42,337,785         | 43,410,411         | 48,731,088         |
| <b>Totals, Gross Sales...</b> | <b>501,637,709</b> | <b>484,966,879</b> | <b>531,785,644</b> | <b>573,652,245</b> | <b>621,144,804</b> |
| <b>Refunds.....</b>           | <b>62,281,661</b>  | <b>63,244,154</b>  | <b>57,868,513</b>  | <b>73,214,740</b>  | <b>91,260,848</b>  |
| <b>Totals, Net Sales.....</b> | <b>438,755,848</b> | <b>421,722,725</b> | <b>476,926,531</b> | <b>500,437,499</b> | <b>532,884,261</b> |

**Motor Vehicle Accidents.**—Motorists are required to report accidents but comprehensive statistics are not available for all provinces. The Vital Statistics Branch of the Bureau of Statistics compiles statistics on all deaths from motor vehicle accidents and these are shown in Table 9. A direct comparison of such statistics between the provinces is of little value due to differences in size, population, motor vehicle density, etc., but, to put them on somewhat the same basis, the average number of deaths per 10,000 registered motor vehicles has also been tabulated. Although this treatment puts the data on a better footing than the absolute figures, it still gives no weight to differences in use of motor vehicles, differences in climate, roads, tourist cars, etc., all of which are factors in accidents.

Table 10 shows the numbers of persons killed or injured in automobile accidents as reported by the motor vehicle branches of the Provincial Governments. It is quite possible that the latter reported some persons as injured who subsequently died from the injuries and these would be included in the fatalities of the vital statistics shown in Table 9; also accidents might occur late in December and resulting deaths might be charged to December by the provincial authorities but to January of the next year in the vital statistics. Consequently, these data do not agree.

## 9.—Deaths Resulting from Motor Vehicle Accidents in Canada, by Provinces, calendar years 1926-36.

NOTE.—Statistics in this table are compiled by the Vital Statistics Branch, Dominion Bureau of Statistics.

| Year.              | P.E. Island. | Nova Scotia. | New Brunswick. | Quebec. | Ontario. | Manitoba. | Saskatchewan. | Alberta. | British Columbia. | Total. |
|--------------------|--------------|--------------|----------------|---------|----------|-----------|---------------|----------|-------------------|--------|
| NUMBERS OF DEATHS. |              |              |                |         |          |           |               |          |                   |        |
| 1926.....          | 1            | 28           | 11             | 183     | 242      | 27        | 21            | 33       | 60                | 606    |
| 1927.....          | 2            | 31           | 25             | 252     | 387      | 32        | 24            | 35       | 77                | 865    |
| 1928.....          | 2            | 40           | 31             | 279     | 437      | 53        | 74            | 75       | 91                | 1,082  |
| 1929.....          | 1            | 61           | 47             | 323     | 556      | 68        | 56            | 71       | 117               | 1,300  |
| 1930.....          | 10           | 54           | 72             | 338     | 517      | 60        | 51            | 77       | 111               | 1,200  |
| 1931.....          | 5            | 49           | 45             | 355     | 574      | 60        | 50            | 67       | 111               | 1,316  |
| 1932.....          | 1            | 51           | 49             | 311     | 497      | 42        | 35            | 49       | 85                | 1,120  |
| 1933.....          | 2            | 47           | 22             | 250     | 416      | 38        | 32            | 64       | 78                | 955    |
| 1934.....          | 5            | 41           | 52             | 275     | 528      | 41        | 30            | 61       | 82                | 1,115  |
| 1935.....          | 2            | 57           | 40             | 314     | 571      | 53        | 40            | 45       | 102               | 1,224  |
| 1936.....          | 7            | 58           | 41             | 371     | 563      | 53        | 47            | 72       | 101               | 1,313  |

## DEATHS PER 10,000 REGISTERED MOTOR VEHICLES.

|           |       |       |       |       |       |      |      |      |       |       |
|-----------|-------|-------|-------|-------|-------|------|------|------|-------|-------|
| 1926..... | 2.89  | 10.82 | 5.11  | 16.89 | 6.23  | 4.67 | 2.16 | 5.03 | 8.82  | 7.23  |
| 1927..... | 4.56  | 10.31 | 10.19 | 19.02 | 8.87  | 5.01 | 2.25 | 4.74 | 9.02  | 9.15  |
| 1928..... | 3.08  | 11.39 | 11.00 | 18.79 | 8.90  | 7.45 | 6.08 | 8.40 | 10.25 | 10.05 |
| 1929..... | 1.03  | 15.80 | 14.76 | 19.05 | 10.12 | 8.74 | 4.30 | 7.12 | 11.23 | 10.82 |
| 1930..... | 13.51 | 12.54 | 20.87 | 18.89 | 9.16  | 7.87 | 3.03 | 7.50 | 11.22 | 10.40 |
| 1931..... | 9.46  | 11.20 | 13.83 | 19.77 | 10.21 | 7.94 | 4.61 | 7.00 | 11.33 | 10.96 |
| 1932..... | 1.43  | 12.39 | 17.47 | 13.77 | 9.35  | 5.87 | 3.83 | 5.64 | 9.84  | 10.05 |
| 1933..... | 2.83  | 11.02 | 8.20  | 16.00 | 8.00  | 5.53 | 3.78 | 7.43 | 8.81  | 8.82  |
| 1934..... | 0.94  | 9.78  | 17.87 | 16.62 | 9.74  | 5.82 | 3.38 | 6.83 | 8.01  | 9.82  |
| 1935..... | 2.43  | 12.97 | 12.81 | 18.40 | 10.12 | 7.50 | 4.21 | 4.79 | 10.47 | 10.42 |
| 1936..... | 9.17  | 12.56 | 12.27 | 20.43 | 9.54  | 7.07 | 4.60 | 7.39 | 9.52  | 10.59 |

1 Preliminary figures.

## 10.—Persons Killed or Injured in Motor Vehicle Accidents, as Reported by Provincial Motor Vehicle Authorities, showing Status of Person, 1936.

| Item.  | P.E.I.                 | N.S.                     | N.B.                   | Que.                     | Ont.          | Man.                     | Sask. <sup>1</sup> | Alta.        | B.C.         | Total.                    |
|--|------------------------|--------------------------|------------------------|--------------------------|---------------|--------------------------|--------------------|--------------|--------------|---------------------------|
| <b>Accidents.</b>                                      |                        |                          |                        |                          |               |                          |                    |              |              |                           |
| Fatal—   |                        |                          |                        |                          |               |                          |                    |              |              |                           |
| Resulting in death of one or more persons.....         | 6                      | -                        | -                      | -                        | 501           | 53                       | 35                 | 46           | 91           |                           |
| Non-fatal—   |                        |                          |                        |                          |               |                          |                    |              |              |                           |
| Resulting in injury to one or more persons.....        | 174                    | -                        | -                      | -                        | 7,803         | 1,312                    | 439                | 612          | 1,815        | -                         |
| Resulting in property damage only.....                 | 2                      | -                        | -                      | -                        | 3,084         | 2                        | 410                | 3,285        | 2,383        | -                         |
| <b>Totals, Accidents...</b>                            | <b>180<sup>2</sup></b> | <b>2,306<sup>4</sup></b> | <b>669<sup>4</sup></b> | <b>4,035<sup>4</sup></b> | <b>11,388</b> | <b>1,365<sup>1</sup></b> | <b>884</b>         | <b>3,943</b> | <b>4,299</b> | <b>29,119<sup>4</sup></b> |
| <b>Persons Killed.</b>                                 |                        |                          |                        |                          |               |                          |                    |              |              |                           |
| Pedestrians.....                                       | 1                      | 25                       | -                      | 170                      | 244           | 14                       | 7                  | 17           | 32           | 510                       |
| Motor cyclists (drivers and passengers).....           | Nil                    | 1                        | -                      | -                        | 11            | 3                        | Nil                | 1            | 7            |                           |
| Drivers of other motor vehicles.....                   | Nil                    | 4                        | -                      | 139                      | 97            | 29                       | 12                 | 18           | 24           | 593                       |
| Passengers and attendants of other motor vehicles..... | 3                      | 21                       | -                      | -                        | 186           |                          | 19                 | 14           | 34           |                           |
| Occupants of horse-drawn vehicles.....                 | 2                      | 1                        | -                      | 7                        | 7             | 2                        | Nil                | Nil          | 3            | 22                        |
| Pedal cyclists.....                                    | 1                      | 2                        | -                      | 42                       | 30            | 5                        | 3                  | 2            | 2            | 94                        |
| Others.....  | Nil                    | Nil                      | -                      | -                        | 1             | 1                        | Nil                | 5            | Nil          |                           |
| <b>Totals, Persons Killed.....</b>                     | <b>7</b>               | <b>54</b>                | <b>33<sup>4</sup></b>  | <b>358</b>               | <b>546</b>    | <b>54</b>                | <b>41</b>          | <b>57</b>    | <b>102</b>   | <b>1,257<sup>4</sup></b>  |

For footnotes see end of table, p.680.

**10.—Persons Killed or Injured in Motor Vehicle Accidents, as Reported by Provincial Motor Vehicle Authorities, showing Status of Persons, 1936—concluded.**

| Item.   | P.E.I. | N.S.               | N.B.             | Que.  | Ont.   | Man.  | Sask. <sup>1</sup> | Alta. | B.C.  | Total.              |
|---|--------|--------------------|------------------|-------|--------|-------|--------------------|-------|-------|---------------------|
| Persons Injured.                                      |        |                    |                  |       |        |       |                    |       |       |                     |
| Pedestrians.....                                      | 2      | —                  | 2                | 2,226 | 3,362  | 605   | 73                 | 172   | 535   | 6,973               |
| Motor cyclists (drivers and passengers).....          | 2      | —                  | 67               | 2,704 | 212    | 36    | 7                  | 18    | 104   | 11,656              |
| Drivers of other motor vehicles.....                  | 2      | —                  | 2                |       | 1,815  | 755   | 266                | 376   | 1,038 |                     |
| Passengers and attendants of other motor vehicles.... | 2      | —                  | 300              | 3,633 | 325    |       |                    |       |       |                     |
| Occupants of horse-drawn vehicles.....                | 2      | —                  | 2                | 174   | 175    | 47    | 37                 | 12    | 15    | 460                 |
| Pedal cyclists.....                                   | 2      | —                  | 2                | 1,106 | 192    | 24    | 73                 | 256   | 2,830 |                     |
| Others.....   | 2      | —                  | 2                | 582   | 7      | 10    | 3                  | Nil   |       | 577                 |
| Totals, Persons Injured.....                          | 2      | 1,288 <sup>4</sup> | 367 <sup>2</sup> | 5,686 | 10,310 | 1,645 | 735                | 651   | 2,525 | 23,207 <sup>2</sup> |

<sup>1</sup> For the period Mar. 1 to Dec. 31, 1936. <sup>2</sup> Not reported. <sup>3</sup> This figure is incomplete. See footnote 2. <sup>4</sup> Not distributed. <sup>5</sup> This figure is incomplete. See previous footnotes.

#### PART IV.—WATERWAYS.\*

Under this heading the statistics relating to shipping, aids to navigations, canals, and harbours are brought together because they are all essential and integral parts of the facilities for water-borne traffic; these facilities work together to promote the expeditious handling of the same freight without transshipment intervening. Under this form of treatment all the facilities for water-borne traffic are first presented, then the cost of other available financial statistics and, finally, figures which give some indication of the traffic handled. The general aim is to present a rounded picture of water transportation, rather than details of the activities of Government Departments dealing with certain phases of it. Legislation regarding all phases of shipping has now been consolidated under the Canada Shipping Act.

**The Canada Shipping Act.**—The Parliament of Canada, since the passage of the Statute of Westminster in 1931, has exercised full responsibility for the regulation of Canadian shipping. Previously certain phases of Canadian shipping business were regulated by the provisions of the Imperial Merchant Shipping Acts. The Parliament of Canada may now repeal sections of the Imperial Statutes, so far as they relate to Canada, if it so desires, and re-enact their provisions or substitute other provisions in lieu thereof.

The shipping legislation of Canada was remodelled in 1934 by the Canada Shipping Act, c. 44 of the Statutes of that year, and was brought more into conformity with present developments. The Act incorporates important provisions of certain international conventions including the Safety of Life at Sea Convention; the Load Line Convention; the International Convention Concerning Seamen's Articles of Agreement; and the International Convention Concerning Repatriation of Seamen. This comprehensive piece of legislation was, in fact, the incorporation into the shipping law of Canada of features of International, British, and previous

\* Information and statistics dealing with the indicated subject have been supplied as follows: aids to navigation, harbours, administrative services, and Government merchant marine, by the Department of Transport; shipping, by the Department of National Revenue; graving docks and part of the financial statistics, by the Department of Public Works; Panama Canal, by the Governor of the Panama Canal Zone; and other canal traffic, by the Transportation and Public Utilities Branch, Dominion Bureau of Statistics.

Canadian legislation which now properly come under Dominion authority, and is framed so as to be in conformity with similar Acts of the Imperial Parliament and other Dominions.

The Act is administered by the Minister of Marine (except as regards Part V, which governs the health and hospitalization of mariners) and deals in 16 parts with the regulations of coasting and inland, as well as ocean, shipping.

Part I deals with the conditions governing the recording and the registering of vessels.

Part II of the Act deals in detail with the proper certification of masters, mates, and engineers of all except certain smaller vessels.

Part III is concerned with the engagement and discharge of seamen and the facilities to be provided by shipping masters for this purpose, as well as for the making of apprenticeships to the sea service. The payment of wages to seamen, and the rights of seamen in respect thereto, are dealt with in Secs. 184-214. The remainder of this Part is concerned with various protective measures for the employment and welfare of seamen.

Part IV lays down provisions for the relief and repatriation of distressed seamen.

Part V governs the treatment of sick mariners and the establishment of marine hospitals. This Part of the Act is to be administered by the Minister named by the Governor in Council.

Part VI treats of pilotage, defines the pilotage districts and allows for the constitution of pilotage authorities and the creation of new districts. The duties and powers of pilotage authorities are laid down and the requirements with regard to the payment of pilotage dues.

Part VII has reference to the safety of shipping, which is ensured through a properly appointed and competent steamship inspection service. Penalties are provided against the overloading of passenger ships, safety precautions are laid down, and the installation of radio equipment made compulsory on all passenger ships and other ships of 1,600 tons gross and upwards registered in Canada. Regulations governing the inspection of radiotelegraph apparatus and the qualification of radio operators are described. Elaborate provisions are made regarding load lines and loading as these matters refer to different classes of ships registered in Canada or not registered in Canada.

Part VIII treats of wrecks, salvage and investigations into shipping casualties. An official Receiver of Wrecks, or, in his absence, the Chief Officer of Customs, or the agent of the Department of Marine, shall have power to take command of a wreck in his district and assign duties to each and all persons present, for the preservation of the vessel and lives of shipwrecked persons. Important further powers of Receivers of Wrecks are also enumerated. All wrecks (including aircraft) shall be delivered to the Receiver as soon as possible by any person taking possession. Conditions governing disposition of wrecks, of procedure in salvage and inquiries into casualties are laid down.

Part IX deals with safeguards to navigation—lighthouses, buoys, beacons—and the government of Sable island.

Parts X and XI govern the creation and extension of Public Harbours, the appointment of Harbour Masters and Port Wardens.

Part XII lays down the rules, regulations and orders regarding collisions and limitation of liability of owners.

Parts XIII-XVI are taken up with matters pertaining to the coasting trade, delivery of goods, legal proceedings, etc.

Appended to the Act are twelve schedules, the first six set out the text of certain international conventions which have been incorporated to a large extent in the Act and which are referred to in the definition section and in other sections of the Act. The other schedules are forms which are used in connection with the administration of the Act.

### Section 1.—Equipment and Facilities.

The developments and equipment to facilitate water traffic are classified under the sub-headings of shipping, aids to navigation and miscellaneous works, canals, and harbours. A subsection is added giving figures of administrative activities regarding the pilotage service, steamship inspection, personnel, and accidents to shipping.

#### Subsection 1.—Shipping.

Although a large part of the water-borne traffic, especially inland and coast-wise, is carried in ships of Canadian registry, the commerce of the Dominion is by no means entirely dependent upon Canadian shipping since all waterways, including canals, and inland lakes and rivers, are open upon equal terms, except in the case of the coasting trade, to the shipping of all countries of the world.

**Canadian Registry.**—Statistics are given below showing the numbers and tonnages of vessels on the Registry of Shipping of Canada, and of vessels built in Canada and vessels sold to other countries. As is found by reference to Part I of the Canada Shipping Act, every ship that falls under the definition of 'British ship' given in Sec. 6 of the Act and is controlled, as to management and use, in Canada, must, unless registered elsewhere in the Empire, be registered in Canada. An exception is made in the case of ships not exceeding 10 tons register and engaged solely in coastal or inland navigation. A ship (whatever her qualification for British registry) which is not registered in any part of His Majesty's dominions, is not entitled to the privileges accorded to British ships. Vessels about to be built *may* be recorded, and vessels being built or equipped *must* be recorded, by a registrar of British ships under the Act. The procedure for the registration in Canada of British ships and the issuance of certificates is covered in Secs. 9-36. Secs. 64-70 govern the registry of alterations (or the registering anew if such be required) and lay down penalties for non-compliance with the requirements. The conditions governing transfer of registry are also laid down.

For a record of the number and tonnage of ships engaged in the carrying trade of Canada, see the tables under Section 3 (pp. 698-702) of this Part of the chapter. The tables are included there under traffic statistics because they relate more directly to traffic and services than merely to the shipping available. For an account of the shipping services operated by the Dominion Government, see p. 696.

## 1.—Numbers and Net Tonnages of Vessels on the Registry of Shipping of Canada, by Provinces, Dec. 31, 1927-36.

NOTE.—The figures in this table are supplied by the Department of Transport.

| Province.        | 1927. |           | 1928. |           | 1929. |           | 1930. |           | 1931. |           |
|------------------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|
|                  | No.   | Tonnage.  | No.   | Tonnage.  | No.   | Tonnage.  | No.   | Tonnage.  | No.   | Tonnage.  |
| P.E. Island..... | 133   | 8,581     | 132   | 8,549     | 134   | 8,370     | 130   | 8,351     | 129   | 10,986    |
| Nova Scotia..... | 1,412 | 129,482   | 1,436 | 126,428   | 1,471 | 127,077   | 1,478 | 119,055   | 1,434 | 112,891   |
| New Brunswick..  | 829   | 33,077    | 828   | 33,395    | 835   | 34,031    | 919   | 33,350    | 983   | 39,766    |
| Quebec.....      | 1,368 | 456,092   | 1,373 | 502,224   | 1,266 | 506,594   | 1,262 | 495,017   | 1,277 | 506,787   |
| Ontario.....     | 1,724 | 397,987   | 1,746 | 367,097   | 1,759 | 363,521   | 1,775 | 392,708   | 1,771 | 378,925   |
| Manitoba.....    | 96    | 10,661    | 98    | 10,684    | 103   | 11,051    | 105   | 11,135    | 110   | 11,461    |
| Saskatchewan.... | 6     | 486       | 6     | 486       | 6     | 486       | 6     | 486       | 6     | 486       |
| British Columbia | 2,872 | 327,954   | 3,012 | 313,651   | 3,257 | 325,810   | 3,203 | 361,328   | 3,178 | 361,805   |
| Yukon.....       | 14    | 3,650     | 14    | 3,650     | 19    | 4,543     | 20    | 5,584     | 17    | 5,031     |
| Totals.....      | 8,451 | 1,368,000 | 8,615 | 1,366,071 | 8,899 | 1,393,493 | 8,898 | 1,432,064 | 8,905 | 1,427,648 |

| Province.        | 1932. |           | 1933. |           | 1934. |           | 1935. |           | 1936. |           |
|------------------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|
|                  | No.   | Tonnage.  | No.   | Tonnage.  | No.   | Tonnage.  | No.   | Tonnage.  | No.   | Tonnage.  |
| P.E. Island..... | 134   | 11,124    | 135   | 11,067    | 140   | 11,060    | 140   | 11,077    | 143   | 11,248    |
| Nova Scotia..... | 1,400 | 113,352   | 1,379 | 105,737   | 1,391 | 99,560    | 1,434 | 90,115    | 1,513 | 94,654    |
| New Brunswick..  | 938   | 39,292    | 1,010 | 41,247    | 1,001 | 43,911    | 1,025 | 42,530    | 1,003 | 44,447    |
| Quebec.....      | 1,321 | 509,634   | 1,320 | 482,579   | 1,291 | 463,591   | 1,312 | 460,313   | 1,303 | 457,220   |
| Ontario.....     | 1,761 | 422,336   | 1,837 | 419,828   | 1,772 | 418,197   | 1,777 | 421,203   | 1,773 | 420,211   |
| Manitoba.....    | 112   | 11,485    | 113   | 11,505    | 114   | 11,943    | 87    | 8,157     | 131   | 8,109     |
| Saskatchewan.... | 6     | 489       | 5     | 397       | 5     | 397       | 5     | 397       | 5     | 397       |
| British Columbia | 3,161 | 362,407   | 3,084 | 352,187   | 3,086 | 341,656   | 3,096 | 341,372   | 3,294 | 325,537   |
| Yukon.....       | 17    | 5,031     | 17    | 5,031     | 17    | 5,074     | 18    | 5,179     | 18    | 5,179     |
| Totals.....      | 8,895 | 1,475,148 | 8,920 | 1,429,578 | 8,877 | 1,395,653 | 8,891 | 1,389,343 | 9,373 | 1,367,071 |

## 2.—Vessels Built and Registered in Canada and Vessels Sold to Other Countries, fiscal years ended Mar. 31, 1927-37.

NOTE.—For 1874-1900, see Canada Year Book, 1911, p. 283; for 1901-10, see 1932 Year Book, p. 597; and for the years 1911-20, see p. 718 of the 1930 Year Book. Statistics are from the Shipping Reports of the Department of National Revenue.

| Fiscal Year. | Built. |          | Registered. |          | Sold to other Countries. |          |              |
|--------------|--------|----------|-------------|----------|--------------------------|----------|--------------|
|              | No.    | Tonnage. | No.         | Tonnage. | No.                      | Tonnage. | Value.       |
| 1927.....    | 341    | 32,801   | 281         | 79,448   | 32                       | 27,027   | \$ 1,984,040 |
| 1928.....    | 236    | 12,904   | 417         | 64,301   | 31                       | 19,307   | 599,490      |
| 1929.....    | 328    | 49,798   | 386         | 155,972  | 30                       | 18,627   | 154,760      |
| 1930.....    | 282    | 28,871   | 468         | 84,529   | 34                       | 33,779   | 805,636      |
| 1931.....    | 294    | 45,162   | 396         | 129,088  | 22                       | 8,865    | 421,500      |
| 1932.....    | 202    | 19,032   | 319         | 64,396   | 23                       | 18,849   | 889,221      |
| 1933.....    | 159    | 9,156    | 193         | 25,811   | 32                       | 37,543   | 443,258      |
| 1934.....    | 113    | 5,818    | 184         | 10,375   | 22                       | 18,570   | 147,850      |
| 1935.....    | 141    | 4,306    | 165         | 12,985   | 18                       | 23,613   | 374,345      |
| 1936.....    | 205    | 11,388   | 285         | 35,732   | 22                       | 7,170    | 230,735      |
| 1937.....    | 213    | 10,423   | 294         | 29,801   | 23                       | 15,595   | 342,975      |



### Subsection 2.—Aids to Navigation and Miscellaneous Works.

Included under this heading are the lighthouses and the whole system of marine danger signals on the east and west coasts of Canada, on Hudson bay and strait, the St. Lawrence river and gulf, the inland rivers and lakes and at the entrances to harbours—a very extensive system designed to provide safe navigation in all Canadian waters. In addition, a pilotage service is maintained in waters where navigation is difficult; this service is described under administrative services on p. 688. As a further aid to safe navigation, there are chains of radio signal and direction-finding stations which are described under that section of this chapter dealing with radiotelegraphy, on pp. 727-729.

### 3.—Comparative Statement of Marine Danger Signals, fiscal years ended Mar. 31, 1926-37.

NOTE.—In addition to the aids to navigation listed in the following table, approximately 9,268 unlighted buoys, ballies, dolphins, and beacons are maintained. The figures are supplied by the Department of Transport.

| Description.                       | 1926. | 1927. | 1928. | 1929. | 1930. | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. | 1937. |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                    | No.   | No.   | No.   | No.   | No.   | No.   | No.   | No.   | No.   | No.   | No.   | No.   |
| Lights.....                        | 1,675 | 1,725 | 1,771 | 1,815 | 1,855 | 1,912 | 1,923 | 1,922 | 1,924 | 1,920 | 1,938 | 1,959 |
| Lighthouses.....                   | 10    | 11    | 11    | 11    | 11    | 11    | 11    | 11    | 11    | 12    | 12    | 11    |
| Light-keepers.....                 | 1,143 | 1,150 | 1,179 | 1,192 | 1,207 | 1,227 | 1,230 | 1,230 | 1,226 | 1,223 | 1,223 | 1,227 |
| Fog whistles.....                  | 8     | 8     | 6     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     |
| Sirens.....                        | 1     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     |
| Diaphones.....                     | 146   | 147   | 153   | 158   | 162   | 165   | 170   | 171   | 171   | 170   | 169   | 168   |
| Fog bells.....                     | 36    | 35    | 36    | 38    | 38    | 38    | 38    | 38    | 38    | 38    | 38    | 37    |
| Hand fog horns.....                | 148   | 148   | 151   | 147   | 151   | 152   | 153   | 154   | 154   | 155   | 158   | 158   |
| Hand fog bells.....                | 4     | 5     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     |
| Gas, whistling and bell buoys..... | 374   | 380   | 401   | 411   | 425   | 429   | 436   | 444   | 440   | 438   | 441   | 445   |
| Whistling buoys.....               | 34    | 36    | 38    | 40    | 40    | 40    | 42    | 42    | 41    | 41    | 41    | 41    |
| Bell buoys.....                    | 99    | 101   | 104   | 111   | 119   | 119   | 119   | 122   | 122   | 122   | 124   | 126   |
| Submarine bells.....               | 6     | 6     | 6     | 6     | 4     | 4     | 3     | 2     | 2     | 2     | 2     | 2     |
| Fog guns and bombs....             | 6     | 6     | 6     | 5     | 5     | 5     | 5     | 5     | 5     | 4     | 6     | 9     |
| Fog alarm stations only.           | 13    | 13    | 13    | 13    | 13    | 13    | 13    | 13    | 13    | 13    | 13    | 13    |

A great deal has been done to improve navigable waters by dredging in channels and harbours, by the removal of obstructions, and by the building of remedial works to maintain or control water levels. Probably the largest task of this nature has been the St. Lawrence River Ship Channel. An extensive floating plant is in service to maintain and improve the deep-water channel from Montreal to the sea for ocean-going shipping. Incidental to these developments of navigable waters are works to guard shore lines and prevent erosion, and also the control of roads and bridges which cross navigable channels. In order to prolong the season of navigation in important waters which freeze over in winter, ice-breaking operations are carried on at both the beginning and end of winter. This is particularly the case in connection with sea-going shipping from Montreal.

#### 4.—Duration of the Season of Open Navigation in the St. Lawrence Ship Channel, calendar years 1911-37.

NOTE.—For the years 1882-1910, see Canada Year Book, 1934-35, p. 756.

| Calendar Year. | Channel Open, Quebec to Montreal. <sup>1</sup> | First Arrival from Sea, Montreal Harbour. | Last Departure for Sea, Montreal Harbour. | Calendar Year. | Channel Open, Quebec to Montreal. <sup>1</sup> | First Arrival from Sea, Montreal Harbour. | Last Departure for Sea, Montreal Harbour. |
|----------------|--|---|---|----------------|--|---|---|
| 1911.....      | Apr. 25  | Apr. 26                                   | Dec. 3                                    | 1924.....      | Apr. 17  | Apr. 24                                   | Dec. 3                                    |
| 1912.....      | " 29   | " 30                                      | " 3                                       | 1925.....      | " 10   | " 22                                      | " 9                                       |
| 1913.....      | " 14   | " 19                                      | Nov. 29                                   | 1926.....      | May 1  | May 3                                     | " 6                                       |
| 1914.....      | " 25   | " 29                                      | Dec. 4                                    | 1927.....      | Apr. 11  | Apr. 12                                   | " 6                                       |
| 1915.....      | " 14   | " 30                                      | " 11                                      | 1928.....      | " 26   | " 26                                      | " 9                                       |
| 1916.....      | " 22   | May 1                                     | " 3                                       | 1929.....      | " 10   | " 20                                      | " 7                                       |
| 1917.....      | " 22   | " 1                                       | " 7                                       | 1930.....      | " 12   | " 21                                      | " 12                                      |
| 1918.....      | " 22   | " 7                                       | " 14                                      | 1931.....      | Mar. 19  | " 15                                      | " 11                                      |
| 1919.....      | " 16   | Apr. 23                                   | " 10                                      | 1932.....      | " 27   | " 14                                      | " 8                                       |
| 1920.....      | " 18   | " 25                                      | " 7                                       | 1933.....      | " 23   | " 14                                      | " 6                                       |
| 1921.....      | Mar. 29  | " 21                                      | " 8                                       | 1934.....      | " 28   | " 26                                      | " 8                                       |
| 1922.....      | Apr. 13  | " 24                                      | " 2                                       | 1935.....      | " 30   | " 15                                      | " 9                                       |
| 1923.....      | " 29   | May 3                                     | " 2                                       | 1936.....      | " 28   | " 13                                      | " 11                                      |
|                |  |   |   | 1937.....      | Apr. 9   | " 19                                      | " 8                                       |

<sup>1</sup> "Channel open" means it can be navigated although there may be floating ice still in the river.

#### Subsection 3.—Canals.

Before the period of extensive railway construction which commenced for Canada in the 1850's, the water routes, more especially the St. Lawrence, the Great Lakes and the Ottawa, were the chief avenues of transportation. These routes were interrupted at certain points, necessitating portages, and to eliminate the toil of unloading, transporting and reloading at the portages the canals of Canada were constructed.

The earliest mention of canals in Canada is in connection with the Lachine canal, begun by early French settlers in 1700, but only after the conquest of Canada by the British were improvements of the main water routes made, and in the early part of the 19th century increased internal and foreign trade and the introduction of steam navigation resulted in more attention being given to this work. Although some of the early canals were constructed primarily for military purposes they soon became essential to the commercial life of the country. However, since the development of railways in Canada, and even more since the growth of motor vehicle traffic, the canals, with the exception of those on the Great Lakes and St. Lawrence river, are playing a minor part in the transportation activities of the country.

There are in Canada six canal systems, under the control of the Dominion Department of Transport, which are connected with the Atlantic ocean by navigable routes, in addition to a number of other minor locks and canals, under the control of the Dominion Department of Public Works or other authority, to facilitate local navigation on disconnected lakes and rivers. The six main systems consist of the canals: (1) between Port Arthur or Fort William and Montreal; (2) from Montreal to the International Boundary near lake Champlain; (3) from Montreal to Ottawa; (4) from Ottawa to Kingston and Perth; (5) from Trenton, lake Ontario, to lake Huron (not completed); and (6) from the Atlantic ocean to Bras d'Or lakes, Cape Breton. By means of these canals, total waterways of 1,890 miles have been opened to navigation, the actual mileage of canals being 508-67.

A detailed description of the individual canals was given on pp. 626-629 of the 1926 Year Book. Summary statistics of their length and lock dimensions are given in Table 5.

## 5.—Canals of Canada, Length and Lock Dimensions, 1938.

| Name.                     | Location.   | Length<br>of<br>Canal. | Locks.            |                     |        |                    |
|---------------------------|---|------------------------|-------------------|---------------------|--------|--------------------|
|                           |   |                        | No.               | Minimum Dimensions. |        |                    |
|                           |   |                        |                   | Length.             | Width. | Depth.             |
|                           |   | miles.                 |                   | ft.                 | ft.    | ft.                |
| St. Lawrence—             |   |                        |                   |                     |        |                    |
| Lachine.....              | Montreal to Lachine.....                                    | 8-74                   | 5                 | 270                 | 45     | 14 <sup>1</sup>    |
| Soulanges.....            | Cascades Point to Coteau Landing.....                       | 14-67                  | 5                 | 280                 | 46     | 15 <sup>1</sup>    |
| Cornwall.....             | Cornwall to Dickinson's Landing.....                        | 11-00                  | 6                 | 270                 | 43-67  | 14 <sup>1</sup>    |
| Farran's.....             | Farran's Point rapids.....                                  | 1-28                   | 1                 | 800                 | 50     | 16 <sup>1</sup>    |
| Rapide Plat.....          | Rapide Plat to Morrisburg.....                              | 3-89                   | 2                 | 270                 | 45     | 14 <sup>1</sup>    |
| Galops.....               | Iroquois to Cardinal.....                                   | 7-36                   | 3                 | 270                 | 45     | 14 <sup>1</sup>    |
| Welland Ship.....         | Port Weller, lake Ontario, to Port Colborne, lake Erie..... | 27-60                  | 8                 | 850                 | 80     | 30 <sup>2</sup>    |
| Sault Ste. Marie.....     | St. Mary's rapids, 47 miles west of lake Huron.....         | 1-38                   | 1                 | 900                 | 60     | 18-25 <sup>1</sup> |
| Richelieu River—          |   |                        |                   |                     |        |                    |
| St. Ours lock.....        | St. Ours, Que.....  | 0-12                   | 1                 | 339                 | 45     | 13 <sup>1</sup>    |
| Chambly.....              | Chambly to St. Johns, Que.....                              | 11-78                  | 9                 | 120-5               | 28-25  | 6-5                |
| Ottawa and Rideau Rivers— |   |                        |                   |                     |        |                    |
| Ste. Anne lock.....       | Junction of St. Lawrence and Ottawa rivers.....             | 0-12                   | 1                 | 200                 | 45     | 9                  |
| Carillon.....             | Carillon rapids, Ottawa river.....                          | 0-94                   | 2                 | 200                 | 45     | 9                  |
| Grenville.....            | Long Sault rapids, Ottawa river.....                        | 5-94                   | 5                 | 200                 | 45     | 9-5                |
| Rideau.....               | Ottawa to Kingston.....                                     | 130-25                 | 47                | 134                 | 33     | 5                  |
| Miscellaneous—            | Rideau lake to Perth (Tay branch)                           | 6-50                   | 2                 | 134                 | 33     | 5                  |
| Trent.....                | Trenton to Peterborough lock, Peterborough.....             | 88-74                  | 18                | 175                 | 33     | 6                  |
|                           | Peterborough lock to Swift rapids.....                      | 135-71                 | 24                | 134                 | 33     | 6                  |
|                           | Swift rapids to Port Severn.....                            | 16-00                  | (marine railways) |                     |        | 4 <sup>3</sup>     |
|                           | Port Severn lock.....                                       | -                      | 1                 | 100                 | 26     | 6                  |
|                           | Sturgeon lake to Lindsay (Seugog branch).....               | 8-35                   | 1                 | 142                 | 33     | 6                  |
|                           | Lindsay to Port Perry (Seugog branch).....                  | 26-65 <sup>4</sup>     | Nil               | -                   | -      | -                  |
| Murray.....               | Isthmus of Murray—bay of Quinte.....                        | 5-15 <sup>4</sup>      | Nil               | -                   | -      | -                  |
| St. Peters.....           | St. Peters bay to Bras d'Or lakes, Cape Breton, N.S.....    | 0-50                   | 1                 | 300                 | 48     | 15 <sup>5</sup>    |

<sup>1</sup> Navigable depths are occasionally less at times of extremely low water.

<sup>2</sup> Minimum depth of navigable channels is 4-5 ft.

<sup>3</sup> Minimum depth of canal with lake Ontario at elevation 244 feet above sea-level is 11 ft.

<sup>4</sup> The depth of canal prism is 17 feet.

<sup>5</sup> Minimum depth

<sup>6</sup> Minimum depth

<sup>7</sup> The depth of canal prism

## Subsection 4.—Harbours.

Water transportation cannot be studied with any degree of completeness without taking into consideration the co-ordination of land and water transportation at many of the seaboard and inland ports. Much equipment designed to facilitate interchange movements is provided by the harbours. This harbour equipment includes the necessary docks and wharves, some for passenger traffic but most of them for freight, warehouses for the handling of general cargo, and special equipment for such bulk freight as lumber, coal, oil, grain, etc. Equipment may include cold storage, harbour railway and switching connections, grain elevators, coal bunkers, oil storage tanks, and, in the main harbours, dry-dock accommodation.

Eight of the principal harbours of Canada are under the administration of the National Harbours Board, as explained below. Some other harbours are administered by commissions which include municipal as well as Dominion Government appointees, while the remainder are administered by harbour masters directly under the authority of the Department of Transport.

In addition to the harbour facilities owned by the National Harbours Board or other operating commission, at most ports there are dock and handling facilities owned by private companies such as railways, pulp and paper, oil, and sugar industries, etc. At a number of ports there are also graving docks which are dealt with separately below.

It is not possible at present to compile comparable representative statistics regarding the equipment of the leading ports of Canada but with the consolidation of control under the Department of Transport, such statistics should be available in the near future.

**National Harbours Board.**—Prior to October, 1935, the seven national harbours of Canada—Halifax, Saint John, Chicoutimi, Quebec, Three Rivers, Montreal, and Vancouver—were under the management and control of separate Harbour Commissions, each consisting of three persons appointed from the immediate locality. Orders in Council were passed on Oct. 31, 1935, accepting the resignations of the individual Harbour Commissions, and other Orders in Council passed as of the same date vesting in a single Board of three Harbour Commissioners the powers and responsibilities inherent in each of the seven former commissions. In this way effect was given to the more important recommendations of Sir Alexander Gibb, following his survey of national ports in 1931.

During the 1936 session of Parliament, the individual Acts relating to the administration of these ports were repealed and a single uniform Act (c. 42) substituted, placing the general direction and control of the national ports referred to under a single National Harbours Board, leaving the local administration in the hands of a port manager responsible to the Board. This legislation became effective on Oct. 1, 1936. An Order in Council was passed Feb. 27, 1937, transferring Churchill harbour (including the grain elevator) as well as grain elevators at Prescott and Port Colborne, to the National Harbours Board for administration, management and control.

The headquarters of the National Harbours Board is at Ottawa, and, under the Minister of Transport, the Board is now responsible for the administration, maintenance, and control of the eight ports and two grain elevators referred to, as well as any other harbour property which the Governor in Council may transfer to the Board for administration. Engineering works, heretofore under the direction of small local staffs, are now looked after by the departmental engineering services, while local direction devolves upon competent port managers with a proper background of experience. The financial control of each port is under the direction of the Comptroller of the Treasury and subject to audit by the Auditor General of Canada. Accounting for each port is, however, to be carried out at the port, and funds earned at one port will not be diverted for use elsewhere.

**Public Harbours and Harbour Masters.**—In the smaller ports, the Governor in Council, as formerly, may create public harbours by proclamation, as provided by Part X of the Canada Shipping Act (c. 44, 1934), and the Minister of Transport may, from time to time, appoint harbour masters for these smaller ports, who will administer the same under rules and regulations approved by the Governor in Council. Remuneration of these harbour masters will be from fees levied on vessels under the terms of the Act.

**Graving Docks.**—The Department of Public Works of the Dominion Government has constructed five dry docks, which are shown in Table 6. The dock at Kingston, Ont., is under lease to the Kingston Shipbuilding Company, while the

old Esquimalt Dry Dock was temporarily transferred to the Department of National Defence on Nov. 1, 1934. This transfer is to be effective until such time as the dock is commercially required, when it will be returned to the control of the Department of Public Works. The large dry docks at Lauzon, Que., and Esquimalt, B.C., can be divided into two parts and were built at a cost of approximately \$3,850,000 each. Under the Dry Dock Subsidies Act, 1910 (9-10 Edw. VII, c. 17), several docks have been subsidized by payments of 3 to 4 p.c. per annum on the original cost for a given number of years, as shown in Table 7.

#### 6.—Dimensions of Graving Docks Owned by the Dominion Government.

| Location.                           | Length. | Width at— |         |           | Depth of Water on Sill. | Rise of Tide. |        |
|-------------------------------------|---------|-----------|---------|-----------|-------------------------|---------------|--------|
|                                     |         | Coping.   | Bottom. | Entrance. |                         | Spring.       | Neap.  |
|                                     | ft.     | ft.       | ft.     | ft.       | ft.                     | ft.           | ft.    |
| Lauzon, Que. <i>Champlain</i> ..... | 1,150   | 144       | 105     | 120       | 40-0 H.W.               | 18            | 13-3   |
| Lauzon, Que. <i>Lorne</i> .....     | 600-3   | 100       | 69-5    | 62        | 25-8 H.W.               | 18            | 13-3   |
| Esquimalt, B.C. (old dock).....     | 450-7   | 90        | 41      | 65        | 29-0 H.W.               | 7 to 10       | 3 to 8 |
| Esquimalt, B.C. ....                | 1,173   | 149       | 126     | 135       | 40-0 H.W.               | 7 to 10       | 3 to 8 |
| Kingston, Ont. ....                 | 353-5   | 79        | 47      | 55        | 18-0                    | -             | -      |

#### 7.—Dimensions and Cost of Graving Docks Subsidized under the Dry Dock Subsidies Act, 1910.

| Location.  | Length. | Width. | Depth over Sill. | Total Cost. | Subsidy.              |
|--|---------|--------|------------------|-------------|-----------------------|
|  | ft.     | ft.    | ft.              | \$          |                       |
| Collingwood No. 1, Ont. <sup>1</sup> .....                     | 515-8   | 59-8   | 14-8             | 500,000     | 3 p.c. for 20 years.  |
| Collingwood No. 2, Ont. <sup>1</sup> .....                     | 413-2   | 95     | 19-2             | 306,965     | 3 p.c. for 20 years.  |
| Port Arthur, Ont. ....   | 708-3   | 77-6   | 16-2             | 1,255,050   | 3 p.c. for 20 years.  |
| Montreal, Que. (floating dock), <i>Duke of Connaught</i> ..... | 601     | 100    | 31-5             | 3,000,000   | 3½ p.c. for 35 years. |
| Prince Rupert, B.C. (floating dock).....                       | 600     | 100    | 32               | 2,199,168   | 3½ p.c. for 35 years. |
| Saint John, N.B. ....  | 1,164-5 | 133    | 40               | 5,500,000   | 4½ p.c. for 35 years. |
| North Vancouver, B.C. (floating dock).....                     | 556-5   | 98     | 28               | 2,500,000   | 4½ p.c. for 35 years. |

<sup>1</sup> Subsidy payments on these two dry docks have been completed.

#### Subsection 5.—Government Administrative Services.

The services covered by this subsection are those dealing with the pilotage service, steamship inspection, sea-faring personnel, and accidents to shipping.

**Pilotage.**—This service functions under the provisions set forth in Part VI of the Canada Shipping Act (c. 44, 1934). The necessity for pilots is that qualified men may offer their services to the stranger in local and confined waters. At the same time, pilotage might also be considered as a method of insurance—the fewer accidents, the cheaper insurance rates will be.

There are 40 pilotage districts in Canada, eight of which, namely, Sydney, Halifax, Saint John, Quebec, Montreal, St. Lawrence-Kingston-Ottawa, British Columbia, and Churchill, are under the Minister of Transport as Pilotage Authority. The Pilotage District of New Westminster, B.C., is under a local authority. The other districts function under local Pilotage Authorities appointed by the Governor in Council under the provisions of the Canada Shipping Act (see p. 681).

The following statement shows the number and aggregate tonnage of ships using pilots for our major Canadian ports during the year ended Mar. 31, 1937. Corresponding statistics are not available for the St. Lawrence-Kingston-Ottawa District.

## DETAILS OF PILOTAGE, BY DISTRICTS, FISCAL YEAR ENDED MAR. 31, 1937.

| District.             | Pilots. | Ships<br>Piloted in<br>and out. | Net<br>Tonnage. |
|-----------------------|---------|---------------------------------|-----------------|
|                       | No.     | No.                             |                 |
| Sydney.....           | 15      | 2,238                           | 2,566,588       |
| Halifax.....          | 21      | 2,185                           | 7,340,044       |
| Saint John.....       | 12      | 800                             | 2,620,362       |
| Quebec.....           | 58      | 3,888                           | 13,996,541      |
| Montreal.....         | 77      | 5,757                           | 14,553,619      |
| Churchill.....        | 2       | 30                              | 91,110          |
| British Columbia..... | 35      | 3,953                           | 15,594,831      |
| New Westminster.....  | 7       | 502                             | 1,759,798       |

**Steamboat Inspection.**—The Steamboat Inspection Service of Canada, maintained under the authority of the Department of Transport, comprises the Board of Steamboat Inspection, together with staffs of inspectors at the principal ocean and inland ports. The Board decides on the standards required of all vessels coming under its jurisdiction. These must be attained by all ships given official warrant as to their seaworthiness and mechanical condition. Regulations for the issue of safety certificates under the International Convention for the Safety of Life at Sea were approved by Order in Council of Oct. 18, 1934, and are now being administered by the Board.

The Board is also responsible for the examinations for competency of marine engineers, and grants certificates of competency to successful candidates.

## 8.—Steamboat Inspection, by Inspection Divisions, fiscal years ended Mar. 31, 1936 and 1937.

| Year and Division. | Vessels Inspected.                           |                |  |                | Vessels Not Inspected. |                |
|--------------------|--|----------------|--|----------------|------------------------|----------------|
|                    | Vessels Registered or Owned in the Dominion. |                | Vessels Registered or Owned Elsewhere. |                |                        |                |
|                    | No.  | gross tonnage. | No.                                    | gross tonnage. | No.                    | gross tonnage. |
| 1936.              |  |                |  |                |                        |                |
| Halifax.....       | 104  | 130,042        | 16                                     | 71,131         | Nil                    | -              |
| Saint John.....    | 53   | 39,258         | 2                                      | 11,223         | 53                     | 44,142         |
| Quebec.....        | 61   | 41,820         | Nil                                    | -              | 11                     | 3,802          |
| Sorel.....         | 82   | 48,543         | Nil                                    | -              | 40                     | 19,134         |
| Montreal.....      | 136  | 111,261        | Nil                                    | -              | 69                     | 19,004         |
| Kingston.....      | 83   | 99,324         | 7                                      | 433            | 21                     | 24,822         |
| Toronto.....       | 222  | 357,985        | 36                                     | 52,316         | 20                     | 21,356         |
| Midland.....       | 87   | 46,238         | 1                                      | 30             | 36                     | 26,630         |
| Collingwood.....   | 28   | 13,366         | 2                                      | 3,509          | Nil                    | -              |
| Port Arthur.....   | 85   | 67,926         | Nil                                    | -              | 57                     | 2,917          |
| Vancouver.....     | 205  | 95,534         | 13                                     | 82,129         | 81                     | 19,543         |
| Victoria.....      | 66   | 77,300         | 6                                      | 28,211         | 32                     | 19,407         |
| Totals, 1936.....  | 1,217  | 1,131,607      | 83                                     | 249,061        | 420                    | 209,788        |
| 1937.              |  |                |  |                |                        |                |
| Halifax.....       | 101  | 127,837        | 15                                     | 50,609         | Nil                    | -              |
| Saint John.....    | 37   | 49,973         | 4                                      | 17,449         | 56                     | 19,525         |
| Quebec.....        | 54   | 36,197         | Nil                                    | -              | 10                     | 3,126          |
| Sorel.....         | 73   | 45,535         | Nil                                    | -              | 48                     | 24,212         |
| Montreal.....      | 115  | 109,065        | Nil                                    | -              | 81                     | 12,677         |
| Kingston.....      | 72   | 95,244         | 13                                     | 785            | 17                     | 19,195         |
| Toronto.....       | 240  | 464,352        | 28                                     | 35,176         | 17                     | 14,349         |
| Midland.....       | 105  | 53,859         | 2                                      | 4,939          | 37                     | 26,478         |
| Port Arthur.....   | 62   | 58,147         | Nil                                    | -              | 69                     | 5,629          |
| Vancouver.....     | 215  | 100,686        | 13                                     | 82,129         | 60                     | 13,772         |
| Victoria.....      | 70   | 89,478         | 6                                      | 28,212         | 29                     | 16,270         |
| Totals, 1937.....  | 1,144  | 1,230,423      | 81                                     | 219,299        | 424                    | 155,234        |

<sup>1</sup> During the year the inspection work at Collingwood was merged with that of Toronto and Midland.

**8.—Steamboat Inspection, by Inspection Divisions, fiscal years ended Mar. 31, 1936 and 1937—concluded.**

| Year and Division.             | Vessels Subject to Inspection when in Commission. |                  | Vessels Added to the Dominion Register. |                | Vessels Lost, Broken Up or Destroyed. |                |
|--------------------------------|---|------------------|---|----------------|---------------------------------------|----------------|
|                                | No.   | gross tonnage.   | No.                                     | gross tonnage. | No.                                   | gross tonnage. |
| <b>1936.</b>                   |   |                  |   |                |                                       |                |
| Halifax.....                   | 130   | 201,173          | Nil                                     | —              | 2                                     | 225            |
| Saint John.....                | 108   | 94,628           | Nil                                     | —              | 1                                     | 34             |
| Quebec.....                    | 72  | 45,622           | Nil                                     | —              | Nil                                   | —              |
| Sorel.....                     | 122   | 67,677           | Nil                                     | —              | 5                                     | 615            |
| Montreal.....                  | 205   | 130,265          | Nil                                     | —              | Nil                                   | —              |
| Kingston.....                  | 116   | 124,585          | Nil                                     | —              | 3                                     | 2,605          |
| Toronto.....                   | 278   | 431,687          | 3                                       | 18,393         | 3                                     | 391            |
| Midland.....                   | 124   | 72,907           | 1                                       | 37             | 2                                     | 275            |
| Collingwood <sup>1</sup> ..... | 30  | 16,935           | Nil                                     | —              | Nil                                   | —              |
| Port Arthur.....               | 142   | 70,843           | 7                                       | 209            | 7                                     | 854            |
| Vancouver.....                 | 299   | 200,206          | 5                                       | 1,222          | 4                                     | 9,847          |
| Victoria.....                  | 104   | 124,918          | 3                                       | 3,915          | Nil                                   | —              |
| <b>Totals, 1936.....</b>       | <b>1,720</b>                                      | <b>1,581,456</b> | <b>19</b>                               | <b>23,776</b>  | <b>27</b>                             | <b>14,846</b>  |
| <b>1937.</b>                   |   |                  |   |                |                                       |                |
| Halifax.....                   | 116   | 178,446          | Nil                                     | —              | 2                                     | 1,478          |
| Saint John.....                | 97  | 86,947           | 3                                       | 162            | Nil                                   | —              |
| Quebec.....                    | 64  | 39,323           | 2                                       | 485            | Nil                                   | —              |
| Sorel.....                     | 121   | 69,747           | 1                                       | 22             | Nil                                   | —              |
| Montreal.....                  | 196   | 121,762          | Nil                                     | —              | 1                                     | 1,981          |
| Kingston.....                  | 102   | 115,224          | 2                                       | 17             | 3                                     | 2,104          |
| Toronto.....                   | 285   | 513,877          | 5                                       | 9,469          | 4                                     | 1,874          |
| Midland.....                   | 144   | 85,306           | Nil                                     | —              | 4                                     | 193            |
| Port Arthur.....               | 131   | 63,776           | 1                                       | 103            | 5                                     | 708            |
| Vancouver.....                 | 288   | 196,588          | 5                                       | 243            | 16                                    | 12,391         |
| Victoria.....                  | 105   | 133,960          | 1                                       | 2,054          | 4                                     | 6,324          |
| <b>Totals, 1937.....</b>       | <b>1,649</b>                                      | <b>1,601,956</b> | <b>20</b>                               | <b>12,555</b>  | <b>39</b>                             | <b>27,053</b>  |

<sup>1</sup> During the year the inspection work at Collingwood was merged with that of Toronto and Midland.

**Seamen Shipped and Discharged.**—Table 9 shows, for each year from 1908 to 1936, the numbers of seamen shipped and discharged at Canadian ports under the provisions of the Canada Shipping Act (R.S.C., 1927, c. 186).

**9.—Numbers of Seamen Shipped and Discharged at Canadian Ports, calendar years 1908-36.**

| Calendar Year. | Seamen Shipped. | Seamen Discharged. | Calendar Year. | Seamen Shipped. | Seamen Discharged. |
|----------------|-----------------|--------------------|----------------|-----------------|--------------------|
| 1908.....      | 18,013          | 11,542             | 1923.....      | 31,407          | 30,195             |
| 1909.....      | 20,502          | 11,573             | 1924.....      | 30,687          | 29,018             |
| 1910.....      | 16,735          | 11,069             | 1925.....      | 31,772          | 28,472             |
| 1911.....      | 13,748          | 11,301             | 1926.....      | 31,869          | 27,413             |
| 1912.....      | 13,708          | 11,290             |                |                 |                    |
|                |                 |                    | 1927.....      | 28,137          | 25,863             |
| 1913.....      | 16,975          | 13,749             | 1928.....      | 26,745          | 25,763             |
| 1914.....      | 18,987          | 14,989             | 1929.....      | 31,374          | 29,483             |
| 1915.....      | 22,797          | 14,319             | 1930.....      | 26,953          | 25,670             |
| 1916.....      | 20,902          | 16,689             |                |                 |                    |
| 1917.....      | 16,998          | 14,145             | 1931.....      | 24,891          | 24,289             |
|                |                 |                    | 1932.....      | 25,313          | 23,472             |
| 1918.....      | 16,516          | 12,930             | 1933.....      | 27,038          | 23,148             |
| 1919.....      | 18,208          | 13,649             | 1934.....      | 27,234          | 23,858             |
| 1920.....      | 22,569          | 19,719             |                |                 |                    |
| 1921.....      | 18,444          | 17,103             | 1935.....      | 26,527          | 23,924             |
| 1922.....      | 25,689          | 24,558             | 1936.....      | 29,052          | 30,269             |

**Wrecks and Casualties.**—The figures of Table 10, supplied by the Department of Transport, apply to vessels of every nationality in respect of wrecks and casualties in Canadian waters, and to Canadian vessels in respect of wrecks and casualties in other waters. The returns in some years cover wrecks and casualties of previous years.

## 10.—Canadian Wrecks and Casualties, 1911-26.

NOTE.—For details of the years 1870-1910, see Canada Year Book, 1911, p. 381.

| Year.                   | Casualties. | Net Tonnage. | Lives Lost.        | Stated Damages.        | Year.     | Casualties. | Net Tonnage. | Lives Lost. | Stated Damages. |
|-------------------------|-------------|--------------|--------------------|------------------------|-----------|-------------|--------------|-------------|-----------------|
|                         | No.         | tons.        | No.                | \$                     |           | No.         | tons.        | No.         | \$              |
| 1911.....               | 271         | 122,619      | 43                 | 942,093                | 1924..... | 224         | 215,470      | 54          | 4,355,217       |
| 1912.....               | 293         | 209,569      | 59                 | 1,053,768              | 1925..... | 298         | 305,798      | 53          | 3,317,020       |
| 1913.....               | 273         | 270,905      | 160                | 1,963,870              | 1926..... | 300         | 293,310      | 91          | 4,630,287       |
| 1914.....               | 255         | 210,368      | 1,083 <sup>1</sup> | 4,983,775              | 1927..... | 434         | 566,011      | 128         | 6,879,825       |
| 1915.....               | 280         | 214,036      | 70                 | 1,450,012              | 1928..... | 504         | 558,251      | 64          | 5,418,236       |
| 1916.....               | 308         | 242,996      | 67                 | 1,377,442              | 1929..... | 451         | 459,394      | 12          | 4,740,820       |
| 1917 <sup>2</sup> ..... | 239         | 715,384      | 152                | 4,850,145 <sup>3</sup> | 1930..... | 551         | 447,169      | 66          | 3,077,009       |
| 1918 <sup>4</sup> ..... | 226         | 312,928      | 402 <sup>4</sup>   | 1,818,895              | 1931..... | 477         | 404,157      | 7           | 2,096,019       |
| 1919.....               | 240         | 205,720      | 100                | 1,808,690              | 1932..... | 452         | 406,194      | 40          | 3,478,575       |
| 1920.....               | 227         | 222,928      | 28                 | 1,643,825              | 1933..... | 445         | 372,545      | 19          | 1,292,618       |
| 1921.....               | 260         | 588,503      | 38                 | 1,809,328              | 1934..... | 484         | 400,714      | 39          | 1,716,234       |
| 1922.....               | 277         | 604,423      | 27                 | 451,312                | 1935..... | 467         | 496,109      | 19          | 2,842,402       |
| 1923.....               | 376         | 480,713      | 50                 | 3,184,749              | 1936..... | 545         | 512,582      | 34          | 3,108,671       |

<sup>1</sup> Includes 1,042 lives lost in the *Empress of Ireland* disaster.<sup>2</sup> Years ended June 30 for 1917 and earlier years.<sup>3</sup> Excluding damage to cargo estimated at \$4,310,350.<sup>4</sup> Years ended Dec. 31 for 1918 and subsequent years.<sup>5</sup> Includes 323 lives lost in the *Princess Sophia* disaster.

## Section 2.—Financial Statistics of Waterways.

The principal statistics available to aid in making an appraisal of the cost of water-borne traffic consist of the record of public expenditures on waterways. Such expenditures are classified as investments which are shown in Table 11, and as annual expenditures for maintenance and operation, shown in Table 12, which are partly balanced by the revenues shown in Table 13. Undoubtedly, in so far as capital expenditures for the permanent improvement of waterways are concerned, those of the Dominion Government cover the major part. There has been some expenditure by municipalities on local harbour facilities, while private capital expenditure is also confined almost entirely to terminal or dockage facilities. The investment in shipping, however, with the exception of the Canadian National (West Indies) Steamships, as shown at p. 696, has come almost entirely from private sources such as railway companies, steamship companies, industrial corporations, and private individuals. No figures are available regarding private investments in shipping except those appearing in the reports of the operating companies which cover only a portion of the field. Neither are there statistics showing the revenues of ship operators from passenger and freight traffic. In the case of railways, statistics show fairly completely: (1) the investment in plant, roadbed, etc.; (2) the revenues of the railways or the annual payment by the people of Canada for the passenger and freight transportation; and (3) the annual deficits which are also indirectly paid by the public whether as investors or taxpayers. No such picture can be given for water-borne traffic.

**Capital and Operation Expenditures.**—In the following statement of investments by the Dominion Government, no amounts have been written off as a result of the destruction or abandonment of property such as the first, second, and third Welland canals and the Port Nelson terminal. Neither have the capital expenditures been reduced by allowances for depreciation.

The classification as between capital and operation expenditure is very difficult to make with respect to some items and cannot be regarded as minutely exact for the long period. This difficulty applies particularly in the case of dredging where the distinction between the removal of accumulating silt and the deepening of a channel is largely one of opinion. For this reason the dredging account of the Department of Public Works is not included in the total investments of Table 11, but is given at the end of the table since a large part of the work has been undoubtedly of the nature of a permanent improvement. This dredging account does not, how-



ever, include the total expenditures for dredging as some dredging expenditures have been distributed with other items. Both capital and operation costs include expenditures by the former Departments of Marine and of Railways and Canals, now the Department of Transport, and by the Department of Public Works.

# 11.—Capital Expenditures of the Dominion Government<sup>1</sup> on Waterways and Harbours to Mar. 31, 1937.

NOTE.—The dredging expenditures by the Department of Public Works shown separately at the end of this table cannot be accurately divided between capital and maintenance expenditures. However, since they have been largely for permanent improvements, they are shown here but are not included in the grand totals of capital expenditure. Other dredging expenditures are included in the various items.

| Item.  | Fiscal Year ended Mar. 31, 1937. | Total to Mar. 31, 1937. | Item.   | Fiscal Year ended Mar. 31, 1937. | Total to Mar. 31, 1937. |
|--|----------------------------------|-------------------------|---|----------------------------------|-------------------------|
| <b>AIDS TO NAVIGATION AND MISCELLANEOUS WORKS.</b>         | \$                               | \$                      | <b>HARBOURS.</b>  | \$                               | \$                      |
| Lighthouses, construction, improvements and apparatus..... | 418,647                          | 24,662,283              | Prescott elevator.....  | 58,032                           | 5,016,757*              |
| Radio-telegraph stations, construction.....                | "                                | 2,291,324               | Port Colborne elevator...                                       | Nil                              | 3,279,613*              |
| St. Lawrence ship channel (below Montreal).....            | 3,083,428                        | 68,555,928              | Hudson Bay Terminals—   |                                  |                         |
| Dominion steamers.....                                     | Nil                              | 6,800,000               | Port Nelson.....  | Nil                              | 6,240,201*              |
| Dredging plant.....  | 53,322                           | 8,246,766               | Churchill.....  | 119,182                          | 13,340,880*             |
| Slides and booms.....                                      | Nil                              | 1,733,192               | Harbour Commissions—  |                                  |                         |
| Jacques Cartier bridge, Montreal.....                      | 4,725                            | 18,649,078*             | Hallifax.....   | 279,143                          | 26,078,034              |
| Second Narrows bridge, Vancouver.....                      | Nil                              | 1,650,052*              | Saint John.....   | 1,367,684                        | 21,958,478              |
| Other roads and bridges.....                               | 499,273                          | 6,613,657               | Chicoutimi.....   | 14,664                           | 4,350,049               |
| Other (Department of Public Works).....                    | 6,620                            | 2,944,152               | Quebec.....   | 676,437                          | 27,746,124              |
| Other (Department of Transport).....                       | Nil                              | 3,206,150               | Three Rivers.....   | 184,179                          | 7,457,210               |
| <b>Totals.....</b>   | <b>4,026,015</b>                 | <b>144,732,582</b>      | Montreal.....   | 1,691,296                        | 64,995,263              |
| <b>CANALS.</b>   |                                  |                         | New Westminster.....  | Nil                              | 974,537                 |
| St. Lawrence River—  |                                  |                         | Vancouver.....  | 11,104                           | 24,368,260              |
| Lachine.....   | 52,835                           | 16,252,785              | <b>Totals.....</b>  | <b>4,701,721</b>                 | <b>206,665,996</b>      |
| Lake St. Louis.....  | Nil                              | 298,176                 | <b>OTHER HARBOURS, RIVERS, CONSTRUCTION, IMPROVEMENTS, ETC.</b> |                                  |                         |
| Soulanges.....   | 24,600                           | 8,452,775               | Prince Edward Island....  | 22,984                           | 2,211,941               |
| Beauharnois, old.....                                      | 54,062                           | 1,855,902               | Nova Scotia.....  | 314,362                          | 13,748,142              |
| Lake St. Francis.....                                      | 24,821                           | 131,231                 | New Brunswick.....  | 183,180                          | 17,267,300              |
| Cornwall.....  | 1,543                            | 7,907,311               | Quebec.....   | 1,493,789                        | 35,338,802              |
| Williamsburg.....  | 2,059                            | 1,757,347               | Ontario.....  | 1,013,910                        | 45,918,130              |
| Farran's Point.....  | Nil                              | 877,091                 | Manitoba.....   | 34,202                           | 3,068,869               |
| Galops.....  | Nil                              | 6,143,468               | Saskatchewan, Alberta   | 95,289                           | 1,152,307               |
| Rapide Plat.....   | Nil                              | 2,159,581               | British Columbia.....   | 421,402                          | 24,292,538              |
| North channel, river reaches, and Galops channel.....      | Cr. 316,677                      | 3,518,869               | Yukon.....  | Nil                              | 364,547                 |
| St. Lawrence Ship Canal                                    | 14,086                           | 738,078                 | General.....  | 14,808                           | 260,513                 |
| Ottawa and Rideau Rivers—                                  |                                  |                         | <b>Totals.....</b>  | <b>3,593,926</b>                 | <b>143,622,580</b>      |
| Ste. Anne lock.....  | 64,065                           | 1,552,039               | <b>Grand Totals.....</b>  | <b>12,495,838</b>                | <b>756,918,478</b>      |
| Carillon and Grenville..                                   | 25,374                           | 4,754,508               | <b>EXPENDITURES BY DEPARTMENTS.</b>                             |                                  |                         |
| Rideau (including Tay)..                                   | 88,133                           | 5,680,185               | Transport.....  | 3,853,465                        | 387,423,039             |
| Richelieu River—   |                                  |                         | Public Works.....   | 4,713,141                        | 167,060,460             |
| St. Ours lock.....   | Nil                              | 921,246                 | Harbour Commissions...  | 4,529,232                        | 202,434,979             |
| Chambly.....   | 57,676                           | 1,948,781               | <b>EXPENDITURES ON DREDGING BY DEPARTMENT OF PUBLIC WORKS.</b>  |                                  |                         |
| Welland canals.....  | Cr. 48,057                       | 162,914,987             | Prince Edward Island....  | 119,588                          | 2,368,992               |
| Sault Ste. Marie.....                                      | 3,731                            | 5,261,622               | Nova Scotia.....  | 381,174                          | 10,445,120              |
| Trent.....   | 83,850                           | 23,965,098              | New Brunswick.....  | 105,222                          | 14,530,498              |
| Murray.....  | 5,689                            | 1,390,689               | Quebec.....   | 405,347                          | 15,849,037              |
| St. Peters.....  | Nil                              | 1,623,572               | Ontario.....  | 582,098                          | 30,376,000              |
| Culbute lock and dam....                                   | Nil                              | 443,315                 | Manitoba.....   | 49,654                           | 1,931,781               |
| Baie Verte.....  | Nil                              | 44,388                  | Saskatchewan, Alberta, and N.W.T.....                           | 4,000                            | 195,483                 |
| Hungry Bay dykes.....                                      | Nil                              | 47,223                  | British Columbia.....   | 363,490                          | 12,186,905              |
| Canals, general.....                                       | 36,386                           | 1,190,745               | Yukon.....  | Nil                              | 7,080                   |
| <b>Totals.....</b>   | <b>174,176</b>                   | <b>291,867,311</b>      | General.....  | Nil                              | 152,964                 |
|  |                                  |                         | <b>Totals.....</b>  | <b>2,100,573</b>                 | <b>88,043,920</b>       |

<sup>1</sup> Includes some expenditure not included in the 1937 Year Book and by authorities other than the Dominion Government. <sup>2</sup> Not separated from expenditures on lighthouses. <sup>3</sup> These are the fixed assets as reported by the National Harbours Board at Dec. 31, 1936, and are included in the totals for Montreal and Vancouver, respectively, under Harbours.

<sup>4</sup> Not segregated from Public Works expenditures. <sup>5</sup> Includes "Income Expenditure" for buildings and permanent improvements to canals and harbours. <sup>6</sup> These are the fixed assets as reported by the National Harbours Board at Dec. 31, 1936.

**12.—Expenditures of the Dominion Government for Maintenance and Operation of Aids to Navigation, Canals and Harbours, fiscal years ended Mar. 31, 1935-37.**

| Item.  | 1935.                        | 1936.                        | 1937.            |
|--|------------------------------|------------------------------|------------------|
|  | \$                           | \$                           | \$               |
| <b>AIDS TO NAVIGATION AND MISCELLANEOUS ITEMS.</b> |                              |                              |                  |
| Lighthouses and Coast Service—                     |                              |                              |                  |
| Agencies, rents and contingencies.....             | 186,145                      | 165,889                      | 196,854          |
| Maintenance.....                                   | 741,928                      | 777,059                      | 1,557,108        |
| Salaries of light-keepers.....                     | 658,737                      | 692,517                      | 5,057            |
| Repairs to wharves.....                            | 6,349                        | 5,057                        | 7,136            |
| Ice-breaking (Thunder bay).....                    | 30,000                       | 40,500                       | 30,000           |
| Radio-telegraph service.....                       | 492,469                      | 543,415                      | 552,950          |
| Dominion steamers.....                             | 1,499,334                    | 1,314,705                    | 1,423,612        |
| Life saving <sup>1</sup> .....                     | 45,078                       | 50,439                       | 45,793           |
| Hydrographic survey <sup>1</sup> .....             | 404,922                      | 408,697                      | 407,645          |
| Marine signal service <sup>1</sup> .....           | 93,909                       | 99,885                       | 99,482           |
| Administration of pilotage <sup>1</sup> .....      | 86,227                       | 103,518                      | 90,281           |
| Removal of obstructions.....                       | 16,216                       | 3,680                        | 52,568           |
| Subsidy to wrecking plants.....                    | 40,000                       | 43,780                       | 43,000           |
| Dredging plant.....                                | 74,308                       | 70,163                       | 60,641           |
| Roads and bridges.....                             | 33,902                       | 48,213                       | 61,925           |
| Miscellaneous (D.P.W.).....                        | 81,285                       | 99,009                       | 33,063           |
| <b>Totals.....</b>                                 | <b>4,480,807<sup>1</sup></b> | <b>4,491,034<sup>1</sup></b> | <b>4,670,658</b> |
| <b>CANALS.</b>                                     |                              |                              |                  |
| St. Lawrence River—                                |                              |                              |                  |
| Soulanges.....                                     | 112,843                      | 141,237                      | 134,873          |
| Lachine.....                                       | 369,692                      | 352,771                      | 329,181          |
| Cornwall.....                                      | 148,876                      | 143,833                      | 125,898          |
| Williamsburg.....                                  | 90,845                       | 94,029                       | 90,628           |
| Head offices for Ontario and Quebec.....           | 71,400                       | 78,364                       | 73,836           |
| Dredge vessels.....                                | 20,126                       | 20,430                       | 34,744           |
| Hungry Bay dyke—St. Barbe.....                     | 7,230                        | 5,692                        | 6,287            |
| Welland.....                                       | 57,480                       |                              |                  |
| Welland Ship Canal.....                            | 568,423                      | 651,138                      | 607,013          |
| Sault Ste. Marie.....                              | 55,517                       | 52,835                       | 48,281           |
| Richelieu River—                                   |                              |                              |                  |
| St. Ours lock.....                                 | 6,386                        | 9,321                        | 9,876            |
| Chambly.....                                       | 59,018                       | 87,525                       | 71,851           |
| Ottawa and Rideau Rivers—                          |                              |                              |                  |
| St. Anne lock.....                                 | 8,905                        | 9,423                        | 11,342           |
| Carillon and Grenville.....                        | 73,601                       | 81,866                       | 85,454           |
| Rideau (including Tay).....                        | 141,376                      | 152,113                      | 150,189          |
| Trent.....   | 178,295                      | 187,808                      | 199,135          |
| Murray.....  | 13,344                       | 17,924                       | 10,482           |
| St. Peters.....                                    | 9,875                        | 9,679                        | 10,251           |
| Canals, general.....                               | Nil                          | Nil                          | 1,829            |
| <b>Totals.....</b>                                 | <b>1,963,292</b>             | <b>2,095,843</b>             | <b>2,062,080</b> |
| <b>HARBOURS, ELEVATORS, RIVERS, ETC.</b>           |                              |                              |                  |
| Port Colborne elevator.....                        | 88,553                       | 89,431                       | 85,512           |
| Prescott elevator.....                             | 80,317                       | 97,220                       | 73,572           |
| Churchill elevator.....                            | 156,316                      | 189,308                      | 95,072           |
| Hudson Bay terminals.....                          | 2                            | 2                            | 63,104           |
| Other Harbours and Rivers—                         |                              |                              |                  |
| Prince Edward Island.....                          | 64,072                       | 86,224                       | 82,404           |
| Nova Scotia.....                                   | 315,508                      | 497,934                      | 291,699          |
| New Brunswick.....                                 | 348,990                      | 432,337                      | 383,863          |
| Quebec.....  | 635,563                      | 438,660                      | 523,945          |
| Ontario.....                                       | 186,103                      | 218,304                      | 130,923          |
| Manitoba.....                                      | 28,251                       | 38,643                       | 30,992           |
| Saskatchewan, Alberta and N.W.T.....               | 3,018                        | 2,637                        | 2,406            |
| British Columbia.....                              | 403,295                      | 319,813                      | 384,478          |
| Yukon.....   | Nil                          | 14,671                       | 5,641            |
| General.....                                       | 434,252                      | 453,597                      | 378,998          |
| <b>Totals.....</b>                                 | <b>2,760,328</b>             | <b>2,878,729</b>             | <b>2,543,929</b> |
| <b>Grand Totals.....</b>                           | <b>9,254,427<sup>1</sup></b> | <b>9,465,661<sup>1</sup></b> | <b>9,276,767</b> |
| <b>EXPENDITURES BY DEPARTMENTS.</b>                |                              |                              |                  |
| Railways and Canals.....                           | 2,344,508                    | 2,471,857                    | 2                |
| Marine.....  | 4,301,312 <sup>1</sup>       | 4,279,705 <sup>1</sup>       | 2                |
| Transport.....                                     |                              |                              | 6,900,769        |
| Public Works.....                                  | 2,608,607                    | 2,714,099                    | 2,875,598        |

<sup>1</sup>— 1 Revised since publication of the 1937 Year Book.

<sup>2</sup> Charged to Hudson Bay Railway in 1935

and 1936. <sup>3</sup> The Department of Transport in 1937 included the former Departments of Marine and of Railways and Canals.

13.—Revenue of the Dominion Government from the Operation of Aids to Navigation, Canals and Harbours, fiscal years ended Mar. 31, 1935-37.

| Item.  | 1935.            | 1936.            | 1937.            |
|--|------------------|------------------|------------------|
|  | \$               | \$               | \$               |
| <b>AIDS TO NAVIGATION AND MISCELLANEOUS ITEMS.</b> |                  |                  |                  |
| Radio revenue—traffic.....                         | 52,670           | 56,714           | 59,840           |
| Dominion steamers.....                             | 2,928            | 2,759            | 793              |
| Earnings of dredges and plant.....                 | 431              | 5,114            | 8,170            |
| Sundries and miscellaneous.....                    | 23,481           | 23,681           | 32,194           |
| <b>Totals.....</b>                                 | <b>79,510</b>    | <b>88,418</b>    | <b>100,997</b>   |
| <b>CANALS.</b>                                     |                  |                  |                  |
| <b>St. Lawrence River—</b>                         |                  |                  |                  |
| Lachine.....                                       | 187,114          | 168,746          | 187,093          |
| Beauharnois.....                                   | 59,516           | 59,526           | 59,619           |
| Soulange.....                                      | 4,257            | 4,057            | 4,175            |
| Cornwall.....                                      | 25,560           | 38,600           | 32,306           |
| Williamsburg.....                                  | 2,566            | 3,018            | 3,230            |
| Welland canal.....                                 | 22,597           | 191,287          | 208,691          |
| Welland Ship Canal.....                            | 152,507          |                  |                  |
| Sault Ste. Marie.....                              | 217              | 217              | 217              |
| <b>Richelieu River—</b>                            |                  |                  |                  |
| Chambly.....                                       | 1,244            | 1,150            | 1,157            |
| St. Ours lock.....                                 | 1                | 1                | 60               |
| <b>Ottawa and Rideau Rivers—</b>                   |                  |                  |                  |
| Ste. Anne lock.....                                | 387              | 189              | 241              |
| Carillon and Grenville.....                        | 1,628            | 1,559            | 1,567            |
| Chats Falls.....                                   | 1                | 1                | 1                |
| Rideau (including Tay).....                        | 10,134           | 10,189           | 10,375           |
| Trent.....   | 6,067            | 6,448            | 6,512            |
| Murray.....  | 254              | 351              | 311              |
| St. Peters.....                                    | 168              | 157              | 169              |
| Sundries.....                                      | 8                | 2                | 3                |
| <b>Totals.....</b>                                 | <b>474,220</b>   | <b>483,557</b>   | <b>515,727</b>   |
| <b>HARBOURS.</b>                                   |                  |                  |                  |
| Churchill terminals.....                           | 2                | 3,264            | 2,865            |
| Prescott elevator.....                             | 69,532           | 175,052          | 161,815          |
| Port Colborne elevator.....                        | 184,116          | 149,004          | 204,767          |
| Churchill elevator.....                            | 109,933          | 84,838           | 117,091          |
| Earnings of dry docks.....                         | 73,983           | 62,500           | 80,330           |
| Rent, Kingston graving dock.....                   | 6,050            | 12,100           | Nil              |
| Ferry privileges.....                              | 2,706            | 3,023            | 2,847            |
| Piers and wharves.....                             | 111,973          | 111,189          | 139,849          |
| Harbour dues.....                                  | 2,765            | 2,800            | 4,272            |
| <b>Totals.....</b>                                 | <b>561,128</b>   | <b>597,819</b>   | <b>715,336</b>   |
| <b>Grand Totals.....</b>                           | <b>1,111,858</b> | <b>1,169,794</b> | <b>1,332,060</b> |

<sup>1</sup> Included with Chambly canal.

<sup>2</sup> Included with Hudson Bay Railway.

**Shipping Subsidies.**—The information given in the following table formerly appeared under the part of this chapter dealing with the Post Office but is now shown here because these subsidies are granted to assure the required steamship services rather than for the mere carriage of mails.

## 14.—Mail Subsidies and Steamship Subventions, fiscal years ended Mar. 31, 1935-37.

NOTE.—The figures in the following table were supplied by F. E. Bawden, Director of Steamship Subsidies, Department of Trade and Commerce. Such data appear annually in the annual report of the Auditor General and represent the amounts paid in connection with contracts made under statutory authority by the Department of Trade and Commerce for trade services, including the conveyance of mails.

| Service.  | 1935.   | 1936.   | 1937.   |
|---|---------|---------|---------|
|   | \$      | \$      | \$      |
| <b>Atlantic Ocean—</b>  |         |         |         |
| Canada and Great Britain.....   | 500,000 | 500,000 | 250,000 |
| Canada and South Africa.....  | 112,500 | 112,500 | 112,500 |
| To assist in the carriage of lumber from Churchill, Man., to<br>United Kingdom.....                       | 2,500   | Nil     | Nil     |
| Prince Edward Island and Boston.....  | Nil     | 35,000  | 20,000  |
| <b>Pacific Ocean—</b>   |         |         |         |
| British Columbia, Australia and/or China.....   | 110,713 | 118,800 | 136,650 |
| Canada, China and Japan.....  | 660,000 | 749,000 | 600,000 |
| Canada and New Zealand, on the Pacific.....   | 200,000 | 200,000 | 292,308 |
| Prince Rupert, B.C., and the Queen Charlotte islands.....   | 12,000  | 12,000  | 12,000  |
| Vancouver and the British West Indies.....  | 36,000  | 33,000  | 30,000  |
| Vancouver and northern ports of British Columbia.....   | 18,000  | 18,000  | 18,000  |
| Victoria, Vancouver, way ports and Skagway.....   | 12,000  | 12,000  | 12,000  |
| Victoria and west coast Vancouver island.....   | 10,000  | 10,000  | 10,000  |
| British Columbia and South Africa.....  | 84,000  | 84,000  | 84,000  |
| <b>Local Services—</b>  |         |         |         |
| Baddeck and Iona.....   | 8,000   | 8,000   | 8,000   |
| Charlottetown and Pictou.....   | 25,000  | 25,000  | 30,000  |
| Charlottetown, Victoria and Holliday's wharf.....   | 4,600   | 4,213   | Nil     |
| Chester and Tanook Island (winter).....   | Nil     | 1,584   | 1,600   |
| Grand Manan and the mainland.....   | 24,750  | 33,000  | 33,000  |
| Halifax and Bay St. Lawrence.....   | 2,000   | 2,000   | 2,000   |
| Halifax, Canso and Guysborough.....   | 6,750   | 6,750   | 6,750   |
| Halifax, LaHave and LaHave River ports.....   | 2,000   | 2,000   | 1,981   |
| Halifax and Sherbrooke.....   | 900     | 900     | 882     |
| Halifax, south Cape Breton and Bras d'Or Lake ports.....  | 3,500   | 3,500   | 3,500   |
| Halifax, Spry bay and Cape Breton ports.....  | 4,000   | 3,961   | 4,000   |
| Halifax and west coast of Cape Breton.....  | 4,000   | 4,000   | 3,623   |
| Ile aux Coudres and les Eboulements.....  | 786     | 1,100   | 1,100   |
| Mulgrave, Arichat and Canso.....  | 33,750  | 33,750  | 33,750  |
| Mulgrave and Guysborough, calling at intermediate ports.....  | 9,500   | 9,469   | 9,317   |
| Murray bay and north shore (winter service).....  | 40,000  | 40,000  | 40,000  |
| Parrsboro, Kingsport and Wolfville.....   | 2,000   | 1,873   | 1,500   |
| Pelee island and the mainland.....  | 8,250   | 8,250   | 8,250   |
| Pictou, Mulgrave and Cheticamp.....   | 11,000  | 11,000  | 11,000  |
| Pictou, Souris and the Magdalen islands.....  | 37,500  | 37,500  | 37,500  |
| Quebec, Natashquan and Harrington, and other ports on the<br>north shore of the gulf of St. Lawrence..... | 76,500  | 84,500  | 85,000  |
| Quebec or Montreal and Gaspé, and other ports on the south<br>shore of the gulf of St. Lawrence.....      | 54,000  | 60,000  | 60,000  |
| Rimouski, Matane and the north shore of the lower St. Law-<br>rence.....                                  | 37,500  | 50,000  | 50,000  |
| Rivière du Loup and Tadoussac, and other north shore ports...<br>St. Catherine's bay and Tadoussac.....   | 9,000   | 12,000  | 10,000  |
| 2,500   | 3,250   | 3,500   |         |
| Saint John and Bridgetown.....  | 800     | 1,000   | 800     |
| Saint John, Bear River, Annapolis and Granville.....  | 2,000   | 2,000   | 1,500   |
| Saint John and Margareville, and other ports on the bay of<br>Fundy.....                                  | 2,800   | 2,800   | 2,500   |
| Saint John and Minas Basin ports.....   | 3,500   | 3,500   | 5,000   |
| Saint John and St. Andrews, calling at intermediate ports.....  | 3,000   | 3,000   | 3,000   |

#### 14.—Mail Subsidies and Steamship Subventions, fiscal years ended Mar. 31, 1935-37 —concluded.

| Service.  | 1935.            | 1936.            | 1937.            |
|---|------------------|------------------|------------------|
|   | \$               | \$               | \$               |
| <b>Local Services—concluded.</b>  |                  |                  |                  |
| Saint John, Westport and Yarmouth, and other way ports.....                         | 13,000           | 13,000           | 13,000           |
| Saint John and Weymouth.....  | 75               | 633              | 1,000            |
| Summersville, Burlington and Windsor, N.S.....                                      | 750              | 750              | 750              |
| Sydney and Bay St. Lawrence, calling at way ports.....                              | 18,000           | 25,000           | 25,000           |
| Sydney and Bras d'Or Lake ports, and ports on the west coast<br>of Cape Breton..... | 20,000           | 22,500           | 22,500           |
| Sydney and Whyocomaugh.....   | 12,000           | 16,000           | 16,000           |
| Inspection of subsidized steamship services.....                                    | 2,331            | 4,526            | 4,553            |
| <b>Totals.....</b>  | <b>2,274,255</b> | <b>2,426,609</b> | <b>2,119,914</b> |

#### Merchant Marine Services Operated by the Canadian Government.

**Canadian Government Merchant Marine.**—The circumstances under which the Canadian Government became possessed of and responsible for the operations of a merchant marine are explained on p. 776 of the 1934-35 Year Book.

This merchant fleet reached its greatest development in 1924 and at Dec. 31 of that year numbered 57 vessels of a total deadweight tonnage of 353,450, representing an original capital investment of \$79,661,921. On June 8, 1936, the 10 remaining vessels were disposed of for a consideration of \$389,444. A table showing the operating results from 1919 to 1936 appeared at p. 689 of the 1937 Year Book.

**Canadian National (West Indies) Steamships.**—In conformity with the Canada-West Indies Trade Agreement Act of 1926 (16-17 Geo. V, c. 16), the Dominion Government has provided direct steamship services to the West Indies through the medium of Canadian National (West Indies) Steamships, Ltd. The service is provided by a fleet of eleven vessels of a total deadweight tonnage of 62,486. Five of these boats, known as the 'Lady' ships, were specially constructed for passenger service on this route, while the remaining six vessels previously formed part of the Canadian Government Merchant Marine fleet, and were taken over by the Canadian National (West Indies) Steamships, Ltd., for operating purposes, under entrusting agreements with the respective companies which owned the ships. The investment in vessels at Dec. 31, 1936, amounted to \$10,942,896, mainly made up of the construction cost of the 'Lady' ships and the present-day valuation of the other six ships, together with the cost of conversion for use in the West Indies service of three of the latter. The financial results of the operations of the Canadian National (West Indies) Steamships, Ltd., have been as follows:—

| Calendar Year. | Operating<br>Revenues. | Operating<br>Expenses. | Operating<br>Net. | Depreci-<br>ation. | Interest. | Book<br>Loss. |
|----------------|------------------------|------------------------|-------------------|--------------------|-----------|---------------|
|                | \$                     | \$                     | \$                | \$                 | \$        | \$            |
| 1929.....      | 3,332,683              | 3,780,524              | -447,841          | 227,315            | 442,739   | 1,117,895     |
| 1930.....      | 3,792,694              | 4,315,831              | -523,137          | 288,999            | 550,519   | 1,362,655     |
| 1931.....      | 3,648,986              | 4,085,555              | -446,569          | 294,141            | 604,651   | 1,345,861     |
| 1932.....      | 3,323,077              | 3,606,793              | -283,716          | 321,261            | 688,037   | 1,293,014     |
| 1933.....      | 2,956,974              | 3,454,972              | -497,998          | 319,967            | 726,108   | 1,544,073     |
| 1934.....      | 3,509,738              | 3,606,416              | -96,678           | 319,967            | 762,033   | 1,178,678     |
| 1935.....      | 3,816,246              | 3,616,215              | +200,031          | 325,513            | 788,814   | 917,390       |
| 1936.....      | 4,322,593              | 3,765,194              | +557,399          | 328,235            | 800,282   | 574,213       |

### Section 3.—Water Traffic and Services.

Complete statistics, comparable to those given for the railways, showing all the freight carried by water, are not available. Indeed it would be very difficult to obtain a record of the traffic handled by small independent coasting vessels. However, there is a record of the number and tonnage of ships calling at all ports and of all the cargoes which pass through the canals.

#### Subsection 1.—Shipping.

Canadian shipping may be divided into three classes: (1) ocean or sea-going shipping; (2) inland or rivers and lakes international shipping (exclusive of ferrage); and (3) coasting trade or coastwise shipping. Ocean shipping covers the sea-going vessels arriving or departing from Atlantic and Pacific Coast ports, including St. Lawrence River ports up to Montreal. Inland international shipping is the term used to cover shipping between Canadian and United States ports on the Great Lakes and international rivers, and on lakes and rivers accessible to shipping from United States ports such as the Ottawa, Rideau, Trent, etc. (Ferrage is, however, excluded from this and other classes of shipping.) Coastwise shipping or the coasting trade covers shipping between one Canadian port and another on the Atlantic coast, on the Pacific coast, and on the inland international lakes and rivers or lakes and rivers accessible to them. It does not, however, include shipping on isolated Canadian waterways, such as the Mackenzie river, lake Winnipeg, lake St. John, etc.

**Ocean Shipping.**—Canadian ocean shipping dates back to the days of early European fishermen who frequented the shores of Newfoundland and the Maritime Provinces. Later on, exploration and settlement produced a larger volume of traffic. The first ocean-going vessels in Canada were probably built by Pont-Gravé, one of the first settlers in New France, and soon afterwards Talon and Hocquart, intendants of the colony, realizing the advantages offered by the timber resources available, gave ship-building every encouragement. Shipyards were established at Quebec and other points along the St. Lawrence, and these, together with later establishments in the Maritime Provinces and on the western coast, have formed the principal bases of Canadian shipping on the Atlantic and the Pacific.

Canadian shipping attained some prominence in the days of fast wooden sailing vessels, and also at a later date when steam power first came into use. In 1833, the *Royal William*, a Canadian ship built to ply between Quebec and Halifax, crossed the Atlantic from Pictou to London, and was the first vessel to navigate the Atlantic entirely under steam power. At the present time, in addition to other lines, the Canadian Pacific Railway operates fleets on the Atlantic and Pacific oceans, and the Dominion Government operates a fleet in the West Indies trade.

The following table has been compiled from the Shipping Reports of the Department of National Revenue for the individual fiscal years.

### 15.—Sea-Going Vessels Entered and Cleared at Canadian Ports with Cargo and in Ballast, fiscal years ended Mar. 31, 1911-37.

NOTE.—The figures in this table are compiled from Statement X of the Shipping Reports of the Department of National Revenue. For the years 1868-1910, see Canada Year Book, 1911, p. 379.

| Fiscal Year. | British,<br>Entered and Cleared. |                   |                               | Canadian,<br>Entered and Cleared. |                   |                               | Foreign,<br>Entered and Cleared. |                   |                               |
|--------------|----------------------------------|-------------------|-------------------------------|-----------------------------------|-------------------|-------------------------------|----------------------------------|-------------------|-------------------------------|
|              | No.                              | Tons<br>Register. | Freight<br>Tons. <sup>1</sup> | No.                               | Tons<br>Register. | Freight<br>Tons. <sup>1</sup> | No.                              | Tons<br>Register. | Freight<br>Tons. <sup>1</sup> |
| 1911....     | 6,870                            | 12,712,337        | 4,742,064                     | 10,607                            | 3,341,998         | 2                             | 12,467                           | 6,242,851         | *                             |
| 1912....     | 6,766                            | 13,342,929        | 5,121,818                     | 10,966                            | 4,618,163         | 1,000,979                     | 15,134                           | 6,628,513         | 3,014,537                     |
| 1913....     | 7,307                            | 13,896,353        | 6,043,747                     | 11,810                            | 4,530,835         | 1,076,228                     | 16,549                           | 7,803,910         | 3,902,488                     |
| 1914....     | 7,418                            | 15,711,840        | 6,935,729                     | 12,786                            | 5,160,799         | 1,123,325                     | 15,811                           | 8,605,838         | 4,022,299                     |
| 1915....     | 6,949                            | 13,931,091        | 7,145,630                     | 11,903                            | 4,005,011         | 1,025,667                     | 15,060                           | 7,466,484         | 3,911,171                     |
| 1916....     | 6,817                            | 12,417,944        | 6,470,715                     | 12,386                            | 3,894,731         | 1,392,601                     | 18,559                           | 8,514,975         | 4,326,934                     |
| 1917....     | 7,357                            | 16,144,573        | 8,524,208                     | 12,241                            | 4,343,448         | 1,471,488                     | 18,500                           | 8,778,752         | 4,563,657                     |
| 1918....     | 7,337                            | 16,950,790        | 9,552,934                     | 10,998                            | 4,343,853         | 1,699,612                     | 16,597                           | 11,453,484        | 3,916,427                     |
| 1919....     | 6,099                            | 14,054,166        | 8,321,353                     | 11,115                            | 3,753,528         | 1,748,357                     | 15,132                           | 7,448,099         | 3,557,590                     |
| 1920....     | 5,511                            | 12,320,994        | 6,709,206                     | 11,994                            | 4,434,634         | 1,921,237                     | 17,353                           | 8,489,129         | 4,034,045                     |
| 1921....     | 4,526                            | 10,545,619        | 5,737,923                     | 12,990                            | 5,510,484         | 2,543,550                     | 17,624                           | 8,860,026         | 3,933,945                     |
| 1922....     | 4,239                            | 10,471,403        | 4,810,493                     | 14,929                            | 6,861,202         | 3,197,917                     | 17,170                           | 10,261,865        | 4,409,105                     |
| 1923....     | 4,869                            | 13,868,905        | 6,431,073                     | 16,693                            | 7,463,809         | 3,768,954                     | 17,493                           | 12,945,623        | 6,915,091                     |
| 1924....     | 5,187                            | 15,158,994        | 6,544,597                     | 16,778                            | 7,698,045         | 3,186,425                     | 10,765                           | 14,161,363        | 7,239,792                     |
| 1925....     | 5,763                            | 16,463,204        | 6,558,508                     | 17,779                            | 7,966,193         | 2,919,639                     | 17,314                           | 16,551,629        | 7,178,115                     |
| 1926....     | 6,515                            | 17,749,007        | 7,755,145                     | 17,906                            | 9,705,054         | 3,488,321                     | 18,117                           | 18,202,875        | 8,658,455                     |
| 1927....     | 6,448                            | 18,117,525        | 6,909,197                     | 16,746                            | 8,926,138         | 3,507,934                     | 19,111                           | 19,100,106        | 8,556,010                     |
| 1928....     | 6,253                            | 18,738,027        | 8,643,925                     | 16,716                            | 9,021,264         | 3,597,639                     | 18,561                           | 20,455,343        | 10,450,038                    |
| 1929....     | 6,400                            | 21,625,660        | 10,448,795                    | 18,005                            | 9,235,036         | 3,433,003                     | 21,021                           | 23,547,831        | 11,317,358                    |
| 1930....     | 5,634                            | 20,171,333        | 8,206,656                     | 18,145                            | 9,673,139         | 3,171,136                     | 19,689                           | 23,146,901        | 9,386,904                     |
| 1931....     | 5,826                            | 20,008,006        | 7,430,148                     | 17,865                            | 11,707,129        | 2,444,542                     | 17,908                           | 22,885,015        | 8,783,961                     |
| 1932....     | 5,754                            | 19,025,391        | 6,751,209                     | 15,919                            | 11,808,667        | 2,570,564                     | 10,604                           | 21,506,183        | 8,198,158                     |
| 1933....     | 6,823                            | 20,865,151        | 9,129,496                     | 13,584                            | 9,041,203         | 1,929,213                     | 15,741                           | 19,800,478        | 7,314,492                     |
| 1934....     | 6,831                            | 22,450,487        | 8,746,708                     | 17,110                            | 9,391,625         | 2,474,602                     | 15,464                           | 23,573,742        | 7,603,473                     |
| 1935....     | 7,678                            | 23,676,256        | 9,392,527                     | 18,788                            | 11,450,147        | 2,567,636                     | 10,737                           | 21,933,445        | 8,375,350                     |
| 1936....     | 8,095                            | 24,593,603        | 10,377,917                    | 21,663                            | 13,104,753        | 3,030,463                     | 16,405                           | 20,354,271        | 8,914,230                     |
| 1937....     | 9,581                            | 27,299,731        | 12,775,530                    | 23,905                            | 13,334,472        | 3,085,518                     | 17,998                           | 22,313,808        | 11,072,578                    |
| Fiscal Year. | Totals Entered.                  |                   |                               | Totals Cleared.                   |                   |                               | Totals, Entered and Cleared.     |                   |                               |
|              | No.                              | Tons<br>Register. | Freight<br>Tons. <sup>1</sup> | No.                               | Tons<br>Register. | Freight<br>Tons. <sup>1</sup> | No.                              | Tons<br>Register. | Freight<br>Tons. <sup>1</sup> |
| 1911....     | 15,235                           | 11,919,339        | *                             | 14,709                            | 10,377,847        | 2                             | 29,944                           | 22,297,186        | *                             |
| 1912....     | 16,642                           | 12,768,191        | 3,337,806                     | 16,224                            | 11,821,414        | 5,799,528                     | 32,866                           | 24,589,605        | 9,137,334                     |
| 1913....     | 18,087                           | 13,575,193        | 4,204,082                     | 17,579                            | 12,655,905        | 6,818,381                     | 35,666                           | 26,231,098        | 11,022,463                    |
| 1914....     | 18,320                           | 14,982,393        | 4,769,563                     | 17,695                            | 14,580,093        | 7,311,790                     | 36,015                           | 29,568,488        | 12,061,333                    |
| 1915....     | 17,132                           | 13,132,944        | 4,440,583                     | 16,730                            | 12,269,642        | 7,641,885                     | 33,912                           | 25,402,580        | 12,082,468                    |
| 1916....     | 19,146                           | 12,616,927        | 3,169,448                     | 18,616                            | 12,210,723        | 9,020,802                     | 37,762                           | 24,827,650        | 12,190,250                    |
| 1917....     | 19,166                           | 14,789,781        | 4,034,017                     | 18,962                            | 14,477,283        | 10,525,336                    | 38,128                           | 29,267,074        | 14,559,533                    |
| 1918....     | 17,239                           | 15,780,160        | 4,540,684                     | 17,703                            | 17,006,967        | 10,668,289                    | 34,932                           | 32,787,127        | 15,208,973                    |
| 1919....     | 15,803                           | 11,694,613        | 4,429,994                     | 16,543                            | 13,566,780        | 9,097,342                     | 32,346                           | 25,261,393        | 14,127,336                    |
| 1920....     | 17,081                           | 12,010,374        | 3,187,764                     | 17,777                            | 13,234,380        | 9,476,724                     | 34,858                           | 25,244,754        | 12,664,488                    |
| 1921....     | 17,358                           | 12,516,503        | 3,465,204                     | 17,282                            | 12,400,226        | 8,750,214                     | 34,640                           | 24,916,729        | 12,215,418                    |
| 1922....     | 18,157                           | 13,620,153        | 3,254,618                     | 18,181                            | 13,974,287        | 9,162,597                     | 36,338                           | 27,594,470        | 13,417,615                    |
| 1923....     | 19,462                           | 17,095,883        | 4,764,309                     | 19,593                            | 17,182,454        | 12,350,809                    | 38,056                           | 34,278,337        | 17,115,113                    |
| 1924....     | 19,261                           | 18,497,025        | 6,095,428                     | 19,499                            | 18,521,877        | 11,855,388                    | 38,760                           | 37,018,409        | 16,920,814                    |
| 1925....     | 20,436                           | 20,470,379        | 4,410,225                     | 20,420                            | 20,510,647        | 11,446,037                    | 40,856                           | 40,981,026        | 15,856,262                    |
| 1926....     | 21,185                           | 22,837,720        | 6,351,872                     | 21,353                            | 22,817,276        | 13,550,049                    | 42,538                           | 45,654,996        | 19,901,921                    |
| 1927....     | 21,882                           | 23,234,281        | 5,856,591                     | 20,923                            | 22,925,483        | 11,614,550                    | 42,806                           | 46,149,769        | 19,273,141                    |
| 1928....     | 20,903                           | 24,240,847        | 7,024,759                     | 20,637                            | 23,973,787        | 15,666,843                    | 41,530                           | 48,214,634        | 22,691,602                    |
| 1929....     | 22,531                           | 27,464,158        | 7,155,130                     | 22,895                            | 26,944,869        | 18,044,626                    | 45,426                           | 54,408,527        | 25,199,766                    |
| 1930....     | 21,583                           | 27,155,766        | 8,471,107                     | 21,895                            | 25,836,466        | 12,293,589                    | 43,468                           | 52,992,232        | 20,764,696                    |
| 1931....     | 20,737                           | 28,064,762        | 7,814,115                     | 20,860                            | 26,535,387        | 10,841,536                    | 41,597                           | 54,600,149        | 18,655,651                    |
| 1932....     | 19,175                           | 27,003,210        | 6,820,915                     | 19,102                            | 25,337,031        | 10,699,016                    | 38,277                           | 52,340,241        | 17,519,931                    |
| 1933....     | 17,778                           | 25,044,359        | 6,570,607                     | 18,150                            | 24,722,443        | 11,802,594                    | 35,928                           | 49,766,832        | 18,373,201                    |
| 1934....     | 19,501                           | 26,209,947        | 7,407,915                     | 19,004                            | 27,235,907        | 11,216,873                    | 39,405                           | 55,445,854        | 18,584,788                    |
| 1935....     | 21,419                           | 28,512,237        | 9,092,787                     | 19,784                            | 28,547,591        | 11,784,784                    | 41,202                           | 57,069,838        | 20,335,518                    |
| 1936....     | 22,835                           | 28,895,751        | 10,025,622                    | 23,328                            | 29,156,876        | 12,296,681                    | 46,163                           | 58,052,622        | 22,822,610                    |
| 1937....     | 25,348                           | 31,145,065        | 11,142,357                    | 26,136                            | 31,802,046        | 15,791,269                    | 51,484                           | 62,948,011        | 26,933,626                    |

<sup>1</sup> Includes freight in both tons weight and tons measurement.

\* Not available.

**Inland Shipping.**—Inland shipping is associated in its beginnings with the birch-bark canoe of the American Indian. Later the *bateau* and Durham boat came into common use after the migration of the U.E. Loyalists. In the absence at that time of any roads to make land travel possible, the St. Lawrence river and the Great Lakes formed the main highway to the interior. The route from Montreal to the Upper Lakes was broken at three places—from Montreal to Kingston transportation was by *bateau* or Durham boat; from Kingston to Queenston schooners were used; then there was the portage road from Queenston to Chippawa and, finally, schooner again to the destination.

In 1809, the *Accommodation*, the first Canadian steamship, was built for the Hon. John Molson, to run between Montreal and Quebec. On lake Ontario, the *Frontenac* was used from 1817 on a weekly service between York and Prescott and, following this beginning, came a period of great activity in lake and river shipping. In 1845, the *Core* reached lake Huron by way of the Welland canal to carry on transport trade on the Upper Lakes, where previously there had not been enough traffic to support a large ship. Shipping on the Upper Lakes became brisker now, for there were settlers to be carried from Buffalo to the western United States and grain to be brought back. In this period Canadian shipping made its profit by carrying United States goods, for there was little traffic originating in the Canadian near-West.

Upon the advent of steam railways, water-borne traffic did not decrease but, on the contrary, increased, and at present the greater part of the western grain is shipped *via* the Great Lakes route to eastern ports. The iron ore and coal traffic between lake Superior and lake Erie is chiefly United States traffic and sometimes exceeds 80 million short tons in a year; the total traffic on these Upper Lakes alone is greater than that carried by all Canadian railways and about one-twelfth of that carried by all United States railways.

Totals of inland shipping are given for each fiscal year since 1923, and by provinces for the latest year, in Table 17, p. 702.

**Coasting Trade.**—This form of water-borne traffic has assumed great importance in Canada owing to the long coast lines on the Atlantic and Pacific oceans and along the Great Lakes and St. Lawrence River system. The movement of grain from Fort William and Port Arthur to Canadian ports on the Lower Lakes and to Montreal is one important factor in coastwise shipping. The registered tonnage of vessels engaged in the coastwise movement is shown for each fiscal year since 1923, and by provinces for the latest year, in Table 17.

**Shipping by Ports.**—The volume of shipping in the leading ports of the provinces of Canada is shown in Table 16. Details are given of the sea-going vessels, and of the total of all shipping (exclusive of ferriage) arrived at and departed from each port. In the fiscal year ended Mar. 31, 1937, the tonnage of sea-going vessels arriving at and departing from Vancouver exceeded that of any other port in Canada; Victoria was next, followed by Montreal and Halifax. In total shipping, which included coastwise and inland international as well as sea-going shipping, Vancouver was considerably in the lead, followed by Montreal, Victoria, and Halifax.



**16.—Numbers and Tonnages of Sea-Going and of All Vessels (Exclusive of Ferriage), Entered and Cleared at each Principal Canadian Port, fiscal year ended Mar. 31, 1937.**

NOTE.—For details of coastwise and inland international shipping at these ports and at all other ports of Canada, see the Shipping Report of the Department of National Revenue for the fiscal year ended Mar. 31, 1937.

| Province and Port.           | Sea-Going Vessels. |                |           |                | Total Shipping. |                |           |                |
|------------------------------|--------------------|----------------|-----------|----------------|-----------------|----------------|-----------|----------------|
|                              | Arrived.           |                | Departed. |                | Arrived.        |                | Departed. |                |
|                              | No.                | Tons Register. | No.       | Tons Register. | No.             | Tons Register. | No.       | Tons Register. |
| <b>Prince Edward Island—</b> |                    |                |           |                |                 |                |           |                |
| Charlottetown.....           | 39                 | 34,275         | 80        | 47,368         | 637             | 230,304        | 661       | 239,569        |
| <b>Nova Scotia—</b>          |                    |                |           |                |                 |                |           |                |
| Baddeck.....                 | 10                 | 3,502          | 11        | 3,582          | 773             | 66,596         | 773       | 66,596         |
| Canso.....                   | 65                 | 8,081          | 121       | 13,372         | 1,188           | 140,910        | 1,268     | 145,082        |
| Digby.....                   | 56                 | 37,224         | 65        | 41,242         | 614             | 693,816        | 614       | 693,830        |
| Halifax.....                 | 1,352              | 3,032,243      | 1,525     | 3,353,259      | 2,997           | 3,354,339      | 3,018     | 4,252,036      |
| Liverpool.....               | 161                | 94,479         | 161       | 93,198         | 297             | 173,780        | 308       | 177,223        |
| Louisburg.....               | 107                | 45,567         | 117       | 52,954         | 348             | 103,204        | 345       | 96,827         |
| Lunenburg.....               | 415                | 35,855         | 449       | 32,938         | 803             | 52,479         | 846       | 52,746         |
| North Sydney.....            | 1,438              | 287,624        | 1,508     | 292,277        | 2,096           | 661,899        | 2,134     | 664,843        |
| Parsonsboro.....             | 63                 | 26,565         | 72        | 46,779         | 473             | 77,180         | 483       | 85,989         |
| Pictou.....                  | 13                 | 10,544         | 29        | 20,730         | 434             | 195,070        | 491       | 185,936        |
| Port Mulgrave.....           | 7                  | 3,837          | 16        | 13,714         | 903             | 108,098        | 902       | 110,729        |
| Sydney.....                  | 342                | 667,353        | 457       | 899,317        | 1,650           | 2,491,190      | 1,665     | 2,441,805      |
| Windsor.....                 | 125                | 199,705        | 122       | 199,807        | 192             | 218,499        | 192       | 218,096        |
| Yarmouth.....                | 535                | 519,279        | 503       | 475,861        | 955             | 644,404        | 948       | 607,106        |
| <b>New Brunswick—</b>        |                    |                |           |                |                 |                |           |                |
| Campobello.....              | 891                | 97,469         | 895       | 91,069         | 1,136           | 196,054        | 1,149     | 190,644        |
| Dalhousie.....               | 27                 | 82,793         | 29        | 92,962         | 44              | 120,082        | 43        | 120,249        |
| North Head.....              | 436                | 89,972         | 396       | 85,549         | 577             | 108,988        | 540       | 104,510        |
| Saint John.....              | 821                | 1,466,117      | 829       | 1,485,821      | 2,814           | 2,435,215      | 2,843     | 2,440,543      |
| St. Andrews.....             | 2,622              | 122,650        | 2,660     | 126,107        | 3,122           | 202,439        | 3,154     | 203,267        |
| <b>Quebec—</b>               |                    |                |           |                |                 |                |           |                |
| Chicoutimi.....              | 3                  | 4,075          | 1         | 2,780          | 156             | 37,627         | 158       | 37,784         |
| Gaspe.....                   | 9                  | 32,189         | 29        | 57,317         | 195             | 111,813        | 195       | 111,782        |
| Lévis.....                   | 5                  | 6,249          | 1         | 1,471          | 122             | 145,669        | 120       | 145,881        |
| Montreal.....                | 1,172              | 4,316,241      | 1,080     | 4,081,445      | 5,908           | 8,948,953      | 5,993     | 8,961,002      |
| Port Alfred.....             | 64                 | 146,732        | 55        | 148,990        | 254             | 573,517        | 254       | 573,479        |
| Quebec.....                  | 399                | 2,034,318      | 406       | 1,875,254      | 2,892           | 4,188,453      | 2,906     | 4,186,814      |
| Rimouski.....                | 12                 | 55,142         | 49        | 70,511         | 1,191           | 353,529        | 1,195     | 346,307        |
| Rivière du Loup.....         | 2                  | 1,558          | 1         | 852            | 306             | 212,010        | 266       | 212,000        |
| Sorel.....                   | 74                 | 206,791        | 122       | 334,881        | 1,000           | 1,354,929      | 1,100     | 1,852,493      |
| Three Rivers.....            | 148                | 400,318        | 148       | 400,318        | 1,727           | 1,851,395      | 1,734     | 1,852,766      |
| <b>Ontario—</b>              |                    |                |           |                |                 |                |           |                |
| Amherstburg.....             | -                  | -              | -         | -              | 417             | 340,118        | 396       | 338,947        |
| Bellefleur.....              | -                  | -              | -         | -              | 111             | 46,294         | 111       | 46,294         |
| Brockville.....              | -                  | -              | -         | -              | 1,263           | 468,973        | 1,262     | 468,969        |
| Cobourg.....                 | -                  | -              | -         | -              | 403             | 1,257,479      | 403       | 1,257,574      |
| Collingwood.....             | -                  | -              | -         | -              | 61              | 79,961         | 66        | 83,487         |
| Cornwall.....                | -                  | -              | -         | -              | 356             | 317,705        | 333       | 337,756        |
| Depot Harbour.....           | -                  | -              | -         | -              | 82              | 149,670        | 82        | 149,670        |
| Erican.....                  | -                  | -              | -         | -              | 149             | 228,772        | 153       | 230,054        |
| Fort William.....            | -                  | -              | -         | -              | 1,339           | 3,080,203      | 1,287     | 2,921,109      |
| Goderich.....                | -                  | -              | -         | -              | 189             | 276,013        | 170       | 297,164        |
| Hamilton.....                | -                  | -              | -         | -              | 805             | 1,528,152      | 635       | 1,267,557      |
| Kingston.....                | -                  | -              | -         | -              | 3,031           | 1,266,166      | 3,093     | 1,296,085      |
| Leamington.....              | -                  | -              | -         | -              | 520             | 272,692        | 518       | 266,908        |
| Little Current.....          | -                  | -              | -         | -              | 312             | 152,967        | 285       | 161,461        |
| Midland.....                 | -                  | -              | -         | -              | 253             | 448,914        | 270       | 456,162        |
| Niagara Falls.....           | -                  | -              | -         | -              | 1,900           | 1,410,903      | 1,900     | 1,410,892      |
| Owen Sound.....              | -                  | -              | -         | -              | 226             | 224,855        | 226       | 228,211        |
| Port Arthur.....             | -                  | -              | -         | -              | 1,344           | 3,257,858      | 1,435     | 3,546,336      |
| Port Colborne.....           | -                  | -              | -         | -              | 863             | 1,421,410      | 874       | 1,411,759      |
| Port Dover.....              | -                  | -              | -         | -              | 187             | 9,903          | 185       | 9,811          |
| Port McNicoll.....           | -                  | -              | -         | -              | 91              | 236,837        | 91        | 244,592        |

16.—Numbers and Tonnages of Sea-Going and of All Vessels (Exclusive of Ferriage), Entered and Cleared at each Principal Canadian Port, fiscal year ended Mar. 31, 1937—concluded.

| Provinces and Port.       | Sea-Going Vessels. |                |           |                | Total Shipping. |                |           |                |
|---------------------------|--------------------|----------------|-----------|----------------|-----------------|----------------|-----------|----------------|
|                           | Arrived.           |                | Departed. |                | Arrived.        |                | Departed. |                |
|                           | No.                | Tons Register. | No.       | Tons Register. | No.             | Tons Register. | No.       | Tons Register. |
| <b>Ontario—concluded.</b> |                    |                |           |                |                 |                |           |                |
| Prescott.....             | -                  | -              | -         | -              | 960             | 1,092,195      | 965       | 1,082,835      |
| Sarnia.....               | -                  | -              | -         | -              | 17,042          | 3,601,890      | 17,047    | 3,604,773      |
| Sault Ste. Marie.....     | -                  | -              | -         | -              | 1,745           | 2,032,342      | 1,813     | 1,995,008      |
| Thorold.....              | 1                  | 775            | 9         | 7,141          | 497             | 691,801        | 508       | 677,813        |
| Toronto.....              | -                  | -              | -         | -              | 3,020           | 3,351,683      | 3,048     | 3,364,880      |
| Walkerville.....          | -                  | -              | -         | -              | 260             | 245,089        | 266       | 249,702        |
| Wallaceburg.....          | -                  | -              | -         | -              | 296             | 193,194        | 293       | 194,442        |
| Welland.....              | -                  | -              | -         | -              | 242             | 297,982        | 232       | 298,977        |
| Windsor.....              | -                  | -              | -         | -              | 999             | 1,704,592      | 975       | 1,692,013      |
| <b>Manitoba—</b>          |                    |                |           |                |                 |                |           |                |
| Churchill.....            | 14                 | 44,190         | 14        | 44,190         | 19              | 44,470         | 19        | 44,470         |
| <b>British Columbia—</b>  |                    |                |           |                |                 |                |           |                |
| Alert Bay.....            | 97                 | 14,897         | 102       | 17,470         | 1,332           | 509,372        | 1,339     | 603,214        |
| Bamfield.....             | 25                 | 7,634          | 35        | 8,896          | 679             | 109,628        | 682       | 109,618        |
| Britannia Beach.....      | 146                | 242,330        | 168       | 256,572        | 1,095           | 469,719        | 1,097     | 468,305        |
| Chemainus.....            | 464                | 830,432        | 484       | 840,171        | 815             | 914,388        | 815       | 910,512        |
| Nanaimo.....              | 857                | 483,659        | 858       | 480,055        | 3,498           | 1,557,850      | 3,488     | 1,547,253      |
| New Westminster.....      | 659                | 1,784,643      | 646       | 1,787,007      | 2,239           | 2,203,751      | 12,284    | 2,204,980      |
| Ocean Falls.....          | 47                 | 61,916         | 77        | 124,266        | 969             | 688,718        | 962       | 690,957        |
| Port Alberni.....         | 357                | 843,060        | 357       | 843,509        | 767             | 1,000,259      | 772       | 997,917        |
| Powell River.....         | 211                | 384,048        | 241       | 408,109        | 2,267           | 1,291,373      | 2,283     | 1,310,329      |
| Prince Rupert.....        | 2,251              | 222,889        | 2,324     | 241,702        | 3,730           | 864,129        | 3,792     | 865,101        |
| Quatsino.....             | 46                 | 86,753         | 58        | 100,529        | 299             | 157,501        | 299       | 157,779        |
| Stewart.....              | 14                 | 12,082         | 20        | 21,652         | 155             | 162,884        | 160       | 154,210        |
| Sidney.....               | 632                | 149,236        | 647       | 141,896        | 1,009           | 306,802        | 1,001     | 305,485        |
| Union Bay.....            | 108                | 299,087        | 128       | 317,456        | 945             | 615,557        | 953       | 618,047        |
| Vancouver.....            | 3,094              | 6,829,667      | 2,980     | 6,814,892      | 10,635          | 11,415,984     | 10,766    | 11,324,810     |
| Victoria.....             | 2,561              | 4,425,833      | 2,572     | 4,442,177      | 5,535           | 6,801,521      | 5,558     | 6,793,818      |

<sup>1</sup> Since the ferry at Sarnia operates without a ferry permit, the "arrived" and "departed" figures for this port each include ferriage to the amount of 15,217 vessels and 1,678,272 tons register.

**Grand Total Shipping Trade.**—Statistics are given in Table 17 showing sea-going, inland international, coastwise and total vessels (exclusive of ferriage), entered and cleared at Canadian ports, by provinces, during the fiscal year ended Mar. 31, 1937, and totals for the fiscal years 1923 to 1937. It is noteworthy in this table that the volume of coastwise shipping is the greatest, while sea-going is next in tonnage. Both sea-going and coastwise shipping show marked expansion since 1923, although the effect of the depression is evident here also. Inland international shipping, on the other hand, has varied considerably and showed a more definite decrease during the depression. The total tonnage of shipping entered and cleared was greater for Ontario than for British Columbia in the fiscal year ended 1937. This was partly due to the fact that the great bulk of the inland international shipping was through Ontario ports, while there was also a large tonnage of coasting trade through these ports. It will be noted, however, from the footnotes to Tables 16 and 17 that a certain amount of ferriage, at Sarnia, is included in the Ontario figures. After making a deduction for this ferriage, the tonnage of total shipping in 1937 was slightly greater for British Columbia than for Ontario, after which came Quebec, Nova Scotia, and New Brunswick.

17.—Numbers and Tonnages of All Vessels (Exclusive of Ferriage). Entered and Cleared at Canadian Ports, 1923-37, With Details by Provinces for the fiscal year ended Mar. 31, 1937.

| Year and Province.              | Sea-Going.            |                |           |                | Coastwise. |                |           |                |
|---------------------------------|-----------------------|----------------|-----------|----------------|------------|----------------|-----------|----------------|
|                                 | Arrived.              |                | Departed. |                | Arrived.   |                | Departed. |                |
|                                 | No.                   | Tons Register. | No.       | Tons Register. | No.        | Tons Register. | No.       | Tons Register. |
| Totals, 1923.....               | 16,162                | 17,095,883     | 19,593    | 17,182,454     | 82,540     | 26,240,041     | 80,933    | 34,730,037     |
| Totals, 1924.....               | 19,261                | 18,197,025     | 19,190    | 18,521,377     | 88,065     | 39,268,712     | 84,762    | 38,006,116     |
| Totals, 1925.....               | 20,436                | 20,470,379     | 20,420    | 20,510,647     | 87,185     | 40,480,372     | 87,091    | 40,139,447     |
| Totals, 1926.....               | 21,185                | 22,837,720     | 21,353    | 22,817,276     | 88,663     | 41,770,480     | 87,878    | 41,117,175     |
| Totals, 1927.....               | 21,382                | 23,224,281     | 20,923    | 22,925,488     | 92,323     | 43,124,919     | 90,814    | 42,617,467     |
| Totals, 1928.....               | 20,903                | 21,210,847     | 20,627    | 23,973,787     | 94,981     | 45,381,586     | 94,714    | 44,146,030     |
| Totals, 1929.....               | 22,531                | 27,464,158     | 22,895    | 26,944,369     | 95,047     | 49,046,588     | 93,905    | 48,007,097     |
| Totals, 1930.....               | 21,883                | 27,155,766     | 21,885    | 25,836,466     | 82,205     | 43,666,866     | 82,197    | 41,067,907     |
| Totals, 1931.....               | 20,737                | 28,064,762     | 20,869    | 26,535,387     | 77,507     | 47,134,652     | 77,354    | 47,540,555     |
| Totals, 1932.....               | 19,178                | 27,003,210     | 19,102    | 25,337,031     | 69,876     | 44,912,972     | 70,112    | 45,311,899     |
| Totals, 1933.....               | 17,778                | 25,044,389     | 18,150    | 21,722,443     | 64,878     | 41,975,393     | 64,688    | 41,100,788     |
| Totals, 1934.....               | 19,501                | 28,209,317     | 19,904    | 27,255,907     | 66,915     | 41,925,543     | 66,895    | 41,813,250     |
| Totals, 1935.....               | 21,119                | 28,512,257     | 21,784    | 28,547,591     | 68,141     | 48,146,087     | 68,545    | 42,827,149     |
| Totals, 1936.....               | 22,635                | 28,895,751     | 22,728    | 29,156,876     | 69,809     | 42,979,591     | 69,689    | 41,815,616     |
| 1937.                           |                       |                |           |                |            |                |           |                |
| Prince Edward Island.....       | 77                    | 53,683         | 129       | 67,190         | 1,198      | 340,734        | 1,170     | 335,511        |
| Nova Scotia.....                | 5,546                 | 5,130,912      | 6,123     | 5,791,212      | 12,310     | 4,933,842      | 12,023    | 4,639,103      |
| New Brunswick.....              | 5,936                 | 2,003,024      | 5,999     | 2,066,631      | 3,761      | 1,410,012      | 3,785     | 1,347,095      |
| Quebec.....                     | 1,903                 | 7,221,953      | 1,917     | 6,987,742      | 11,729     | 10,467,814     | 11,503    | 10,357,151     |
| Ontario.....                    | 1                     | 775            | 9         | 7,141          | 13,557     | 10,284,573     | 13,490    | 15,961,502     |
| Manitoba.....                   | 14                    | 44,190         | 14        | 44,190         | 5          | 280            | 5         | 280            |
| British Columbia.....           | 11,871                | 16,689,928     | 11,945    | 16,838,833     | 30,354     | 12,462,739     | 30,563    | 12,731,194     |
| Yukon.....                      | Nil                   | -              | Nil       | -              | 139        | 73,776         | 140       | 74,846         |
| Totals, 1937.....               | 25,348                | 31,145,065     | 26,136    | 31,802,916     | 73,033     | 45,973,830     | 72,739    | 45,447,342     |
| Year and Province.              | Inland International. |                |           |                | Totals.    |                |           |                |
|                                 | Arrived.              |                | Departed. |                | Arrived.   |                | Departed. |                |
|                                 | No.                   | Tons Register. | No.       | Tons Register. | No.        | Tons Register. | No.       | Tons Register. |
| Totals, 1923.....               | 55,958                | 18,864,448     | 56,419    | 19,260,398     | 157,960    | 72,209,372     | 156,045   | 71,172,889     |
| Totals, 1924.....               | 50,314                | 18,926,976     | 50,758    | 19,001,993     | 157,610    | 76,692,713     | 155,019   | 75,610,798     |
| Totals, 1925.....               | 46,412                | 17,616,105     | 47,011    | 19,341,929     | 151,033    | 78,566,156     | 151,322   | 79,992,014     |
| Totals, 1926.....               | 26,010                | 14,117,099     | 27,056    | 15,471,732     | 135,018    | 78,725,299     | 136,287   | 79,409,193     |
| Totals, 1927.....               | 29,876                | 14,862,096     | 29,626    | 16,319,794     | 143,480    | 81,211,290     | 142,363   | 81,862,740     |
| Totals, 1928.....               | 35,073                | 16,745,632     | 35,918    | 18,843,531     | 150,957    | 86,398,065     | 151,239   | 86,963,248     |
| Totals, 1929.....               | 37,320                | 18,987,751     | 38,437    | 20,338,949     | 154,898    | 85,198,497     | 155,237   | 85,290,415     |
| Totals, 1930.....               | 54,742                | 17,550,585     | 55,609    | 18,895,972     | 138,539    | 88,373,217     | 139,822   | 88,800,345     |
| Totals, 1931.....               | 40,663                | 17,769,696     | 40,826    | 18,542,037     | 138,907    | 92,969,101     | 139,916   | 92,617,979     |
| Totals, 1932.....               | 35,364                | 15,216,218     | 35,768    | 15,879,943     | 124,314    | 87,132,398     | 124,982   | 86,528,873     |
| Totals, 1933.....               | 31,551                | 12,714,051     | 31,957    | 13,791,599     | 114,301    | 79,739,836     | 114,795   | 79,614,930     |
| Totals, 1934.....               | 24,328                | 12,718,566     | 25,600    | 14,408,832     | 114,744    | 82,852,056     | 115,489   | 82,540,109     |
| Totals, 1935.....               | 26,943                | 14,722,884     | 26,874    | 14,602,057     | 116,882    | 86,431,178     | 117,393   | 85,976,827     |
| Totals, 1936.....               | 29,548                | 14,472,022     | 29,425    | 14,998,858     | 122,192    | 86,347,134     | 122,356   | 85,971,350     |
| 1937.                           |                       |                |           |                |            |                |           |                |
| Prince Edward Island.....       | Nil                   | -              | Nil       | -              | 1,275      | 394,417        | 1,299     | 402,707        |
| Nova Scotia.....                | Nil                   | -              | Nil       | -              | 17,856     | 10,064,754     | 18,146    | 10,430,316     |
| New Brunswick.....              | Nil                   | -              | Nil       | -              | 9,697      | 3,413,630      | 9,784     | 3,414,326      |
| Quebec.....                     | 1,065                 | 805,360        | 1,849     | 1,099,208      | 15,297     | 18,495,127     | 15,320    | 18,444,101     |
| Ontario <sup>1</sup> .....      | 29,930                | 14,749,412     | 29,880    | 14,965,568     | 43,408     | 31,034,760     | 43,379    | 30,934,266     |
| Manitoba.....                   | Nil                   | -              | Nil       | -              | 19         | 44,470         | 19        | 44,470         |
| British Columbia.....           | 2                     | 60             | 2         | 60             | 42,227     | 29,152,787     | 42,510    | 29,570,087     |
| Yukon.....                      | 27                    | 9,289          | 28        | 9,783          | 166        | 83,065         | 168       | 84,629         |
| Totals, 1937 <sup>1</sup> ..... | 31,621                | 15,564,121     | 31,759    | 16,074,614     | 130,005    | 92,083,016     | 130,634   | 93,324,902     |

<sup>1</sup> The Ontario figures and the totals for Inland International and Total Shipping are inclusive of ferriage at Sarnia amounting in each case of "arrived" and "departed" to: 13,180 vessels and 1,415,012 tons for 1934; 13,444 vessels and 1,433,031 tons for 1935; 14,583 vessels and 1,620,820 tons for 1936; and 15,217 vessels and 1,678,272 tons for 1937. Corresponding deductions for earlier years are not available. (See also footnote 1 to Table 16.)

## Subsection 2.—Canal Traffic.

Since the canals of Canada are open to the vessels and traffic of all nations upon equal terms, United States traffic constitutes an important part of the total carried through certain canals, especially the Welland Ship Canal. This is shown in Tables 18 and 21. More complete details of the traffic through canals may be found in the annual report on Canal Statistics published by the Dominion Bureau of Statistics.

## 18.—Traffic through Canadian Canals, by Nationality of Vessels and Origin of Freight, navigation seasons 1911-37.

NOTE.—Figures include duplications where cargoes use two or more canals. For Canadian canal traffic from 1836 to 1899, see 1902 Year Book, p. 398, and for the figures of 1903-10, see the 1933 Year Book, p. 697.

| Navigation Season. | Traffic.          |                     |                                     |                     | Origin of Freight Carried. |                |                             |                |                         |
|--------------------|-------------------|---------------------|-------------------------------------|---------------------|----------------------------|----------------|-----------------------------|----------------|-------------------------|
|                    | Canadian Vessels. |                     | United States Vessels. <sup>1</sup> |                     | Canada.                    |                | United States. <sup>2</sup> |                | Total.                  |
|                    | No.               | Registered Tonnage. | No.                                 | Registered Tonnage. | Tons.                      | P.C. of Total. | Tons.                       | P.C. of Total. |                         |
| 1911.              | 25,585            | 9,172,192           | 10,370                              | 18,231,022          | 7,792,907                  | 20.5           | 30,237,446                  | 79.5           | 38,030,353              |
| 1912.              | 27,371            | 10,237,335          | 11,785                              | 24,639,190          | 9,376,529                  | 19.7           | 38,210,716                  | 80.3           | 47,587,245              |
| 1913.              | 28,654            | 12,078,041          | 10,739                              | 24,238,788          | 11,130,875                 | 21.3           | 40,923,038                  | 78.7           | 52,053,913              |
| 1914. <sup>3</sup> | 26,125            | 12,050,856          | 7,742                               | 15,636,414          | 9,382,206                  | 25.3           | 27,041,031                  | 74.7           | 37,023,237 <sup>4</sup> |
| 1915.              | 21,575            | 9,398,207           | 6,415                               | 7,385,101           | 6,789,423                  | 44.7           | 8,409,380                   | 55.3           | 15,198,803              |
| 1916.              | 23,002            | 9,839,029           | 6,500                               | 10,660,839          | 7,436,962                  | 31.7           | 10,606,529                  | 68.3           | 23,533,491              |
| 1917.              | 21,553            | 9,831,694           | 6,594                               | 10,259,772          | 5,964,369                  | 26.8           | 16,274,566                  | 73.2           | 22,238,935              |
| 1918.              | 18,909            | 7,800,972           | 6,791                               | 9,616,200           | 3,369,477                  | 17.8           | 15,514,142                  | 82.2           | 18,883,619              |
| 1919. <sup>4</sup> | 20,682            | 8,755,973           | 4,092                               | 5,259,173           | 4,885,831                  | 45.7           | 5,129,455                   | 51.3           | 9,005,286 <sup>5</sup>  |
| 1920.              | 23,038            | 8,521,943           | 3,826                               | 3,838,390           | 4,094,044                  | 46.0           | 4,641,339                   | 53.1           | 8,735,383               |
| 1921.              | 25,720            | 10,079,388          | 2,969                               | 2,330,178           | 4,562,028                  | 48.5           | 4,844,993                   | 51.5           | 9,407,021               |
| 1922.              | 20,217            | 11,059,261          | 3,735                               | 3,165,054           | 6,273,237                  | 62.1           | 3,752,828                   | 37.9           | 10,026,055              |
| 1923.              | 27,112            | 13,013,970          | 3,399                               | 3,325,809           | 7,637,485                  | 68.2           | 3,561,949                   | 31.8           | 11,199,434              |
| 1924.              | 27,467            | 13,988,909          | 3,233                               | 2,821,177           | 8,887,177                  | 68.8           | 4,011,920                   | 31.2           | 12,899,097              |
| 1925.              | 28,361            | 14,904,785          | 3,557                               | 3,824,924           | 9,570,311                  | 67.7           | 4,560,356                   | 32.3           | 14,130,667              |
| 1926.              | 27,905            | 14,542,455          | 3,543                               | 3,144,866           | 9,656,190                  | 71.7           | 3,821,473                   | 28.3           | 13,477,663              |
| 1927.              | 36,102            | 17,472,601          | 4,013                               | 3,364,461           | 11,803,931                 | 67.8           | 5,624,350                   | 32.2           | 17,458,311              |
| 1928.              | 30,575            | 17,435,176          | 3,973                               | 3,270,591           | 13,832,592                 | 74.2           | 4,837,849                   | 25.8           | 18,720,441              |
| 1929.              | 25,917            | 13,741,071          | 2,400                               | 2,323,351           | 9,659,718                  | 70.7           | 4,009,929                   | 29.3           | 13,699,647              |
| 1930.              | 24,100            | 14,489,045          | 2,063                               | 1,684,570           | 10,955,113                 | 74.0           | 3,845,221                   | 26.0           | 14,803,334              |
| 1931.              | 25,830            | 15,809,553          | 1,821                               | 1,740,231           | 11,433,737                 | 70.6           | 4,755,337                   | 29.4           | 16,189,074              |
| 1932.              | 19,854            | 15,255,970          | 2,061                               | 2,681,078           | 13,242,773                 | 73.7           | 4,717,877                   | 26.3           | 17,960,650              |
| 1933.              | 21,364            | 15,225,022          | 2,200                               | 3,045,876           | 12,724,925                 | 67.8           | 6,055,564                   | 32.2           | 18,780,489              |
| 1934.              | 22,217            | 14,766,837          | 2,044                               | 2,969,981           | 10,813,922                 | 59.8           | 7,255,330                   | 40.2           | 18,069,252              |
| 1935.              | 28,522            | 15,290,797          | 2,035                               | 2,578,091           | 11,187,082                 | 61.5           | 7,018,907                   | 38.5           | 18,205,989              |
| 1936.              | 25,251            | 17,085,749          | 2,708                               | 3,208,829           | 13,465,460                 | 62.7           | 8,003,366                   | 37.3           | 21,468,816              |
| 1937.              | 24,699            | 17,904,774          | 2,869                               | 3,529,939           | 11,911,241                 | 51.0           | 11,439,759                  | 49.0           | 23,351,000              |

<sup>1</sup> Includes a small percentage of vessels of other foreign countries.

<sup>2</sup> Third lock of United States

Sault Ste. Marie canal opened Oct. 21, 1914.

<sup>3</sup> Fourth lock of United States Sault Ste. Marie canal

opened Sept. 18, 1919.

## 19.—Tonnage of Canal Traffic, by Canals and Classes of Products, navigation seasons 1936 and 1937.

NOTE.—Figures include duplications where cargoes use two or more canals.

| Year and Canal.         | Agricultural Products. | Animal Products. | Manufactures. | Forest Products. | Mineral Products. | Total.     |
|-------------------------|------------------------|------------------|---------------|------------------|-------------------|------------|
|                         | tons.                  | tons.            | tons.         | tons.            | tons.             | tons.      |
| 1936.                   |                        |                  |               |                  |                   |            |
| Sault Ste. Marie.....   | 1,451,177              | 807              | 267,021       | 116,832          | 442,399           | 2,278,236  |
| Welland Ship.....       | 3,193,459              | 2,354            | 1,856,272     | 537,616          | 4,387,262         | 10,436,803 |
| St. Lawrence River..... | 3,194,661              | 7,331            | 1,700,203     | 758,638          | 2,627,551         | 8,288,524  |
| Richelieu River.....    | 3,098                  | 188              | 28,544        | 7,158            | 40,743            | 79,731     |
| St. Peters.....         | 4,467                  | 2,029            | 4,063         | 25,038           | 20,610            | 56,257     |
| Murray.....             | Nil                    | Nil              | Nil           | Nil              | 4,906             | 4,906      |
| Ottawa River.....       | 800                    | 45               | 97,197        | 9,912            | 153,539           | 261,493    |
| Rideau.....             | Nil                    | 45               | 5,334         | 2,245            | 7,980             | 15,604     |
| Trent.....              | 74                     | 9                | 336           | 22,960           | 668               | 24,047     |
| St. Andrews.....        | 2                      | 1,097            | 208           | 15,334           | 6,574             | 23,215     |
| Totals, 1936.....       | 7,837,738              | 13,855           | 3,959,238     | 1,495,783        | 8,162,262         | 21,468,816 |
| 1937.                   |                        |                  |               |                  |                   |            |
| Sault Ste. Marie.....   | 1,451,177              | 807              | 267,021       | 116,832          | 442,399           | 2,278,236  |
| Welland Ship.....       | 3,193,459              | 2,354            | 1,856,272     | 537,616          | 4,387,262         | 10,436,803 |
| St. Lawrence River..... | 3,194,661              | 7,331            | 1,700,203     | 758,638          | 2,627,551         | 8,288,524  |
| Richelieu River.....    | 3,098                  | 188              | 28,544        | 7,158            | 40,743            | 79,731     |
| St. Peters.....         | 4,467                  | 2,029            | 4,063         | 25,038           | 20,610            | 56,257     |
| Murray.....             | Nil                    | Nil              | Nil           | Nil              | 4,906             | 4,906      |
| Ottawa River.....       | 800                    | 45               | 97,197        | 9,912            | 153,539           | 261,493    |
| Rideau.....             | Nil                    | 45               | 5,334         | 2,245            | 7,980             | 15,604     |
| Trent.....              | 74                     | 9                | 336           | 22,960           | 668               | 24,047     |
| St. Andrews.....        | 2                      | 1,097            | 208           | 15,334           | 6,574             | 23,215     |
| Totals, 1937.....       | 7,837,738              | 13,855           | 3,959,238     | 1,495,783        | 8,162,262         | 21,468,816 |

19.—Tonnage of Canal Traffic, by Canals and Classes of Products, navigation seasons 1936 and 1937—concluded.

| Year and Canal.         | Agricultural Products. | Animal Products. | Manufactures. | Forest Products. | Mineral Products. | Total.     |
|-------------------------|------------------------|------------------|---------------|------------------|-------------------|------------|
|                         | tons.                  | tons.            | tons.         | tons.            | tons.             | tons.      |
| 1937.                   |                        |                  |               |                  |                   |            |
| Sault Ste. Marie.....   | 1,014,698              | 950              | 303,566       | 107,041          | 393,674           | 1,819,929  |
| Welland Ship.....       | 3,583,282              | 1,121            | 1,899,573     | 497,288          | 5,766,686         | 11,747,950 |
| St. Lawrence River..... | 3,558,640              | 6,044            | 1,808,625     | 736,577          | 3,085,553         | 9,195,439  |
| Richelieu River.....    | 584                    | 312              | 61,064        | 5,971            | 55,813            | 123,744    |
| St. Peters.....         | 5,904                  | 1,536            | 6,663         | 40,173           | 25,566            | 79,952     |
| Murray.....             | Nil                    | Nil              | 150           | Nil              | 2,215             | 2,365      |
| Ottawa River.....       | 259                    | 60               | 125,840       | 5,312            | 217,637           | 349,075    |
| Rideau.....             | 2                      | 50               | 5,117         | 667              | 10,645            | 16,481     |
| Trent.....              | 68                     | 25               | 405           | 1,002            | 843               | 2,348      |
| St. Andrews.....        | Nil                    | 3,391            | 54            | 7,913            | 2,356             | 13,714     |
| Totals, 1937.....       | 8,163,467              | 13,539           | 4,211,657     | 1,401,944        | 9,560,993         | 23,351,000 |

1 Includes 1,588,377 tons of miscellaneous freight.

20.—Principal Commodities Carried through Canadian Canals, navigation seasons 1934-37.

NOTE.—Figures include duplications where cargoes use two or more canals.

| Commodity.                           | 1934.      | 1935.      | 1936.      | 1937.      | Increase in 1937. | Decrease in 1937. |
|--------------------------------------|------------|------------|------------|------------|-------------------|-------------------|
|                                      | tons.      | tons.      | tons.      | tons.      | tons.             | tons.             |
| Barley.....                          | 420,838    | 396,659    | 494,500    | 755,081    | 260,581           | -                 |
| Corn.....                            | 295,459    | 346,094    | 381,248    | 1,823,211  | 1,441,903         | -                 |
| Oats.....                            | 271,253    | 315,340    | 317,507    | 258,269    | -                 | 59,288            |
| Rye.....                             | 320,685    | 179,326    | 112,487    | 245,119    | 132,632           | -                 |
| Flaxseed.....                        | 77,849     | 67,013     | 110,056    | 222,791    | 112,735           | -                 |
| Wheat.....                           | 4,011,651  | 4,089,058  | 5,444,009  | 4,119,842  | -                 | 1,324,067         |
| Other Grains.....                    | 132        | 88,470     | 114,954    | 73,106     | -                 | 41,345            |
| Flour.....                           | 704,135    | 716,602    | 773,152    | 597,823    | -                 | 175,329           |
| Hay.....                             | 5,192      | 2,950      | 4,794      | 3,225      | -                 | 1,499             |
| Other milled products.....           | 132,612    | 129,549    | 78,328     | 54,196     | -                 | 24,132            |
| Fruits and vegetables.....           | 2,938      | 5,930      | 3,902      | 5,441      | 1,539             | -                 |
| Potatoes.....                        | 7,169      | 6,934      | 2,871      | 5,283      | 2,392             | -                 |
| Poultry, game and fish.....          | 3,729      | 4,276      | 5,024      | 6,105      | 1,081             | -                 |
| Dressed meats.....                   | 415        | 376        | 2,105      | 97         | -                 | 2,008             |
| Other packing-house products.....    | 2,445      | 1,694      | 1,906      | 2,908      | 1,002             | -                 |
| All other animal products.....       | 7,393      | 7,995      | 4,820      | 4,429      | -                 | 391               |
| Agricultural implements.....         | 11,154     | 19,212     | 8,763      | 12,660     | 3,897             | -                 |
| Cement, bricks and lime.....         | 65,603     | 39,592     | 41,939     | 29,573     | -                 | 12,361            |
| Iron, pig and bloom.....             | 16,407     | 31,074     | 14,631     | 142,215    | 127,682           | -                 |
| Iron and steel, all other.....       | 208,860    | 222,404    | 291,913    | 338,843    | 46,930            | -                 |
| Gasoline.....                        | 852,530    | 956,766    | 1,038,855  | 1,139,041  | 49,156            | -                 |
| Petroleum and other oils.....        | 803,519    | 755,432    | 849,458    | 970,738    | 121,330           | -                 |
| Sugar.....                           | 332,234    | 322,167    | 308,308    | 256,485    | -                 | 51,823            |
| Salt.....                            | 68,358     | 78,040     | 74,127     | 102,767    | 28,640            | -                 |
| Wines, liquors and beer.....         | 16,950     | 19,941     | 16,161     | 15,447     | -                 | 714               |
| Paper.....                           | 322,692    | 387,400    | 406,828    | 515,668    | 108,840           | -                 |
| Wood-pulp.....                       | 570,074    | 780,090    | 799,192    | 606,836    | -                 | 192,356           |
| Automobiles and parts.....           | 53,479     | 68,361     | 59,033     | 81,731     | 22,698            | -                 |
| Pulpwood.....                        | 1,288,338  | 1,124,916  | 1,388,154  | 1,331,699  | -                 | 56,455            |
| Logs, posts, poles, piling.....      | -          | 25,727     | 32,992     | 6,903      | -                 | 26,029            |
| Firewood.....                        | 58,894     | 16,273     | 6,655      | 5,810      | -                 | 875               |
| Lumber mill and cooperage stock..... | -          | 47,432     | 60,707     | 55,779     | -                 | 4,928             |
| Other forest products.....           | 22,075     | 5,898      | 7,245      | 1,693      | -                 | 4,460             |
| Hard coal.....                       | 413,309    | 446,367    | 380,910    | 266,193    | -                 | 115,800           |
| Soft coal.....                       | 3,941,983  | 3,714,568  | 4,339,090  | 5,617,723  | 1,278,633         | -                 |
| Coke.....                            | 492,405    | 295,329    | 406,142    | 330,733    | -                 | 69,409            |
| Copper ore.....                      | 8,700      | 8,693      | 12,559     | 5,051      | -                 | 7,498             |
| Iron ore.....                        | 608,533    | 657,995    | 863,632    | 1,077,709  | 214,077           | -                 |
| Other ore.....                       | 80,316     | 98,452     | 214,876    | 215,227    | 351               | -                 |
| Sand, etc.....                       | 329,413    | 426,952    | 388,444    | 453,079    | 65,526            | -                 |
| All other freight.....               | 1,178,979  | 1,288,142  | 1,556,549  | 1,568,377  | 31,828            | -                 |
| Totals.....                          | 18,069,252 | 18,205,989 | 21,468,816 | 23,351,000 | 4,653,413         | 2,171,229         |

## 21.—Canal Traffic, by Direction and Origin, navigation seasons 1936 and 1937.

NOTE.—Figures include duplications where cargoes use two or more canals.

| Year and Canal.     | From Canadian to Canadian Ports. |                         | From Canadian to United States Ports. <sup>1</sup> |                             | From United States to United States Ports. <sup>1</sup> |  | From United States to Canadian Ports. <sup>1</sup> |                        |
|---------------------|----------------------------------|-------------------------|--|-----------------------------|---|--|--|------------------------|
|                     | Up.                              | Down.                   | Up.  | Down.                       | Up.   | Down.  | Up.  | Down.                  |
|                     | tons.                            | tons.                   | tons.  | tons.                       | tons.   | tons.  | tons.  | tons.                  |
| 1936.               |                                  |                         |  |                             |   |  |  |                        |
| Sault Ste. Marie... | 414,149                          | 1,256,693               | 63,272   | 342,472                     | 31,350  | 46,023                                       | 89,314   | 4,963                  |
| Welland Ship...     | 894,334                          | 3,122,607               | 1,292,245  | 72,215                      | 446,757   | 403,799                                      | 72,535 <sup>2</sup>                                | 4,132,256 <sup>2</sup> |
| St. Lawrence River  | 2,749,963                        | 3,009,262               | 1,306,028  | 77,655                      | 113,410   | 44,199                                       | 25,974   | 902,003                |
| Richelieu River...  | 27,392                           | 3,556                   | 36,225   | 134                         | Nil   | Nil  | Nil  | 11,924                 |
| St. Peters.....     | 10,816                           | 45,416                  | Nil  | 25                          | Nil   | Nil  | Nil  | Nil                    |
| Murray.....         | Nil                              | 1,011                   | Nil  | Nil                         | Nil   | Nil  | Nil  | 3,895                  |
| Ottawa River...     | 103,237                          | 138,842                 | Nil  | 18,872                      | Nil   | Nil  | 542  | Nil                    |
| Rideau.....         | 12,820                           | 2,784                   | Nil  | Nil                         | Nil   | Nil  | Nil  | Nil                    |
| Trent.....          | 23,303                           | 744                     | Nil  | Nil                         | Nil   | Nil  | Nil  | Nil                    |
| St. Andrews.....    | 18,941                           | 4,274                   | Nil  | Nil                         | Nil   | Nil  | Nil  | Nil                    |
| Totals, 1936.       | 4,255,455                        | 7,615,249               | 2,697,770  | 511,403                     | 591,517   | 494,616                                      | 188,363 <sup>2</sup>                               | 5,115,041 <sup>2</sup> |
| 1937.               |                                  |                         |  |                             |   |  |  |                        |
| Sault Ste. Marie... | 407,200                          | 880,547                 | 95,072   | 231,305                     | 36,528  | 40,597                                       | 77,092   | 51,588                 |
| Welland Ship...     | 993,645                          | 2,903,700               | 1,749,118  | 20,206                      | 243,037   | 400,035                                      | 26,129   | 5,321,080              |
| St. Lawrence River  | 3,144,516                        | 2,832,391               | 1,555,911  | 55,949                      | 67,145  | 41,333                                       | 12,841   | 1,455,348              |
| Richelieu River...  | 30,334                           | 2,046                   | 66,651   | Nil                         | Nil   | Nil  | Nil  | 24,718                 |
| St. Peters.....     | 14,193                           | 65,359                  | Nil  | 300                         | Nil   | Nil  | 100  | Nil                    |
| Murray.....         | 50                               | 100                     | Nil  | Nil                         | Nil   | Nil  | Nil  | 2,215                  |
| Ottawa River...     | 163,354                          | 145,222                 | Nil  | 41,023                      | Nil   | Nil  | 479  | Nil                    |
| Rideau.....         | 13,745                           | 2,736                   | Nil  | Nil                         | Nil   | Nil  | Nil  | Nil                    |
| Trent.....          | 1,653                            | 695                     | Nil  | Nil                         | Nil   | Nil  | Nil  | Nil                    |
| St. Andrews.....    | 9,420                            | 4,294                   | Nil  | Nil                         | Nil   | Nil  | Nil  | Nil                    |
| Totals, 1937.       | 4,777,110                        | 6,837,090               | 3,437,752  | 348,753                     | 446,713   | 481,967                                      | 116,641  | 6,884,944              |
| Year and Canal.     | Traffic by Direction.            |                         | Origins of Cargo.                                  |                             | Total Cargo.  | Increase(+) or Decrease(-) on Previous Year. |  |                        |
|                     | Up.                              | Down.                   | Canada.  | United States. <sup>1</sup> |   |  |  |                        |
|                     | tons.                            | tons.                   | tons.  | tons.                       | tons.   | tons.  |  |                        |
| 1936.               |                                  |                         |  |                             |   |  |  |                        |
| Sault Ste. Marie... | 598,065                          | 1,680,151               | 2,082,863  | 195,373                     | 2,278,236   | +346,189                                     |  |                        |
| Welland Ship...     | 2,705,871 <sup>2</sup>           | 7,730,392 <sup>2</sup>  | 4,840,621  | 5,596,182                   | 10,436,803  | +1,483,420                                   |  |                        |
| St. Lawrence River  | 4,195,375                        | 4,093,149               | 6,098,406  | 2,190,118                   | 8,288,524   | +1,414,869                                   |  |                        |
| Richelieu River...  | 64,117                           | 15,614                  | 67,807   | 11,624                      | 79,731  | +35,512                                      |  |                        |
| St. Peters.....     | 10,816                           | 45,441                  | 56,257   | Nil                         | 56,257  | +1,665                                       |  |                        |
| Murray.....         | Nil                              | 4,906                   | 1,011  | 3,895                       | 4,906   | -15  |  |                        |
| Ottawa River...     | 103,779                          | 157,714                 | 255,629  | 5,864                       | 261,493   | -28,093                                      |  |                        |
| Rideau.....         | 12,820                           | 2,784                   | 15,604   | Nil                         | 15,604  | -4,322                                       |  |                        |
| Trent.....          | 23,303                           | 744                     | 24,047   | Nil                         | 24,047  | +9,890                                       |  |                        |
| St. Andrews.....    | 18,941                           | 4,274                   | 23,215   | Nil                         | 23,215  | +4,152                                       |  |                        |
| Totals, 1936.       | 7,733,107 <sup>2</sup>           | 13,735,709 <sup>2</sup> | 13,465,460   | 8,003,356                   | 21,468,816  | +3,262,827                                   |  |                        |
| 1937.               |                                  |                         |  |                             |   |  |  |                        |
| Sault Ste. Marie... | 615,892                          | 1,204,037               | 1,548,049  | 271,880                     | 1,819,929   | -458,307                                     |  |                        |
| Welland Ship...     | 3,102,929                        | 8,645,021               | 4,210,760  | 7,537,190                   | 11,747,950  | +1,311,147                                   |  |                        |
| St. Lawrence River  | 4,780,416                        | 4,415,023               | 5,604,202  | 3,591,237                   | 9,195,439   | +906,915                                     |  |                        |
| Richelieu River...  | 96,985                           | 26,759                  | 99,031   | 24,713                      | 123,744   | +44,013                                      |  |                        |
| St. Peters.....     | 14,293                           | 65,695                  | 79,852   | 100                         | 79,952  | +23,095                                      |  |                        |
| Murray.....         | 50                               | 2,315                   | 150  | 2,215                       | 2,365   | -2,541                                       |  |                        |
| Ottawa River...     | 162,833                          | 186,245                 | 336,054  | 12,434                      | 349,078   | +87,538                                      |  |                        |
| Rideau.....         | 13,745                           | 2,736                   | 16,451   | Nil                         | 16,451  | +577   |  |                        |
| Trent.....          | 1,653                            | 695                     | 2,348  | Nil                         | 2,348   | -21,699                                      |  |                        |
| St. Andrews.....    | 9,420                            | 4,294                   | 13,714   | Nil                         | 13,714  | -9,501                                       |  |                        |
| Totals, 1937.       | 8,798,216                        | 14,552,784              | 11,911,241   | 11,439,759                  | 23,351,000  | +1,382,184                                   |  |                        |

<sup>1</sup> Includes a small percentage of ports of other foreign countries.<sup>2</sup> Revised since the publication of the 1937 Year Book.

The canal traffic figures in the foregoing Tables, 18 to 21, include duplications where the same freight passes through two or more canals. Table 22 below eliminates most of this duplication for the St. Lawrence-Great Lakes system. Even in this analysis, however, grain traffic originating at Lake Superior ports and transhipped from Upper Lake to smaller boats at Port Colborne or other points on lakes Erie or Huron, is really a duplication although not appearing as such and is shown separately and deducted in the table. The elimination of duplications for Canadian canals only, is not feasible because both Canadian and United States vessels use the locks on both sides of the river at Sault Ste. Marie without the payment of tolls or other restrictions.

**22.—Freight Traffic Using the St. Lawrence River, Welland Ship, and Sault Ste. Marie Canals, navigation season of 1937.**

NOTE.—Excluding duplications.

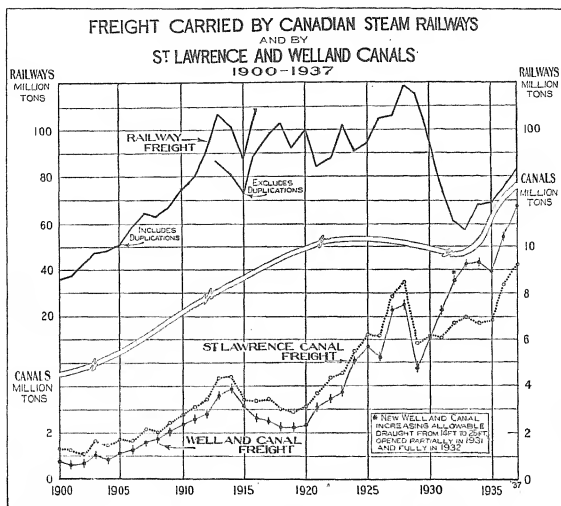
| Canals Used.  | Up-Bound Freight. | Down-Bound Freight. | Total.             |
|---|-------------------|---------------------|--------------------|
|   | tons.             | tons.               | tons.              |
| St. Lawrence River only.....  | 2,972,622         | 1,550,416           | 4,523,038          |
| St. Lawrence River and Welland Ship.....                                  | 1,907,087         | 2,801,327           | 4,299,014          |
| St. Lawrence River, Welland Ship, and Sault Ste. Marie <sup>1</sup> ..... | 229,091           | 587,705             | 816,796            |
| Welland Ship only.....  | 726,190           | 4,254,502           | 4,980,692          |
| Welland Ship, and Sault Ste. Marie <sup>1</sup> .....                     | 149,961           | 1,501,488           | 1,651,449          |
| Sault Ste. Marie <sup>1</sup> only.....                                   | 15,123,244        | 70,045,133          | 85,168,377         |
| <b>Totals.....</b>  | <b>21,198,795</b> | <b>80,240,871</b>   | <b>101,439,666</b> |
| Deduct grain transhipped at Port Colborne and Buffalo.....                | -                 | 1,315,754           | 1,315,754          |
| <b>Totals.....</b>  | <b>21,198,795</b> | <b>78,924,817</b>   | <b>100,123,612</b> |

<sup>1</sup> Includes both Canadian and United States canals at Sault Ste. Marie.

**The Panama Canal.\***—The Panama canal, which was opened to commercial traffic on Aug. 15, 1914, is a waterway which is destined to be of the greatest importance to the British Columbian ports, from which vessels now leave direct for Great Britain and European ports throughout the year. As an alternative route to that of the transcontinental railway lines, such a passage by water is of vital importance in the solution of the larger transportation problems of the continent, and while its influence is perhaps more potential than actual, such a check on transcontinental rail rates is a valuable one. During the War the great expectations based upon the opening of the canal were not realized, owing to the scarcity of shipping, but, with the post-war decline in ocean freight rates, an increase in traffic between our Pacific ports and Europe has taken place, and, while the proportion carried in vessels of Canadian registry is comparatively small, the cargo tonnage has nevertheless assumed considerable proportions.

Table 23 shows the amount of traffic originating in or destined for Canada carried through the canal. The greater importance of the route as one from Pacific to Atlantic ports is illustrated by the much larger volume of freight originating at western ports than at eastern ports, and the larger volume destined for eastern than for western Canadian ports. Strictly inter-coastal Canadian cargo during the latest year aggregated 119,939 long tons as compared with 119,577 long tons in 1936.

\*Revised, and figures supplied, by courtesy of the Governor of the Panama Canal Zone.



**23.—Traffic to and from the East and West Coasts of Canada via the Panama Canal, years ended June 30, 1921-37.**

| Year ended June 30— | Originating on—     |                     | Destined for—       |                     |
|---------------------|---------------------|---------------------|---------------------|---------------------|
|                     | Canada, West Coast. | Canada, East Coast. | Canada, West Coast. | Canada, East Coast. |
|                     | long tons.          | long tons.          | long tons.          | long tons.          |
| 1921.....           | 125,638             | 39,561              | 126,414             | 16,558              |
| 1922.....           | 180,981             | 25,174              | 148,305             | 6,521               |
| 1923.....           | 604,546             | 92,939              | 101,588             | 125,283             |
| 1924.....           | 1,223,102           | 110,677             | 141,086             | 197,204             |
| 1925.....           | 1,082,282           | 121,803             | 158,709             | 379,284             |
| 1926.....           | 1,650,855           | 160,196             | 103,295             | 614,580             |
| 1927.....           | 1,548,783           | 207,063             | 248,009             | 803,418             |
| 1928.....           | 2,846,675           | 103,287             | 268,900             | 394,173             |
| 1929.....           | 2,650,646           | 231,128             | 266,433             | 530,767             |
| 1930.....           | 1,968,966           | 185,776             | 267,282             | 556,592             |
| 1931.....           | 2,307,257           | 137,756             | 271,621             | 492,532             |
| 1932.....           | 2,383,211           | 89,443              | 167,855             | 529,317             |
| 1933.....           | 2,896,162           | 121,875             | 134,511             | 328,038             |
| 1934.....           | 2,201,180           | 106,204             | 189,227             | 498,706             |
| 1935.....           | 2,490,203           | 248,668             | 176,668             | 547,074             |
| 1936.....           | 2,705,567           | 298,884             | 223,174             | 500,073             |
| 1937.....           | 2,780,243           | 379,783             | 240,221             | 589,011             |



With respect to total traffic through the canal by nationality of vessels and cargo carried, vessels of United States registration carried 9,844,254 tons, or 35.0 p.c. of the total cargo of 28,108,375 loaded through in the fiscal year ended June 30, 1937. British vessels carried 7,179,136 tons, or 25.5 p.c.; Norwegian vessels 3,506,109 tons, or 12.5 p.c.; Japanese vessels 1,789,178 tons, or 6.4 p.c.; and German vessels 1,496,084 tons, or 5.3 p.c.

**24.—Summary of Commercial Traffic through the Panama Canal, years ended June 30, 1915-37.**

| Year ended June 30— | Atlantic to Pacific. |                | Pacific to Atlantic. |                | Total Traffic. |                |
|---------------------|----------------------|----------------|----------------------|----------------|----------------|----------------|
|                     | Vessels.             | Cargo Tonnage. | Vessels.             | Cargo Tonnage. | Vessels.       | Cargo Tonnage. |
|                     | No.                  | long tons.     | No.                  | long tons.     | No.            | long tons.     |
| 1915.....           | 512                  | 2,070,939      | 546                  | 2,817,461      | 1,058          | 4,888,400      |
| 1916.....           | 376                  | 1,369,018      | 348                  | 1,724,317      | 724            | 3,093,335      |
| 1917.....           | 844                  | 2,928,470      | 894                  | 4,126,260      | 1,738          | 7,054,720      |
| 1918.....           | 877                  | 2,638,116      | 1,112                | 4,887,652      | 1,989          | 7,525,768      |
| 1919.....           | 819                  | 2,787,321      | 1,129                | 4,172,776      | 1,948          | 6,910,097      |
| 1920.....           | 1,130                | 4,001,964      | 1,263                | 5,280,410      | 2,393          | 9,372,374      |
| 1921.....           | 1,417                | 5,891,009      | 1,374                | 5,704,962      | 2,791          | 11,595,971     |
| 1922.....           | 1,469                | 5,495,164      | 1,196                | 5,387,443      | 2,665          | 10,882,607     |
| 1923.....           | 2,090                | 7,085,965      | 1,818                | 12,480,404     | 3,908          | 19,566,429     |
| 1924.....           | 2,697                | 7,858,909      | 2,461                | 19,134,198     | 5,158          | 26,993,107     |
| 1925.....           | 2,364                | 7,397,159      | 2,228                | 16,559,390     | 4,592          | 23,956,549     |
| 1926.....           | 2,698                | 8,034,593      | 2,389                | 17,996,423     | 5,087          | 26,030,016     |
| 1927.....           | 2,805                | 8,576,474      | 2,488                | 19,137,081     | 5,293          | 27,733,555     |
| 1928.....           | 3,284                | 8,303,344      | 2,969                | 21,312,307     | 6,253          | 29,615,651     |
| 1929.....           | 3,279                | 9,873,529      | 3,010                | 20,774,239     | 6,289          | 30,647,768     |
| 1930.....           | 3,051                | 9,472,061      | 2,976                | 20,546,368     | 6,027          | 30,018,429     |
| 1931.....           | 2,717                | 6,070,718      | 2,653                | 18,394,565     | 5,370          | 25,065,283     |
| 1932.....           | 2,273                | 5,631,717      | 2,089                | 14,167,269     | 4,362          | 19,798,986     |
| 1933.....           | 2,184                | 4,507,070      | 1,978                | 13,654,095     | 4,162          | 18,161,165     |
| 1934.....           | 2,753                | 6,162,649      | 2,481                | 18,541,360     | 5,234          | 24,704,009     |
| 1935.....           | 2,676                | 7,529,721      | 2,504                | 17,779,806     | 5,180          | 25,309,527     |
| 1936.....           | 2,770                | 8,249,899      | 2,612                | 18,250,044     | 5,382          | 26,505,943     |
| 1937.....           | 2,865                | 9,895,632      | 2,522                | 18,212,743     | 5,387          | 28,108,375     |

**Subsection 3.—Harbour Traffic.**

The freight movement through a large port takes a number of different forms. The overseas movement, *i.e.*, the freight loaded into or unloaded from sea-going vessels, frequently constitutes a surprisingly small part of the total. Usually the volume coming in and going out by coastwise vessels is larger. Then there is the 'in transit' movement in vessels which pass through the harbour without loading or unloading. Finally there is the movement from one point to another within the harbour, which in many ports amounts to a larger total than any of the other activities. With the consolidation of administrative activities in the Department of Transport, and the control of many of the leading ports in the National Harbours Board, traffic statistics for the seven harbours so administered are now obtainable from the Annual Reports of the Board. These harbours are Halifax, Saint John, Chicoutimi, Quebec, Three Rivers, Montreal, and Vancouver. There still exist divergencies of classification that render it difficult to compile a statement covering the total traffic for these seven harbours, and it is at present not possible to include the traffic of other ports not administered by the Board. Marked progress is noticeable since the Board was organized, however, and comparable basic summary statistics, even if not altogether comprehensive, will no doubt be evolved in the course of time.

## PART V.—AIR NAVIGATION.\*

Aircraft furnish a rapid and convenient means of transportation for passengers and supplies to remote and unsettled areas. The use of aircraft has made it possible to obtain accurate information for the development and conservation of natural resources in parts of Canada that would otherwise have been practically inaccessible. Air-mail and air-transportation lines and commercial services are increasing steadily in number and in the scope of their operations and usefulness.

The treatment of air navigation in this part of the Year Book is confined to civil aviation; the military activities and organizations are dealt with under National Defence (see "Air Service" in the Index). The subject is introduced with a section dealing with the history and administrative control of civil aviation and this is followed by sections on facilities and equipment, finances and employees, and traffic, along the lines of the treatment adopted in this chapter for other forms of transportation.

The collection and compilation of statistics of civil aviation was transferred from the Branch of the Controller of Civil Aviation to the Bureau of Statistics in 1936. To preserve continuity with aviation statistics published in previous Year Books, a statistical summary of civil aviation for the years 1932 to 1937 is given below in Table 1. The statistics collected since 1936 have been somewhat enlarged and consequently no comparisons with similar data for previous years can be made for items appearing in other tables of this Part.

\*Descriptive and administrative information has been prepared from material supplied by J. A. Wilson, Controller of Civil Aviation, Department of Transport, while statistics have been compiled by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics.

## 1.—Statistical Summary of Civil Aviation in Canada, 1932-37.

NOTE.—Figures for 1921-23 may be found at p. 616 of the 1924 edition of the Year Book, for 1924-29 at p. 661 of the 1930 edition, and for 1930 and 1931 at p. 698 of the 1936 Year Book. Dashes in this table indicate that no information was reported under the corresponding head for those years.

| Item.   | 1932.     | 1933.     | 1934.      | 1935.                  | 1936.                   | 1937.                   |
|---|-----------|-----------|------------|------------------------|-------------------------|-------------------------|
|   | No.       | No.       | No.        | No.                    | No.                     | No.                     |
| <b>General Analysis.</b>                                  |           |           |            |                        |                         |                         |
| Firms manufacturing aircraft.....                         | 7         | 7         | 6          | 10                     | 7                       | 9                       |
| Firms chiefly operating aircraft.....                     | 73        | 87        | 125        | 123                    | 116                     | 162                     |
| Firms using aircraft as auxiliary service.                | 4         | 3         | 3          | 7                      | 12                      | 10                      |
| Aircraft flights made.....                                | 102,219   | 106,252   | 128,031    | 153,211                | 160,014                 | 202,534                 |
| Aircraft hours flown.....                                 | 56,170    | 53,299    | 75,871     | 88,451                 | 101,935                 | 126,550                 |
| Total aircraft mileage.....                               | 4,569,131 | 4,538,315 | 6,497,637  | 7,522,102              | 7,803,042               | 10,026,030              |
| Average flight duration (minutes).....                    | 33        | 30        | 36         | 34                     | 38                      | 37                      |
| Pilots carried.....                                       | 102,219   | 106,252   | 128,031    | 173,211 <sup>1</sup>   | 132,096 <sup>1</sup>    | 200,930 <sup>1</sup>    |
| Passengers and crew carried.....                          | 76,800    | 85,006    | 106,306    | 157,472 <sup>2</sup>   | 118,660 <sup>2</sup>    | 160,517 <sup>2</sup>    |
| Total personnel carried.....                              | 179,019   | 191,258   | 233,337    | 330,683                | 250,756                 | 361,447                 |
| Pilots carried one mile (pilot miles).....                | 4,569,131 | 4,538,315 | 6,497,637  | 7,522,102 <sup>1</sup> | 9,753,690 <sup>1</sup>  | 14,179,486 <sup>1</sup> |
| Passengers and crew carried 1 mile (passenger miles)..... | 2,869,799 | 3,816,862 | 6,266,475  | 7,936,950 <sup>2</sup> | 10,105,936 <sup>2</sup> | 14,690,872 <sup>2</sup> |
| Total personnel carried 1 mile (personnel miles).....     | 7,438,930 | 8,355,177 | 12,764,112 | 15,459,052             | 19,859,626              | 28,870,358              |
| Total freight or express carried (lb.).....               | 3,129,974 | 4,205,901 | 14,441,179 | 17,615,910             | 25,387,719              | 26,205,766              |
| Total mail carried (lb.).....                             | 413,687   | 539,358   | 625,040    | 1,120,084              | 1,161,069               | 1,411,213 <sup>3</sup>  |
| <b>Licensed Civil Air Harbours.</b>                       |           |           |            |                        |                         |                         |
| Total air harbours (all types).....                       | 83        | 90        | 101        | 96                     | 155                     | 155                     |

For footnotes see end of table, p. 710.

## 1.—Statistical Summary of Civil Aviation in Canada, 1932-37—concluded.

| Item.                                       | 1932. | 1933. | 1934. | 1935. | 1936. | 1937. |
|---|-------|-------|-------|-------|-------|-------|
|   | No.   | No.   | No.   | No.   | No.   | No.   |
| <b>Licensed Civil Aircraft.<sup>1</sup></b> |       |       |       |       |       |       |
| Total aircraft (all types)—                 |       |       |       |       |       |       |
| Gross weight—                               |       |       |       |       |       |       |
| Up to 2,000 lb.....                         | 410   | 331   | —     | —     | —     | 316   |
| 2,001-4,000 lb.....                         | —     | 1     | —     | —     | —     | 132   |
| 4,001-10,000 lb.....                        | 1     | —     | —     | —     | —     | 147   |
| Over 10,000 lb.....                         | —     | —     | —     | —     | 5     | 9     |
| Type—                                       |       |       |       |       |       |       |
| Sea boats.....                              | 416   | 331   | —     | —     | —     | 32    |
| Amphibians.....                             | 26    | 12    | —     | —     | —     | 1     |
| Land planes.....                            | 2     | 1     | —     | —     | —     | 322   |
| Convertible.....                            | 445   | 345   | 368   | 380   | 450   | 249   |
| <b>Licensed Civil Air Personnel.</b>        |       |       |       |       |       |       |
| Commercial pilots.....                      | 5     | 474   | 405   | 414   | 380   | 320   |
| Limited commercial pilots.....              | 6     | 6     | 6     | 6     | 65    | 129   |
| Transport pilots.....                       | 6     | 6     | 6     | 6     | 42    | 73    |
| Private pilots.....                         | 5     | 405   | 429   | 406   | 550   | 625   |
| Air engineers.....                          | 5     | 403   | 461   | 472   | 533   | 595   |
| Unlicensed air mechanics employed.....      | 52    | 60    | 61    | 318   | 55    | 90    |

<sup>1</sup> Crews for 1935-37.<sup>2</sup> Passengers for 1935-37.<sup>3</sup> Canadian postal contracts, 1,323,584 lb.<sup>4</sup> Details of licensed aircraft for 1937 are given in Table 2.<sup>5</sup> The basis of classification was changed in 1935 and is now shown from 1933 onward. Figures on the old basis for 1929-34 will be found at p. 746 of the 1934-35 edition of the Year Book.<sup>6</sup> This class did not exist prior to 1930.

## 2.—Licensed Civil Aircraft in Canada, Dec. 31, 1937.

NOTE.—Dashes in this table indicate that no information was reported under the corresponding head for those years.

| Aircraft.                        | Dominion and Provincial. | Private.   | Flying Clubs. | Commercial. | Total.     |
|----------------------------------|--------------------------|------------|---------------|-------------|------------|
|                                  | No.                      | No.        | No.           | No.         | No.        |
| <b>GROSS WEIGHT.<sup>1</sup></b> |                          |            |               |             |            |
| Up to 2,000 lb.....              | 39                       | 95         | 71            | 111         | 316        |
| 2,001 to 4,000 lb.....           | 21                       | 16         | —             | 95          | 132        |
| 4,001 to 10,000 lb.....          | 17                       | 3          | —             | 127         | 147        |
| Over 10,000 lb.....              | —                        | —          | —             | 9           | 9          |
| <b>Totals.....</b>               | <b>77</b>                | <b>114</b> | <b>71</b>     | <b>342</b>  | <b>604</b> |
| <b>TYPE.</b>                     |                          |            |               |             |            |
| Sea boats.....                   | 25                       | 1          | 1             | 5           | 32         |
| Amphibians.....                  | 1                        | —          | —             | —           | 1          |
| Land planes.....                 | 34                       | 99         | 68            | 121         | 322        |
| Convertible <sup>2</sup> .....   | 17                       | 14         | 2             | 216         | 249        |
| <b>Totals.....</b>               | <b>77</b>                | <b>114</b> | <b>71</b>     | <b>342</b>  | <b>604</b> |

<sup>1</sup> Total weight of aircraft with supplies and full load.  
skis as conditions demand.<sup>2</sup> May be equipped with wheels, floats or

## Section 1.—History and Administration.

## Subsection 1.—Development of Aviation in Canada.

**Historical Sketch.**—About the turn of the century Mr. W. R. Turnbull, who may be termed the "father of aeronautical research in Canada", was experimenting with aerofoils and propellers at Rothesay, New Brunswick, where, in 1902, he set up the first small wind tunnel in Canada. He discovered the laws of the centre of pressure movement on aerofoils, and made deductions from these laws which explained the longitudinal stability of aeroplanes. He also propounded the static laws of air propellers and in later years evolved and developed the controllable-pitch propeller.

At the time that Mr. Turnbull was beginning his work, Dr. Graham Bell was experimenting with kites and air-screws in laboratories at his summer home at

Baddeck, Cape Breton island. The "Aerial Experiment Association", formed in 1907, consisted of Dr. Bell, J. A. D. McCurdy and F. W. Baldwin, two young Canadian engineering graduates, Glen Curtiss, a motor-cycle engine builder from New York State, and Lieut. Selfridge, on leave from the United States army. As a result of the work of these associates, the first flight in Canada was made at Baddeck on Dec. 7, 1907, in the *Cygnet*, a tetrahedral kite, which was towed by a steam tug. On Feb. 23, 1909, McCurdy's aeroplane, the *Silver Dart*, was taken out for tests on the ice at Baddeck. With its designer as pilot and under its own power, it flew for half a mile, rising thirty feet above the ice. This was the first aeroplane flight by a British subject. The *Silver Dart* was an advance on any aircraft previously flown, notable features being a three-wheel undercarriage, tapered wings, and the use of aileron controls.

Progress was rapid throughout the civilized world in the development and design of heavier-than-air flying craft from 1908 to the outbreak of the War, and this progress was accelerated during the War by the intensity of competition for superiority in the air, and by the wide field for experiment which the war activities provided. Officially, Canada took little part in these developments. However, many young Canadians entered the flying service of Britain and, to facilitate their recruitment and preparation, training units were established in Canada. To provide the aircraft for training purposes, Canadian Aeroplanes, Limited, was organized by the Imperial Munitions Board and, by the end of the War no less than 2,900 planes had been built by this industry. In the latter part of the War, owing to the extension of submarine raiding to the Atlantic coast of America, a Royal Canadian Naval Air Service was organized to patrol the coasts of the Maritime Provinces and the gulf of St. Lawrence. Bases were established at Halifax and Sydney, and patrols inaugurated on Aug. 25, 1918.

At the end of the War thousands of young men with training and experience in the British flying services returned to Canada, full of enthusiasm for aviation, and seeking an opportunity to apply their new knowledge to peace-time developments. At the same time, governments were disposing of their surplus stocks of planes at bargain prices. Action was necessary to supervise and control aviation in Canada. The Air Board was appointed in June, 1919, with authority for the full regulation of civil aeronautics. Branches were organized to deal with licensing of aircraft and personnel, to conduct operations for other Government services, and to provide technical services.

The immediate post-war circumstances of a large number of trained pilots and many surplus aircraft resulted in great activity in flying. However, much of this was in the form of exhibition flying, joy-riding and flying instruction. Patronage of these activities soon waned as the novelty of flying wore off among the general public. However, the foundations for real progress were laid by a few more far-sighted men who sought to apply the facilities of aircraft to real practical purposes in forest reconnaissance, surveying, and transportation in inaccessible areas of country. In the summer of 1919 successful flights were made for forest protection and survey work at Lac à la Tortue in Quebec. In the summers of 1920 and 1921 bases were established by the Air Board, with provincial co-operation, at various points across Canada from which forest patrols and survey work were carried on. In addition some large corporations, such as the Laurentide Company and Price Brothers, established their own air services for forest patrol, surveys and transportation. The discovery of crude oil at Fort Norman on the Mackenzie river in the fall of 1921 led to the first large-scale attempt to establish air transportation in the far north by the Imperial Oil Company. As a result of the development of mining activity at Rouyn

in northwestern Quebec, the first regular freight and passenger air transport service was inaugurated in 1924 by the Laurentide Air Services, Limited.

From these beginnings the expansion has been rapid. The speed and ease of air transport played a very important part in the expansion of mining activity during recent years throughout many areas of the Canadian Shield. Aircraft have been regularly used all across Canada for forest sketching, patrol and fire suppression, while very large areas have been mapped each year by aerial photography. The basic reasons for this progress of flying in the north country are simple. The only alternative means of transportation in many cases—the canoe in summer and the dog team in winter—are arduous, tedious, very costly, and slow for long distances. Furthermore, the lakes which dot the country everywhere provided from the first readily available landing places for aircraft equipped with floats in summer and with skis in winter. The flying could all be done in daylight hours and trips could generally be postponed if weather conditions were unfavourable. As a result commercial flying throughout the north country has been able to supply a very real economic service and to show substantial progress without governmental subsidies of any kind, while numerous governmental functions are being carried out with increased efficiency and economy through the aid of flying.

The situation was wholly different in the older settled parts of Canada. Here other forms of dependable and efficient transportation were already in existence and in some phases over-developed. The only advantage flying could offer was a saving of time, and to effect this an elaborate system of ground facilities was necessary. On account of the expense entailed, the development of inter-city air transportation was left in abeyance at first until progress elsewhere would give a clearer indication of its success and value. However, the success of inter-city air services in Europe and the steady growth of the United States airway system led to a reconsideration of Canada's position in 1927. As a step in establishing a chain of airports across Canada and also to provide for the training of personnel, the flying-club movement was started with the offer of government grants and gifts of aircraft. Twenty-three flying clubs were established in the principal cities of Canada in 1928 and 1929. Aerodromes established by municipalities or by these flying clubs formed the nucleus for the Trans-Canada airway, the Dominion Government having to provide intermediate landing fields, especially through the Rocky mountains and across northern Ontario, and the weather-reporting, lighting, and radio services. (See pp. 713-714.)

Mention has already been made of the administration of aviation under the Air Board immediately after the War. At the beginning of 1923, in the unification of the defence forces under the Department of National Defence, the Air Board was abolished and the administration of aviation was placed under the new Department. At this period when both military and civil flying services were small and in the early stages of their development, the advantages of combining their administration in one department were manifest. However, the two functions inevitably developed along different lines, these differences applying both to types of aircraft and to training of personnel. With the growth of both military and civil flying, their administration in one department became less convenient and stability in the administration of aviation in the Dominion was finally reached in the autumn of 1936 by the complete separation of the military and civil functions, the latter being transferred to the new Department of Transport. Civil aviation has now become so important a part of the transportation facilities of Canada that it can best be administered by the Department which deals with railway, shipping, and highway services, to which aviation is complementary.

## THE TRANS-CANADA AIRWAY.

**Modern Airway Facilities.**—The term 'airway' may be defined as the path of flight between two terminal airports on which have been installed permanent aids to air navigation. In North America a standard system of aids to air navigation has gradually been evolved. This is being closely adhered to in the construction and equipment of the Trans-Canada airway, and some of the most important characteristics should be mentioned. Essential features are efficient weather and radio services. Terminal airports, *i.e.*, those where regular stops are made, should be all-weather and all-weather fields, having three or more hard-surfaced runways, at least 3,000 feet in length, fully lighted with electric airway beacons, floodlights, boundary lighting systems to define the runways, range and approach lights to indicate the path of flight to the paved landing strips, and obstruction lights to define obstacles that might interfere with the clear approach to the airport. At a distance of about three miles there should be a radio-beam station, by means of which the pilot is guided along the airway and brought directly over the airport at the proper altitude for landing.

A meteorological service is essential on every main airport. By means of two-way radio, aeroplanes in flight are given, every thirty minutes, the latest information on the weather, are controlled during their flight, given full information as to other aeroplanes flying in their vicinity, and advised when to land.

Present practice requires radio-beam and two-way communication stations along the airway at intervals of about 100 miles between the terminal airports. Adjacent to these and directly in the path of flight secondary aerodromes are constructed. These are not necessarily stopping points but they afford a safe landing in case of need. The number of such additional intermediate aerodromes considered necessary for safety varies with the type of country. In open, settled, farm lands, where there are no mountains and where the weather is normally fine, they may be dispensed with altogether or spaced at intervals of about fifty miles between the major airports. Owing to the nature of the climate and the difficult physical character of the terrain in the Rocky Mountain region and northern Ontario, where there are absolutely no alternative emergency landing places, the spacing averages about thirty miles. The Trans-Canada Airway when finally completed will consist of a chain of airports from 30 to 50 miles apart reaching from Halifax to Vancouver with 'feeder' lines at branches from larger cities on the main airway to neighbouring cities in the United States and into the Canadian North.

**Major Divisions of the Trans-Canada Airway.**—Natural conditions divide the Trans-Canada airway into four distinct regions—the Mountain region, from the Pacific coast to the foothills in Alberta; the Prairie region, stretching from the foothills to the Ontario boundary; the Laurentian area, extending through western Ontario as far as the Ottawa valley; and the Atlantic section, which takes in the settled areas in the basin of the Great Lakes, the Eastern Townships of Quebec, and the Maritimes.

The Prairie region obviously presented the simplest construction and operating problems. There, precipitation is light, visibility normally good, contour changes are gradual, and aerodrome sites requiring little development were obtainable everywhere. Airway surveys commenced on the prairie section in the summer of 1928, and aerodrome construction and lighting installation followed. By the end of 1929, a chain of lighted aerodromes from Winnipeg to Edmonton *via* Regina and Calgary had been prepared and a contract for the carriage of mails had been let to Canadian Airways by the Post Office Department. Actual flying operations started on Mar.

1, 1930, with the operation of a nightly service each way. Five radio-beam stations, constructed in 1931, increased the efficiency of the airway materially. This service continued in regular operation with satisfactory results till Mar. 31, 1932, when, for reasons of economy in all services, it was temporarily suspended. Although the operation of the trans-prairie service was stopped, the airway surveys then in hand in the mountains and in northern Ontario, Quebec, and the Maritime Provinces were continued with a view to the eventual completion of the system from coast to coast.

**Progress of the Airway.**—Preliminary development on practically all aerodromes west of Montreal is now completed and while further construction work is required on some of the key airports to bring them up to the high standard of construction required, the route may now be flown safely in daylight hours. The installation of the radio-beam and two-way radio systems is proceeding as deliveries of equipment can be obtained. The lighting program is also well in hand.

Regular operations from Vancouver to Winnipeg—the western half of the airway—were possible at the end of 1937, and the airway should be in shape for regular operation at all seasons of the year, both night and day, from Vancouver to Montreal by mid-summer, 1938. The Atlantic section, east of Montreal, is not so far advanced but by the close of another construction season this too should be ready for regular operation.

An Act creating a national operating company—Trans-Canada Air Lines—for the operation of the Trans-Canada system was passed by Parliament in 1937. Time is required to build up such an organization but already it is operating the Seattle-Vancouver air-mail service and using this service as a training ground. As aircraft now on order are delivered, Trans-Canada Air Lines will extend its operations until they include the whole system from coast to coast.

The increase in landing speed and the introduction of night and all-weather flying necessitate larger airports, with longer clear approaches and improved surfaces. Airports which were adequate five years ago no longer suffice. The Department of Transport is co-operating with the municipal authorities in all parts of the country to provide air terminals of the required standard and is giving generous assistance so that first-rate airports may be available at all the principal traffic centres.

#### TRANS-ATLANTIC AIR SERVICE.

The past decade has witnessed the creation of a world-wide system of communications by air. European air lines cover that continent with a network connecting all the principal centres and stretching out to the farthest confines of Africa, Asia, and Australasia. In North America, the United States airway system provides a similar network and has been extended to give rapid means of transportation to all points in Central and South America. The Pacific ocean has been spanned and South America connected with Europe. The only major trade route not yet regularly served by aircraft is the North Atlantic. This trade route is perhaps the most important in the world. It joins the greatest centres of population and industry of the Old and New Worlds. It is served by the most highly efficient transport and communication systems in the world and here, if anywhere, is to be found traffic of sufficient value and quantity to justify the establishment of a commercial air service. The great circle track, or shortest route joining these two great industrial districts, passes down the Rhine Valley, through northern France and Belgium, London, northern Ireland, the Straits of Belle Isle, Montreal, the valley of the St. Lawrence and thence to the Mississippi basin. The eastern and western terminals of the direct

Trans-Atlantic airway lie in the British Commonwealth and from the earliest days of aviation the Canadian Government has watched its development with growing interest. The length of the ocean crossing and the climatic difficulties have delayed the establishment of any regular service by this route, but, with the advance of aeronautical and radio science and meteorological services, these are being conquered.

At the invitation of the Government of Newfoundland, representatives of the Canadian and United Kingdom Governments visited St. John's, Newfoundland, in July, 1933, for a conference on trans-Atlantic flying. This conference was also attended by representatives of Imperial Airways and Pan American Airways. The result of this conference was close co-operation between the three Governments in certain preliminary surveys and meteorological studies.

An agreement for co-operation in the establishment of the Trans-Atlantic air service by the Governments of Canada, the United Kingdom, the Irish Free State, and Newfoundland was reached by representatives of these Governments in Ottawa in December, 1935. Since the friendly co-operation of United States interests, rather than the institution of a rival service, was highly desirable, at the close of the Ottawa Conference in December, 1935, the representatives of the Commonwealth Governments proceeded to Washington and an agreement was reached with representatives of the United States Government for their co-operation in the institution of a regular transatlantic air-mail, passenger, and express service. The practical results of these two conferences were the trial flights made by aircraft of Imperial Airways and Pan American Airways during the summer of 1937. Flying boats were used by both companies, Imperial Airways operating two of the new 'Empire' type, high wing monoplane boats, while Pan American Airways used the 'Clipper' flying boat, a type which had been successfully flown on their trans-Pacific service. The success of these trial flights inspires confidence that, in a relatively short time, commercial transatlantic services will be in operation.

Canada's share in the trial flights has been confined so far to the provision of seaplane bases, meteorological and radio services in Canada and, as regards the two services last named, in Newfoundland as well. Under the Ottawa Agreement, when the trial flights justify the establishment of a regular service, a joint operating company will be formed by Imperial Airways, Trans-Canada Air Lines and a company nominated by the Irish Free State for the permanent operation of the route. Negotiations are now proceeding between the three companies for the establishment at an early date of such a joint operating company.

### Subsection 2.—Administration.

Civil aviation, previously administered by the Department of National Defence, is now a function of the Department of Transport, created in November, 1936.

The administrative duties under the Controller of Civil Aviation include the inspection and registration of aircraft and air harbours, the licensing of commercial and private air pilots, air engineers and air navigators. In addition to these duties, the location and construction of air routes and any matters connected with airship services are administered in this Branch.

**Provincial Government Operations.**—The Ontario Provincial Air Service owns 25 aircraft, which are operated by the province in the work of forest fire protection, transportation, air photography and sketching in northern Ontario. The Manitoba Government Air Service operated, in 1937, 6 aircraft on forest protection



in the province for the Forestry Branch. Work requiring the use of aircraft was carried out in other provinces by commercial operators on contract with the Provincial Governments concerned.

**Royal Canadian Mounted Police.**—Since the Royal Canadian Mounted Police took over the duties of the Preventive Service in 1932, aircraft have been utilized in the work on a wide scale, particularly along the coastal areas of the Maritime Provinces and in the lower St. Lawrence river. Such aircraft are equipped to maintain communication with the Preventive Service patrol vessels and also the land detachments, thereby enabling closest co-operation between all branches. Prior to 1937, this work had been performed by seaplanes provided by the Royal Canadian Air Force, who also furnished the pilots. During 1937 aircraft operations along the Atlantic seaboard in connection with Preventive Service work were carried out entirely by aircraft purchased by the Royal Canadian Mounted Police. Four DeHavilland twin-engine Dragonfly landplanes were purchased by the Force, three of which were operated from the base located at Moncton, N.B. Flying operations commenced July 9, 1937, and terminated for the season Oct. 31, 1937, during which time a total of 117 separate patrols were carried out, which involved a total of 350 hours flying time. No accident or other untoward incident occurred during these patrols.

**Commercial Aviation.**—During 1937 the principal activity of commercial aircraft operators in Canada was the carriage by air of passengers, freight, and mails to mining fields in the more remote parts of the Dominion. Their work also included forest fire patrols, timber cruising, air photography, flying instruction, advertising, short passenger flights, etc., in various parts of the country.

**Air-Mail Services.**—Regular air-mail services were established in December, 1927. Statistics of the air-mail services, showing routes operated, mileage flown, and mail carried during the fiscal year ended Mar. 31, 1937, may be found in Table 6, p. 736, under the part of this chapter dealing with the Post Office.

**Encouragement of Aviation.**—To encourage a more wide-spread interest and knowledge of aviation, the Department of National Defence, since 1928, has assisted by issuing light aeroplanes and making grants to each of the 22 flying clubs, viz.: Halifax, Cape Breton, Saint John, Montreal, Brant-Norfolk, Fort William, Hamilton, Kingston, London, Ottawa, St. Catharines, Toronto, Border Cities, Kitchener, Brandon, Winnipeg, Moose Jaw, Regina, Saskatoon, Calgary, Edmonton, and Vancouver. Many aerodromes have been established through this movement. Details of membership, aircraft, hangars, flights, etc., of flying clubs are shown separately in the tables.

## Section 2.—Airports and Aircraft.

### Subsection 1.—Ground Facilities.

The nucleus of the chain of aerodromes and ground facilities mentioned below, which will constitute the Trans-Canada airway, consists of municipal or flying-club airports adjacent to the larger urban centres. There are also numerous terminals from which commercial flying services operate, chiefly into the northerly mining regions. These different types of air harbours are indicated in Table 3.

A large air terminal has been built at St. Hubert, seven miles south of Montreal. Immigration, customs, and postal facilities are available. An aerodrome has also been constructed at Rimouski to expedite the dispatch and reception of trans-Atlantic mails.

### 3.—Air Harbours in Canada, 1936.

#### MUNICIPAL AIR HARBOURS.

| Location.                                   | Name of Aeroplane Club Using Harbour.        | Landing Surface.    | Capacity of Hangar. | Investment. <sup>1</sup> |
|---|--|---------------------|---------------------|--------------------------|
|   |  |                     | sq. ft.             | \$                       |
| <b>Nova Scotia—</b>                         |  |                     |                     |                          |
| Halifax.....                                | Halifax Aero Club.....                       | Land.....           | 2,400               | 1,300                    |
| <b>New Brunswick—</b>                       |  |                     |                     |                          |
| Fredericton.....                            | (none)                                       | Water.....          | —                   | —                        |
| Moncton.....                                | (none)                                       | Land.....           | 4,881               | 23,830                   |
| Saint John.....                             | Saint John Flying Club.....                  | Land.....           | 5,200               | 33,520                   |
| <b>Quebec—</b>                              |  |                     |                     |                          |
| Cap de la Madeleine.....                    | (none)                                       | Land.....           | —                   | —                        |
| <b>Ontario—</b>                             |  |                     |                     |                          |
| Brantford.....                              | Brant-Norfolk Aero Club.....                 | Land.....           | 1,300               | 6,650                    |
| Fort William.....                           | Fort William Aero Club.....                  | Land.....           | 2,400               | 975                      |
| Halleybury.....                             | (none)                                       | Water.....          | —                   | —                        |
| Hamilton.....                               | Hamilton Aero Club.....                      | Land.....           | 5,700               | —                        |
| Kingston.....                               | Flying Club of Kingston.....                 | Land.....           | 7,500               | 3,500                    |
| Little Current.....                         | (none)                                       | Land and Water..... | —                   | 75                       |
| Port Arthur.....                            | (none)                                       | Water.....          | —                   | —                        |
| Stratford.....                              | (none)                                       | Land.....           | —                   | 15,000                   |
| Waterloo.....                               | Kitchener-Waterloo Flying Club.....          | Land.....           | 5,000               | 1,600                    |
| <b>Manitoba—</b>                            |  |                     |                     |                          |
| Virden.....                                 | (none)                                       | Land.....           | —                   | 1,000                    |
| Winnipeg.....                               | Winnipeg Flying Club.....                    | Land.....           | —                   | 17,784                   |
| <b>Saskatchewan—</b>                        |  |                     |                     |                          |
| Moose Jaw.....                              | Moose Jaw Flying Club, Ltd.                  | Land.....           | 11,600              | 42,500                   |
| North Battleford.....                       | (none)                                       | Land.....           | 4,392               | 9,400                    |
| Regina.....                                 | Regina Flying Club.....                      | Land.....           | 12,000              | 150,000                  |
| Saskatoon.....                              | Saskatoon Flying Club.....                   | Land.....           | —                   | 36,127                   |
| Weyburn.....                                | (none)                                       | Land.....           | —                   | 2,000                    |
| Yorkton.....                                | (none)                                       | Land.....           | —                   | 5,000                    |
| <b>Alberta—</b>                             |  |                     |                     |                          |
| Calgary.....                                | Calgary Aero Club.....                       | Land.....           | 7,800               | 54,638                   |
| Cooking Lake.....                           | (none)                                       | Land and Water..... | —                   | 20,658                   |
| Edmonton.....                               | Edmonton and Northern Alberta Aero Club..... | Land.....           | 8,000               | 165,070                  |
| Lethbridge.....                             | (none)                                       | Land.....           | —                   | —                        |
| Medicine Hat.....                           | (none)                                       | Land.....           | —                   | —                        |
| <b>British Columbia—</b>                    |  |                     |                     |                          |
| Cranbrook.....                              | (none)                                       | Land.....           | 3,850               | 10,758                   |
| Fernie.....                                 | (none)                                       | Land.....           | 3,200               | 23,700                   |
| Grand Forks.....                            | (none)                                       | Land.....           | —                   | 2,850                    |
| Trail.....                                  | (none)                                       | Land.....           | —                   | —                        |
| Vancouver.....                              | Aero Club of British Columbia.....           | Land and Water..... | 21,306              | 626,000                  |
| Vernon.....                                 | (none)                                       | Land.....           | 3,000               | 5,000                    |
| Williams Lake.....                          | (none)                                       | Land.....           | —                   | 902                      |
| <b>Totals, Municipal Air Harbours .....</b> |  |                     | <b>199,529</b>      | <b>1,259,837</b>         |

## OTHER AIR HARBOURS.

| Kind.                                       | Landing Surfaces. |             |                 |            |
|---|-------------------|-------------|-----------------|------------|
|   | Land Only.        | Water Only. | Land and Water. | Total.     |
| Public.....                                 | No. 17            | No. 27      | No. Nil         | No. 44     |
| Public-auxiliary.....                       | 2                 | Nil         | Nil             | 2          |
| Public-temporary.....                       | 1                 | Nil         | Nil             | 1          |
| Dominion Government.....                    | Nil               | 3           | 1               | 4          |
| Intermediate.....                           | 30                | Nil         | Nil             | 30         |
| Provincial.....                             | Nil               | 11          | Nil             | 11         |
| Private.....                                | 13                | 16          | Nil             | 29         |
| <b>Totals, Other Air Harbours .....</b>     | <b>63</b>         | <b>57</b>   | <b>1</b>        | <b>121</b> |
| <b>Totals, Municipal Air Harbours .....</b> | <b>23</b>         | <b>3</b>    | <b>3</b>        | <b>34</b>  |
| <b>Grand Totals.....</b>                    | <b>91</b>         | <b>60</b>   | <b>4</b>        | <b>155</b> |

<sup>1</sup> Not included in investments shown in Table 4.<sup>2</sup> Information not available.

### Subsection 2.—Aircraft.

**The Manufacture of Aircraft.**—An aircraft industry, to construct in Canada the aircraft and equipment required for aviation, is essential to the development of flying. Canadian Vickers was the pioneer firm in Canada. Several manufacturers are now producing original types especially suited to operation in Canada. Several aircraft manufacturers from England and the United States have formed branches in Canada for the assembly and service of their products. The list of aircraft manufacturers for 1937 includes the following: Canadian Car & Foundry Co. Ltd., Fort William, Ont.; Boeing Aircraft Co. of Canada Ltd., Vancouver, B.C.; DeHavilland Aircraft of Canada, Toronto, Ont.; Fleet Aircraft of Canada Ltd., Fort Erie, Ont.; Cub Aircraft Ltd., Hamilton, Ont.; National Car & Foundry Co. Ltd., Hamilton, Ont.; A. E. Link, Gananoque, Ont.; Canadian Vickers Ltd., Montreal, Que.; Fairchild Aircraft Ltd., Longueuil, Que.; Noorduyt Aircraft Ltd., Montreal, Que.; and Montreal Aircraft Industries, Ltd., Montreal, Que.

The following firms have established plants for the manufacture of landing gear designed to meet the needs of Canadian aviation: MacDonald Bros. Aircraft Ltd., Winnipeg, Man.; Elliott Bros., Sioux Lookout, Ont.; Aircraft Supplies Ltd., Winnipeg, Man.; Sachau Marine Works, Toronto, Ont.; S. W. Waggett, Toronto, Ont.; Rutherford Co. Ltd., Montreal, Que.; Ottawa Car Mfg. Co. Ltd., Ottawa, Ont.; and Alberta Motor Boat Co., Edmonton, Alta.

Aero engine factories are established for construction or assembly and service of their products as follows: Standard Machine Works, Winnipeg, Man.; Coates Ltd., Eboune, B.C.; Wells Air Transport Ltd., Eboune, B.C.; Canadian Airways Ltd., Winnipeg, Man.; DeHavilland Aircraft of Canada, Toronto, Ont.; Fleet Aircraft of Canada Ltd., Fort Erie, Ont.; Cub Aircraft Ltd., Hamilton, Ont.; Canada Car & Foundry Co. Ltd., Hamilton, Ont.; Aero Engines of Canada Ltd., Montreal, Que.; Canadian Pratt & Whitney Ltd., Longueuil, Que.; Canadian Wright Ltd., Montreal, Que.; Canadian Car & Foundry Co., Montreal, Que.; Armstrong-Siddeley Motors Ltd., Ottawa, Ont.; Aircraft Repair Ltd., Edmonton, Alta.; M. & C. Aviation Co. Ltd., Prince Albert, Sask.; Prairie Airways Ltd., Moose Jaw, Sask.; and Institute of Technology & Arts, Calgary, Alta.

### Section 3.—Finances and Employees.

**Investments.**—The development of aviation requires a considerable outlay of capital not only for the provision and replacement of aircraft but also for the provision of landing fields or harbours, buildings, servicing shops, etc.

#### 4.—Investment for Civil Aviation in Canada, 1936.

| Item.                                | Flying Clubs. | Commercial.      |
|--------------------------------------|---------------|------------------|
|                                      | \$            | \$               |
| Land and buildings.....              | 14,204        | 561,198          |
| Aircraft.....                        | 47,018        | 2,742,469        |
| Tools and equipment.....             | 2,788         | 275,404          |
| Furniture and office appliances..... | 1,690         | 35,837           |
| Organization expenditures.....       | 1,479         | 1,017,312        |
| <b>Totals.....</b>                   | <b>67,179</b> | <b>4,632,220</b> |

**Revenues and Expenses.**—No statistics are available regarding expenditures on flying operations by the Dominion and Provincial Governments or by private individuals. Table 5 shows the revenues and expenditures of flying clubs and commercial flying organizations.

## 5.—Revenues and Expenses of Aviation in Canada, 1936.

| Item.                         | Flying Clubs. | Commercial. |
|-------------------------------|---------------|-------------|
|                               | \$            | \$          |
| Total operating revenues..... | 198,401       | 2,501,242   |
| Total operating expenses..... | 182,325       | 2,390,019   |
| Net operating revenues.....   | 16,076        | 111,223     |

**Personnel and Employees.**—The numbers of pilots and engineers holding licences under the Controller of Civil Aviation in 1937 were as follows: private pilots 625; commercial pilots 320; limited commercial pilots 129; transport pilots 73; and air engineers 595.

In Table 6 are shown employees and salaries and wages in flying clubs and commercial flying organizations in 1936.

## 6.—Employees and Salaries and Wages in Civil Aviation, in Canada, 1936.

| Item.                   |     | Flying Clubs. | Commercial. |
|-------------------------|-----|---------------|-------------|
|                         |     | No.           | \$          |
| Employees.....          | No. | 67            | 548         |
| Salaries and Wages..... | \$  | \$0,707       | \$15,931    |

## Section 4.—Traffic.

The freight carried by aircraft consisted largely of machinery, supplies, etc., for mines in the northern part of Quebec, Ontario and the western provinces and the Northwest Territories. Many of these mines are accessible only by canoe in the summer and dog team in the winter or by aircraft, and aircraft transportation will probably be the cheapest and most effective method of transportation during the life of a large number of these. The amount of freight and express carried by aircraft has grown steadily and rapidly, increasing from 2,372,467 pounds in 1931 to 26,226,260 pounds in 1937 exclusive of 12,836 pounds carried in international service. This is considerably more than was carried in any other country, the United States reporting 7,127,369 pounds for 1937. The activity in mining, particularly in gold mining, due to the increased price of gold, has been a large factor in this rapid growth of air transportation of freight and express. Much mail, not included in the mail carried under contract, is also carried into the mines by aircraft.

7.—Commercial Air Traffic in Canada,<sup>1</sup> by Provinces, 1937.

| Province or Other Origin.            | Passengers Taken On. | Freight Loaded.   | Mail Loaded.     |
|--------------------------------------|----------------------|-------------------|------------------|
|                                      | No.                  | lb.               | lb.              |
| Prince Edward Island.....            | 630                  | 549               | 126,460          |
| Nova Scotia.....                     | 613                  | 250               |                  |
| New Brunswick.....                   | 872                  | 5,839             | 148,910          |
| Quebec.....                          | 33,539               | 3,375,560         | 186,611          |
| Ontario.....                         | 42,604               | 11,249,169        | 321,686          |
| Manitoba.....                        | 12,232               | 3,823,817         | 254,409          |
| Saskatchewan.....                    | 12,270               | 1,176,481         | 62,023           |
| Alberta.....                         | 5,404                | 2,399,635         | 109,153          |
| British Columbia.....                | 8,165                | 509,782           | 40,848           |
| Yukon and Northwest Territories..... | 5,626                | 1,091,265         | 33,942           |
| Foreign countries.....               | 5,075                | 11,873            | 127,171          |
| <b>Totals.....</b>                   | <b>127,090</b>       | <b>24,244,220</b> | <b>1,411,213</b> |

<sup>1</sup> Includes international operations.

## 8.—Operations of Civil Aircraft in Canada, 1937 with Totals for 1935 and 1936.

| Item.                                       | 1935<br>Total.         | 1936<br>Total. | Details.   |                                   |                        |                                  | Total.                 |
|---|------------------------|----------------|--|-----------------------------------|------------------------|----------------------------------|------------------------|
|   |                        |                | Dominion<br>and<br>Provincial<br>Govern-<br>ments. | Light<br>Aero-<br>plane<br>Clubs. | Com-<br>mercial.       | Inter-<br>national. <sup>1</sup> |                        |
| Clubs..... No.                              | -                      | -              | -  | 22                                | -                      | -                                | 22                     |
| Members.....                                | -                      | -              | -  | 1,194                             | -                      | -                                | 1,194                  |
| Flying..... "                               | -                      | -              | -  | 1,189                             | -                      | -                                | 1,189                  |
| Other..... "                                | -                      | -              | -  | -                                 | -                      | -                                | -                      |
| Flights of aircraft.....                    | 153,211                | 160,014        | 11,009   | 51,400                            | 136,311                | 3,814                            | 202,534                |
| Hours flown.....                            | 88,451                 | 101,953        | 8,818  | 19,720                            | 92,550                 | 5,462                            | 120,550                |
| Miles flown..... No.                        | 7,522,102              | 7,803,942      | 699,771  | 27,900 <sup>2</sup>               | 9,136,626              | 762,333                          | 10,620,630             |
| Average duration of flight..... minutes.    | 34                     | 38             | 48   | 23                                | 41                     | 80                               | 37                     |
| Gasoline consumed, gal.                     | 3                      | 1,681,517      | 126,971  | 132,165                           | 1,876,527              | 139,189                          | 2,274,852              |
| Lubricating oil consumed..... "             | 3                      | 51,730         | 3,419  | 3,501                             | 51,238                 | 3,317                            | 61,475                 |
| Crew carried..... No.                       | 173,211                | 132,096        | 12,092   | 51,400                            | 130,631                | 6,907                            | 200,930                |
| Paying passengers carried.....              | 140,379                | 99,451         | -  | 380                               | 102,740                | 9,352                            | 112,472                |
| Non-paying passengers carried.....          | 17,093                 | 19,209         | 7,010  | 26,037                            | 13,698                 | 1,800                            | 48,045                 |
| Totals, personnel carried.....              | 330,683                | 250,756        | 19,102   | 77,817                            | 247,069                | 17,459                           | 361,447                |
| Crew carried one mile.....                  | 7,522,102 <sup>3</sup> | 9,753,690      | 750,227  | 30,400 <sup>4</sup>               | 12,036,281             | 1,362,578                        | 14,179,486             |
| Paying passengers carried one mile.....     | 7,930,950 <sup>5</sup> | 8,724,790      | -  | 26,000 <sup>6</sup>               | 10,952,003             | 1,874,601                        | 12,853,204             |
| Non-paying passengers carried one mile..... | -                      | 1,381,146      | 455,497  | 3                                 | 1,101,703              | 280,468                          | 1,837,668              |
| Totals, personnel carried one mile.....     | 15,459,052             | 19,859,626     | 1,205,724  | 57,000 <sup>7</sup>               | 24,089,992             | 3,517,642                        | 28,870,358             |
| Pupils given instruction.....               | 3                      | 1,304          | 6  | 985                               | 646                    | 12                               | 1,649                  |
| Freight and express carried..... lbs.       | 17,616,910             | 25,387,719     | 1,961,546  | -                                 | 24,231,384             | 12,836                           | 26,205,766             |
| Mail—postal contracts.....                  | 1,126,034              | 1,191,069      | -  | -                                 | 1,221,869 <sup>8</sup> | 189,344                          | 1,411,213 <sup>9</sup> |
| Ton miles—freight and express..... No.      | 3                      | 1,075,029      | 3  | -                                 | 1,890,594              | 1,080                            | 1,891,674              |
| Ton miles—mail.....                         | 3                      | 89,588         | -  | -                                 | 93,801                 | 18,612                           | 112,418                |
| Totals, ton miles.....                      | 3                      | 1,164,617      | 3  | -                                 | 1,984,395              | 19,692                           | 2,004,087              |
| Square miles sketched from aircraft.....    | 3                      | 902            | Nil  | -                                 | 14,474                 | -                                | 14,474                 |
| Square miles photographed—vertical.....     | 3                      | 6,472          | 427  | -                                 | 10,700                 | -                                | 11,127                 |
| Square miles photographed—oblique.....      | 3                      | 156            | 20   | -                                 | 3,850                  | -                                | 3,870                  |

<sup>1</sup> Flights between Canada and the United States.<sup>2</sup> From Point to point only.<sup>3</sup> Not available.<sup>4</sup> Pilot miles.<sup>5</sup> Crew and passenger miles.<sup>6</sup> Exclusive of 46,375 lbs. carried on contract with means of transportation optional.<sup>7</sup> Carried under Canadian Postal contracts—1,323,584 lbs.<sup>8</sup> Carried under Canadian Postal contracts—

Some countries include in their statistics traffic between two foreign stations of companies incorporated in the reporting country. In Table 7 are shown separately statistics of companies operating regular routes between points in Canada and the United States. These statistics include only those of traffic between the two countries. The company operating between Montreal, Albany, and New York reported only the flights, passengers, and freight, etc., from and to Montreal. Consequently, it would be quite proper to add this international traffic to the strictly Canadian traffic.

The Northern Airways Company has a postal contract for mail in the north-west to be carried by any means feasible and on this contract 46,375 pounds not included in the official air-mail contracts was carried by aeroplane.

## 9.—Accidents Resulting from Aircraft in Flight in Canada, 1937.

| Class of Flight.                    | Number of Accidents Resulting in— |                       | Persons— |                |          |             |
|-------------------------------------|-----------------------------------|-----------------------|----------|----------------|----------|-------------|
|                                     | Death or Injury.                  | Property Damage Only. | Killed.  |                | Injured. |             |
|                                     |                                   |                       | Crew.    | Passengers.    | Crew.    | Passengers. |
| COMMERCIAL SERVICES.                |                                   |                       |          |                |          |             |
| With passengers, freight, mail..... | 3                                 | 25                    | 1        | 3 <sup>1</sup> | 1        | 3           |
| With crew only.....                 | 1                                 | 19                    | Nil      | Nil            | 1        | Nil         |
| Instruction.....                    | Nil                               | 4                     | "        | "              | Nil      | "           |
| Totals.....                         | 4                                 | 48                    | 1        | 3 <sup>1</sup> | 2        | 3           |
| LIGHT AEROPLANE CLUBS.              |                                   |                       |          |                |          |             |
| Instruction—student solo.....       | 1                                 | 8                     | 1        | Nil            | Nil      | Nil         |
| Licensed pilot—solo.....            | Nil                               | 10                    | Nil      | Nil            | Nil      | Nil         |
| Licensed pilot with passenger.....  | 1                                 | 6                     | 1        | 1              | "        | "           |
| Totals.....                         | 2                                 | 24                    | 2        | 1              | Nil      | Nil         |
| STATE AIRCRAFT.                     |                                   |                       |          |                |          |             |
| Forest protection.....              | 1                                 | 1                     | Nil      | Nil            | 1        | 1           |
| Exhibition and miscellaneous.....   | Nil                               | 1                     | "        | "              | Nil      | Nil         |
| Totals.....                         | 1                                 | 2                     | Nil      | Nil            | 1        | 1           |
| Grand Totals.....                   | 7                                 | 74                    | 3        | 4              | 3        | 4           |

<sup>1</sup> Includes 1 bystander.

## 10.—Non-Flight Accidents in Connection with Civil Aviation in Canada, 1937.

| Item.                      | Employees. |          | Other Persons. |          | Totals. |          |
|----------------------------|------------|----------|----------------|----------|---------|----------|
|                            | Killed.    | Injured. | Killed.        | Injured. | Killed. | Injured. |
| Commercial services.....   | Nil        | 4        | Nil            | Nil      | Nil     | 4        |
| Light aeroplane clubs..... | "          | Nil      | "              | "        | "       | Nil      |
| State aircraft.....        | "          | "        | "              | "        | "       | "        |
| Totals.....                | Nil        | 4        | Nil            | Nil      | Nil     | 4        |

| Item.                      | Estimated Damage to Aircraft. | Other Damage and Expenses. |
|----------------------------|-------------------------------|----------------------------|
| Commercial services.....   | \$ 142,534                    | \$ 1,330                   |
| Light aeroplane clubs..... | 10,333                        | Nil                        |
| State aircraft.....        | 8,200                         | "                          |
| Totals.....                | 161,067                       | 1,330                      |

## 11.—Operation and Accident Averages in Commercial Aviation in Canada, 1937.

| Item.  | No.     | Item.   | No.   |
|--|---------|---|-------|
| OPERATION AVERAGES.                                |         | ACCIDENT AVERAGES.                                    |       |
| Duration of flight.....hours                       | -699    | Accidents per 1,000 aircraft flights.....No.          | -331  |
| Length of flight.....miles                         | 68-001  | Accidents per 1,000,000 aircraft miles..              | 5-563 |
| Paying passengers per flight.....No.               | -75     | Fatalities per 1,000 aircraft flights.....            | -0239 |
| Length of passenger journey.....miles              | 107-001 | Fatalities per 1,000,000 aircraft miles..             | -423  |
| Length of flights with freight.....miles           | 156-001 | Passengers killed per 1,000,000 passenger miles.....  | -1659 |
| Aircraft miles per gallon of fuel.....No.          | 4-976   | Passengers injured per 1,000,000 passenger miles..... | -2483 |
| Aircraft miles per gallon of lubricating oil....." | 132-16  | Crew killed per 1,000,000 crew miles.....             | -0331 |
|  |         | Crew injured per 1,000,000 crew miles..               | -1663 |

<sup>1</sup> Approximate.  
46847—46

## PART VI.—WIRE COMMUNICATIONS.\*

The statistics regarding communication by wire are classified under two sections—telegraphs and telephones.

## Section 1.—Telegraphs.

The early history of telegraphic communication in Canada, given on p. 778 of the 1934-35 Year Book, is not repeated in this volume in order to economize space.

**Dominion Government Telegraph Service.**—This service is operated by the Telegraph Branch of the Department of Public Works. Its general object has been to furnish wire communication for outlying and sparsely settled districts where the amount of business is so small that commercial companies will not enter the field but where the public interests require that there should be communication. Thus these facilities include: telegraph and telephone services to scattered settlements around the coasts of Cape Breton island; cable services to Campobello, Grand Manan and other islands in the bay of Fundy, to Prince Edward Island, Magdalen islands and Anticosti island in the gulf of St. Lawrence; telegraph or telephone services along the north shore of the gulf of St. Lawrence from Quebec to the straits of Belle Isle; cable connections with Pelee and Manitoulin islands in Ontario; some lines to northern outlying districts in Saskatchewan; lines from Edmonton to the Athabaska and Peace River country in Alberta; telegraph or telephone communications around the coast of Vancouver Island and to fishing, lumbering, and mining settlements along the coast of the mainland of British Columbia, as well as to isolated mining centres in the interior; and finally the overland telegraph line to Dawson and other settlements in Yukon. Statistics of these services are included in the tables which follow.

## 1.—Summary Statistics of All Canadian Telegraphs, calendar years 1920-36.

| Year. | Gross Revenue. | Operating Expenses. | Net Operating Revenue. | Pole Line Mileage.  | Wire Mileage. | Em- ployees.       | Offices. | Messages, Land. | Cable- grams. <sup>1</sup> | Money Trans- ferred. |
|-------|----------------|---------------------|------------------------|---------------------|---------------|--------------------|----------|-----------------|----------------------------|----------------------|
|       | \$             | \$                  | \$                     | miles.              | miles.        | No.                | No.      | No.             | No.                        | \$                   |
| 1920  | 11,337,428     | 9,589,082           | 1,747,446              | 52,393              | 238,866       | 7,508              | 4,825    | 15,559,711      | 1,102,204                  | 7,045,861            |
| 1921  | 11,310,989     | 9,734,299           | 1,576,690              | 52,828              | 250,802       | 7,818              | 4,901    | 15,013,903      | 1,154,787                  | 5,150,916            |
| 1922  | 11,018,702     | 9,846,425           | 1,172,277              | 53,090              | 262,343       | 8,500              | 4,702    | 15,271,410      | 1,182,053                  | 4,404,407            |
| 1923  | 11,417,284     | 9,931,845           | 1,485,439              | 53,383              | 270,782       | 8,275              | 4,961    | 16,150,106      | 1,302,224                  | 5,326,352            |
| 1924  | 10,930,020     | 9,608,020           | 1,326,400              | 54,742              | 268,632       | 8,909              | 4,945    | 15,460,811      | 1,448,894                  | 5,428,080            |
| 1925  | 11,520,322     | 9,681,200           | 1,839,122              | 51,726              | 284,121       | 7,224 <sup>2</sup> | 4,664    | 14,460,988      | 1,557,235                  | 6,680,595            |
| 1926  | 12,143,388     | 10,106,049          | 1,977,348              | 52,012              | 305,933       | 6,755 <sup>2</sup> | 4,801    | 14,934,053      | 1,769,513                  | 7,760,127            |
| 1927  | 12,920,549     | 10,600,412          | 2,300,137              | 52,731              | 322,539       | 7,238 <sup>2</sup> | 4,885    | 15,564,007      | 1,970,653                  | 9,241,864            |
| 1928  | 14,740,641     | 11,647,063          | 3,093,578              | 53,771              | 337,971       | 7,689 <sup>2</sup> | 4,900    | 16,357,220      | 2,279,293                  | 9,776,000            |
| 1929  | 16,255,441     | 12,590,364          | 3,666,077              | 52,835              | 360,883       | 8,056 <sup>2</sup> | 4,766    | 18,029,073      | 2,086,549                  | 11,295,857           |
| 1930  | 14,264,997     | 11,791,201          | 2,473,796              | 52,824              | 371,747       | 7,331 <sup>2</sup> | 4,661    | 15,558,224      | 2,053,059                  | 10,213,475           |
| 1931  | 11,641,729     | 10,720,949          | 920,780                | 53,228              | 368,583       | 6,637 <sup>2</sup> | 4,474    | 13,200,108      | 1,784,787                  | 7,475,928            |
| 1932  | 9,381,075      | 9,020,052           | 361,023                | 52,362              | 366,142       | 5,788 <sup>2</sup> | 4,248    | 10,519,433      | 1,514,321                  | 4,698,660            |
| 1933  | 9,267,715      | 8,122,904           | 1,144,751              | 52,112 <sup>2</sup> | 365,489       | 5,263 <sup>2</sup> | 4,115    | 10,095,061      | 1,597,044                  | 3,632,910            |
| 1934  | 9,972,627      | 8,436,144           | 1,536,483              | 52,406              | 366,706       | 5,624 <sup>2</sup> | 4,171    | 10,526,490      | 1,691,477                  | 3,950,854            |
| 1935  | 9,741,394      | 8,416,329           | 1,325,065              | 53,084              | 365,518       | 5,903 <sup>2</sup> | 4,103    | 11,138,835      | 1,297,454                  | 3,334,458            |
| 1936  | 10,378,873     | 8,710,349           | 1,668,524              | 52,907              | 363,180       | 6,064 <sup>2</sup> | 4,121    | 12,735,156      | 1,391,903                  | 4,299,735            |

<sup>1</sup> Excluding messages relayed to the United States.

<sup>2</sup> Revised since the publication of the 1937 Year Book.

<sup>3</sup> Excluding commission operators.

**Telegraph Systems.**—The Canadian telegraph systems are composed of lines owned by the Dominion Government and by chartered railway and telegraph companies. The Canadian facilities, in proportion to population, are among the most extensive in the world, and are operated under considerable climatic and geographical disadvantages. In the operation of railways and in the receipt and dispatch of market and press reports, the service to the nation is invaluable.

\*Revised by G. S. Wong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch issues annual reports dealing with telegraph and telephone statistics, respectively, to which the reader is referred for more detailed information.

Table 2 gives figures of telegraph operation and line and wire mileage of various companies for the years 1932 to 1936. Statistics of the Halifax and Bermudas Cable Co., the Canadian Marconi Wireless Telegraph Co., and the Pacific Cable Board are not included.

**2.—Statistics of Chartered Telegraph Companies for the calendar years 1932-36.**

| Company.                                      | Year. | Miles of Line.   | Miles of Wire. | Number of Messages. <sup>1</sup> | Number of Offices. <sup>2</sup> |
|---|-------|------------------|----------------|----------------------------------|---------------------------------|
| Canadian National Telegraph Co.....           | 1932  | 24,018           | 166,172        | 5,562,277                        | 2,011                           |
|   | 1933  | 24,103           | 165,055        | 5,408,221                        | 1,937                           |
|   | 1934  | 23,980           | 164,531        | 5,608,761                        | 1,909                           |
|   | 1935  | 24,938           | 162,110        | 5,307,170                        | 1,708                           |
|   | 1936  | 24,698           | 162,922        | 7,215,653                        | 1,705                           |
| Canadian Pacific Railway Co.....              | 1932  | 17,490           | 175,720        | 4,402,606                        | 1,394                           |
|   | 1933  | 17,477           | 176,423        | 4,202,158                        | 1,390                           |
|   | 1934  | 17,439           | 177,300        | 4,439,425                        | 1,474                           |
|   | 1935  | 17,471           | 176,430        | 4,808,265                        | 1,552                           |
|   | 1936  | 17,604           | 173,341        | 4,946,247                        | 1,613                           |
| Western Union.....                            | 1932  | 1,134            | 9,368          | 2                                | 2                               |
|   | 1933  | 1,135            | 9,390          | 2                                | 2                               |
|   | 1934  | 1,135            | 9,390          | 2                                | 2                               |
|   | 1935  | 1,098            | 9,387          | 2                                | 1                               |
|   | 1936  | 1,086            | 9,362          | 2                                | 1                               |
| Temiskaming and Northern Ont. Rly. Commission | 1932  | 593              | 3,111          | 101,294                          | 35                              |
|   | 1933  | 593              | 3,111          | 96,906                           | 35                              |
|   | 1934  | 593              | 3,122          | 112,965                          | 35                              |
|   | 1935  | 575              | 3,557          | 94,436                           | 35                              |
|   | 1936  | 575              | 3,485          | 108,707                          | 35                              |
| North American Telegraph Co., Ltd.....        | 1932  | 345 <sup>4</sup> | 445            | 57,571                           | 16                              |
|   | 1933  | 345 <sup>4</sup> | 445            | 54,738                           | 15                              |
|   | 1934  | 345 <sup>4</sup> | 445            | 57,030                           | 15                              |
|   | 1935  | 345 <sup>4</sup> | 445            | 57,541                           | 15                              |
|   | 1936  | 345 <sup>4</sup> | 445            | 60,086                           | 15                              |
| Northern Alberta Rly.....                     | 1935  | 926              | 2,262          | 16,599                           | 40                              |
|   | 1936  | 926              | 2,262          | 42,612                           | 40                              |
| Dominion Government Telegraph Service.....    | 1932  | 9,077            | 11,316         | 326,256                          | 750                             |
|   | 1933  | 8,844            | 11,052         | 254,910                          | 703                             |
|   | 1934  | 8,864            | 11,108         | 299,869                          | 705                             |
|   | 1935  | 8,864            | 11,327         | 324,721                          | 688                             |
|   | 1936  | 8,893            | 11,363         | 328,866                          | 679                             |

<sup>1</sup> Cablegrams not included.

<sup>2</sup> The figures for Table 1 include offices of wireless and cable companies and to that extent are larger than the sums of the items given here for corresponding years.

<sup>3</sup> Included with Canadian National. The Western Union handles only through business.

<sup>4</sup> Leased telephone line.

**Submarine Cables.**—Sixteen transoceanic cables have termini in Canada—fourteen of them on the Atlantic coast and two on the Pacific. In addition there are eight cables between Atlantic coastal stations in Canada and the United States. The year in which the cable was first demonstrated to be of commercial value was 1866, and up to the present its use has greatly increased. The Atlantic cables are controlled by English and United States interests. The Pacific cable, from Canada to Australia and New Zealand, has been in operation since 1902, and was owned by a partnership of the Governments of Great Britain, New Zealand, Australia, and Canada. As a result of the recommendation of the Imperial Wireless and Cable Conference of 1928, in view of increased wireless competition, it was decided to dispose of the Pacific and West Indian Islands cable systems to the Imperial and International Communication Co., a company formed to take over all Empire-owned cables and lease the Empire-owned beam wireless systems. The necessary legislation was passed by the United Kingdom in February, 1929, and by Canada in June, 1929.

## Section 2.—Telephones.

A brief historical account of the early development of telephones in Canada appeared at p. 781 of the 1934-35 Year Book.



## Subsection 1.—Systems and Equipment.

**Telephone Systems.**—The 3,063 telephone systems existing in 1936 included the three large provincial systems in Manitoba, Saskatchewan, and Alberta, and a smaller governmental system in Ontario, together with the system operated by the National Parks of Canada, Department of Mines and Resources. There were also 143 municipal systems, the largest operated by the cities of Edmonton, Fort William, and Port Arthur. Out of the 1,901 co-operative telephone companies, no fewer than 1,153 were in Saskatchewan alone, 419 in Alberta, and 206 in Nova Scotia. The largest among the 772 joint-stock companies operating telephone systems in 1936 were the Bell Telephone Co., and the British Columbia Telephone Co. Almost 58 p.c. of the total telephone investment in Canada belonged to the Bell Telephone Co., and their telephones in Quebec and Ontario constituted 56 p.c. of the total for Canada.

**Telephone Equipment.**—The number of telephones per capita is second only to that of the United States, the numbers being 13·69 telephones per 100 population in the United States and 11·5 in Canada. This is a favourable showing in view of the low density of population in Canada as a whole and the fact that 46 p.c. (46·30 p.c. in 1931) of the population is rural.

There were 546,887 telephones out of a total of 829,078 in 51 leading cities of Canada operated from automatic switchboards; the remainder, or 282,191, were operated from manual switchboards. Automatic switchboards have completely displaced manual switchboards in the principal cities of the Prairie Provinces and are displacing them in the other provinces.

### 3.—Telephones in Use, Classified by Business, Residential, Rural and Public Pay, Mileages of Wire and Pole Line, 1911-36.

| Year.                   | Sys-<br>tems. | Pole-Line<br>Mileage. | Mileage<br>of Wire. | Telephones in Use.   |                      |                      |                     |           |                             |
|-------------------------|---------------|-----------------------|---------------------|----------------------|----------------------|----------------------|---------------------|-----------|-----------------------------|
|                         |               |                       |                     | Business.            | Resi-<br>dential.    | Rural. <sup>1</sup>  | Public<br>Pay.      | Total.    | Per 100<br>Popu-<br>lation. |
|                         | No.           | miles.                | miles.              | No.                  | No.                  | No.                  | No.                 | No.       | No.                         |
| 1911.....               | 537           | -                     | 687,782             | -                    | -                    | -                    | -                   | 302,759   | 4·2                         |
| 1912.....               | 683           | -                     | 889,572             | -                    | -                    | -                    | -                   | 370,884   | 5·0                         |
| 1913.....               | 1,075         | -                     | 1,092,587           | -                    | -                    | -                    | -                   | 463,671   | 6·8                         |
| 1914.....               | 1,136         | -                     | 1,343,090           | -                    | -                    | -                    | -                   | 521,144   | 6·8                         |
| 1915.....               | 1,399         | -                     | 1,452,360           | -                    | -                    | -                    | -                   | 533,090   | 6·8                         |
| 1916.....               | 1,592         | -                     | 1,600,564           | -                    | -                    | -                    | -                   | 548,421   | 6·8                         |
| 1917.....               | 1,695         | -                     | 1,708,203           | -                    | -                    | -                    | -                   | 604,136   | 7·4                         |
| 1918.....               | 2,007         | -                     | 1,848,466           | -                    | -                    | -                    | -                   | 662,330   | 8·0                         |
| 1919 <sup>2</sup> ..... | 2,219         | -                     | 2,105,240           | -                    | -                    | -                    | -                   | 778,758   | 9·2                         |
| 1920.....               | 2,327         | 161,270 <sup>3</sup>  | 2,105,101           | 260,481 <sup>3</sup> | 390,930 <sup>3</sup> | 204,855 <sup>3</sup> | -                   | 856,266   | 9·9                         |
| 1921.....               | 2,365         | 178,093               | 2,268,271           | 273,498              | 396,384              | 232,208              | -                   | 902,090   | 10·3                        |
| 1922.....               | 2,387         | 184,147               | 2,396,805           | 281,535              | 414,887              | 247,607              | -                   | 944,029   | 10·6                        |
| 1923.....               | 2,459         | 188,408               | 2,574,083           | 303,660              | 444,300              | 261,360              | -                   | 1,009,320 | 11·1                        |
| 1924.....               | 2,466         | 193,399               | 2,765,722           | 281,108              | 509,928              | 265,509              | 15,909 <sup>3</sup> | 1,072,454 | 11·6                        |
| 1925.....               | 2,495         | 194,370               | 3,020,773           | 297,875              | 556,837              | 268,807              | 19,357              | 1,142,876 | 12·2                        |
| 1926.....               | 2,479         | 201,604               | 3,306,214           | 311,557              | 597,429              | 270,686              | 21,336              | 1,201,008 | 12·8                        |
| 1927.....               | 2,462         | 204,245               | 3,591,035           | 324,425              | 637,636              | 275,544              | 22,482              | 1,259,987 | 13·2                        |
| 1928.....               | 2,447         | 207,566               | 3,982,867           | 345,771              | 694,820              | 280,878              | 23,065              | 1,334,534 | 13·8                        |
| 1929.....               | 2,415         | 220,525               | 4,486,213           | 366,418              | 724,001              | 269,467              | 22,916              | 1,382,522 | 14·1                        |
| 1930.....               | 2,414         | 222,113               | 4,790,224           | 373,387              | 740,050              | 264,681              | 24,743              | 1,402,861 | 14·1                        |
| 1931.....               | 2,399         | 222,196               | 4,985,076           | 369,281              | 723,868              | 245,485              | 25,566              | 1,364,200 | 13·1                        |
| 1932.....               | 2,414         | 220,459               | 5,089,261           | 351,509              | 663,815              | 220,680              | 25,241              | 1,261,245 | 12·0                        |
| 1933.....               | 2,403         | 219,753               | 5,134,871           | 341,063              | 617,532              | 209,611              | 24,124              | 1,192,330 | 11·2                        |
| 1934.....               | 2,388         | 208,131               | 5,133,521           | 349,892              | 605,206              | 217,182              | 24,749              | 1,197,029 | 11·1                        |
| 1935.....               | 2,333         | 207,916               | 5,120,610           | 351,427              | 615,052              | 218,818              | 23,518              | 1,208,815 | 11·1                        |
| 1936.....               | 3,063         | 210,926               | 5,197,042           | 371,401              | 641,229              | 229,940              | 23,668              | 1,266,228 | 11·5                        |

<sup>1</sup> Includes telephones on rural exchange lines and urban exchange lines which have more than four parties.

<sup>2</sup> Figures for 1911-18 are for years ended June 30; those since 1918 are for calendar years.

<sup>3</sup> First year reported.

The density of telephones in the different provinces is naturally influenced by the urbanization of the population because the number of telephones used for business purposes is much greater in cities and towns than in rural areas.

#### 4.—Telephones in Use, by Provinces, Dec. 31, 1936.

| Provinces.  | On Individual Lines. |            | On 2- and 4-Party Lines. |            | On Rural Lines. |            | Private Branch Exchange and Extensions. |            | Public Pay Station. | Total.    | Telephones per 100 Population. |
|-------------|----------------------|------------|--------------------------|------------|-----------------|------------|---|------------|---------------------|-----------|--------------------------------|
|             | Business.            | Residence. | Business.                | Residence. | Business.       | Residence. | Business.                               | Residence. |                     |           |                                |
|             |                      |            |                          |            |                 |            |   |            |                     |           |                                |
|             | No.                  | No.        | No.                      | No.        | No.             | No.        | No.                                     | No.        | No.                 | No.       | No.                            |
| P.E.I.....  | 713                  | 912        | 134                      | 587        | 164             | 2,231      | 421                                     | 83         | 72                  | 5,317     | 5.8                            |
| N.S.....    | 5,913                | 11,717     | 621                      | 8,290      | 917             | 9,640      | 5,069                                   | 1,968      | 1,010               | 45,145    | 8.4                            |
| N.B.....    | 4,055                | 6,683      | 782                      | 7,152      | 830             | 5,393      | 4,009                                   | 1,161      | 702                 | 30,707    | 7.1                            |
| Que.....    | 39,312               | 69,702     | 3,983                    | 65,305     | 3,596           | 22,761     | 51,934                                  | 11,439     | 7,416               | 275,448   | 8.9                            |
| Ont.....    | 68,519               | 125,380    | 7,149                    | 158,070    | 4,471           | 93,942     | 82,084                                  | 25,784     | 10,665              | 576,064   | 15.6                           |
| Man.....    | 9,114                | 25,063     | 72                       | 3,618      | 31              | 12,354     | 11,105                                  | 5,528      | 2,033               | 64,888    | 9.1                            |
| Sask.....   | 11,570               | 17,131     | Nil                      | 379        | 3               | 44,559     | 4,896                                   | 536        | 316                 | 79,430    | 8.5                            |
| Alta.....   | 12,189               | 26,324     | 8                        | 7          | 552             | 13,890     | 9,174                                   | 487        | 147                 | 102,768   | 8.1                            |
| B.C.....    | 17,461               | 10,191     | 500                      | 57,628     | 1,612           | 12,985     | 20,576                                  | 4,023      | 1,297               | 126,273   | 16.8                           |
| Yukon.....  | 38                   | 9          | Nil                      | 72         | Nil             | 19         | Nil                                     | Nil        | Nil                 | 138       | 3.4                            |
| Totals..... | 168,884              | 293,112    | 13,249                   | 301,108    | 12,176          | 217,764    | 189,268                                 | 47,099     | 23,658              | 1,266,228 | 11.5                           |

#### Subsection 2.—Telephone Finances.

The financial statistics of Table 5 show that the investment in telephone property in Canada, represented by the cost of property, is a very large item and is exceeded in the field of transportation and communications only by the investments in steam railways (pp. 645-646) and roads and highways (pp. 674-675).

#### 5.—Summary Financial Statistics of Telephones in Canada, 1911-36.

| Year.                   | Capitalization. |              | Cost of Property. | Gross Revenue. | Operating Expenses. | Net Operating Revenue. |            | Salaries and Wages. <sup>1</sup> | Em-<br>ployees. <sup>2</sup> |
|-------------------------|-----------------|--------------|-------------------|----------------|---------------------|------------------------|------------|----------------------------------|------------------------------|
|                         | Capital Stock.  | Funded Debt. |                   |                |                     |                        |            |                                  |                              |
|                         | \$              | \$           | \$                | \$             | \$                  | \$                     | \$         | No.                              |                              |
| 1911.....               | 21,527,375      | 18,516,608   | 34,737,530        | 10,068,220     | 6,979,045           | 3,089,175              | 915,636    | 10,425                           |                              |
| 1912.....               | 21,533,005      | 24,743,247   | 56,887,799        | 12,273,927     | 9,084,689           | 3,178,938              | 2,669,042  | 12,733                           |                              |
| 1913.....               | 26,800,801      | 33,256,503   | 69,214,071        | 14,807,278     | 11,175,689          | 3,721,589              | 6,839,369  | 12,867                           |                              |
| 1914.....               | 28,644,340      | 41,647,554   | 80,258,356        | 17,297,269     | 12,882,402          | 4,414,867              | 8,250,253  | 16,799                           |                              |
| 1915.....               | 28,947,122      | 45,337,869   | 83,792,583        | 17,601,673     | 12,836,715          | 6,764,958              | 8,357,029  | 15,072                           |                              |
| 1916.....               | 29,416,956      | 47,503,358   | 88,520,020        | 18,594,268     | 11,147,201          | 7,447,067              | 7,852,719  | 15,247                           |                              |
| 1917.....               | 29,476,367      | 49,645,335   | 94,469,534        | 20,122,282     | 12,095,426          | 8,026,856              | 8,882,593  | 16,490                           |                              |
| 1918.....               | 29,803,090      | 55,471,601   | 104,368,628       | 22,753,274     | 13,644,518          | 9,108,756              | 10,410,807 | 17,336                           |                              |
| 1919 <sup>3</sup> ..... | 35,227,233      | 65,360,600   | 125,017,222       | 29,401,006     | 20,081,436          | 9,319,570              | 15,774,586 | 20,491                           |                              |
| 1920.....               | 36,143,838      | 80,839,367   | 144,560,969       | 33,473,712     | 23,044,401          | 5,429,311              | 17,204,405 | 21,187                           |                              |
| 1921.....               | 42,194,426      | 90,343,345   | 158,678,229       | 36,980,013     | 20,080,035          | 6,906,878              | 19,000,422 | 19,943                           |                              |
| 1922.....               | 48,968,198      | 94,833,825   | 167,332,932       | 39,559,149     | 29,966,181          | 9,592,968              | 17,305,759 | 19,321                           |                              |
| 1923.....               | 57,306,676      | 95,306,347   | 179,002,152       | 42,656,655     | 32,390,370          | 10,266,285             | 18,182,429 | 21,002                           |                              |
| 1924.....               | 63,798,133      | 96,216,887   | 193,884,378       | 44,322,598     | 33,615,686          | 10,706,912             | 18,293,234 | 21,885                           |                              |
| 1925.....               | 65,514,130      | 102,683,161  | 210,535,795       | 47,233,617     | 35,566,947          | 11,666,670             | 19,106,383 | 21,831                           |                              |
| 1926.....               | 68,345,999      | 110,805,999  | 227,155,900       | 50,822,859     | 38,141,300          | 12,381,499             | 25,219,493 | 23,083                           |                              |
| 1927.....               | 76,460,540      | 115,981,955  | 243,999,135       | 56,907,338     | 48,561,910          | 8,345,422              | 20,264,605 | 23,437                           |                              |
| 1928.....               | 85,913,230      | 121,528,427  | 263,201,651       | 61,791,333     | 51,542,544          | 10,248,789             | 28,501,378 | 24,373                           |                              |
| 1929.....               | 93,737,979      | 141,205,328  | 291,589,148       | 65,240,610     | 56,559,517          | 8,681,093              | 31,672,277 | 27,459                           |                              |
| 1930.....               | 102,777,267     | 155,411,716  | 319,101,191       | 69,420,459     | 61,886,340          | 7,534,119              | 32,085,948 | 26,575                           |                              |
| 1931.....               | 105,765,685     | 168,224,084  | 333,055,119       | 66,806,580     | 60,067,016          | 6,739,564              | 28,493,252 | 23,825                           |                              |
| 1932.....               | 106,161,477     | 172,158,197  | 333,109,486       | 66,684,992     | 55,344,023          | 5,340,969              | 24,115,545 | 21,354                           |                              |
| 1933.....               | 106,336,079     | 165,229,197  | 330,490,878       | 66,062,970     | 60,423,641          | 5,639,329              | 21,276,406 | 18,786                           |                              |
| 1934.....               | 108,638,326     | 162,660,037  | 331,187,227       | 67,380,171     | 60,980,088          | 6,391,083              | 21,167,334 | 17,291                           |                              |
| 1935.....               | 109,776,507     | 159,785,968  | 327,764,020       | 67,029,918     | 60,889,780          | 6,140,138              | 22,533,362 | 17,414                           |                              |
| 1936.....               | 111,239,775     | 160,331,901  | 330,045,263       | 69,770,591     | 61,938,102          | 7,832,489              | 23,395,977 | 17,775                           |                              |

<sup>1</sup> Includes salaries and wages chargeable to capital account.

<sup>2</sup> Excluding employees on rural lines in Saskatchewan.

<sup>3</sup> Years ended June 30, 1911-18, and calendar years 1919-35.

## 6.—Financial Statistics of Telephones in Canada, by Provinces, 1936.

| Province.                  | Capital Liability.       | Cost of Property.       | Gross Revenues.         | Operating Expenses.     | Net Operating Revenues. | Salaries and Wages.  | Em-<br>ployees.  |
|----------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----------------------|------------------|
|                            | \$                       | \$                      | \$                      | \$                      | \$                      | \$                   | No.              |
| P.E. Island....            | 1,012,667                | 1,006,658               | 185,725                 | 143,665                 | 52,060                  | 61,405               | 81               |
| Nova Scotia...             | 8,417,824                | 10,605,323              | 1,908,081               | 1,131,812               | 776,269                 | 683,902              | 749              |
| New Brunswick              | 5,851,628                | 6,968,004               | 1,329,337               | 869,311                 | 460,026                 | 507,741              | 527              |
| Quebec.....                | 157,185,471 <sup>1</sup> | 70,496,877 <sup>1</sup> | 39,237,479 <sup>1</sup> | 27,060,438 <sup>1</sup> | 12,177,041 <sup>1</sup> | 6,058,417            | 4,089            |
| Ontario.....               | 6,470,765                | 137,815,129             | 2,222,642               | 1,711,464               | 511,178                 | 10,215,177           | 7,141            |
| Manitoba.....              | 20,880,554               | 22,764,040              | 2,937,435               | 1,810,278               | 1,127,157               | 1,393,850            | 1,047            |
| Saskatchewan...            | 10,556,387               | 33,223,982              | 3,238,066               | 2,601,280               | 636,786                 | 811,291 <sup>2</sup> | 640 <sup>2</sup> |
| Alberta.....               | 30,070,199               | 18,761,752              | 3,135,812               | 1,463,735               | 1,672,077               | 1,029,727            | 1,120            |
| British Colum-<br>bia..... | 22,033,195               | 28,351,257              | 5,548,881               | 3,697,517               | 1,851,364               | 2,594,615            | 2,374            |
| Yukon.....                 | 86,716                   | 55,241                  | 17,133                  | 17,453                  | -320                    | 9,852                | 7                |
| Totals.....                | 271,371,376              | 330,048,263             | 59,770,591              | 40,506,953              | 19,263,638              | 23,365,977           | 17,775           |

<sup>1</sup> Includes Bell Telephone in Ontario and Quebec.<sup>2</sup> Excludes rural lines.

## Subsection 3.—Telephone Calls.

Systems operating almost 90 p.c. of all telephones in Canada made estimates by actual count on days of normal business, and, after adjusting for uncompleted calls, holidays, Sundays, etc., the average was multiplied by 365. The long-distance calls in practically all cases were the actual long-distance calls put through or completed. The averages were 1,912 local and 22.1 long-distance calls per telephone and 222 telephone conversations per capita. The estimated per capita average for the United States in 1935 was 197.

## 7.—Local and Long-Distance Calls and Averages per Telephone and per Capita, calendar years 1928-36.

| Year.     | Local Calls.  | Long-Distance Calls. | Total Calls.  | Averages per Telephone. |                |        | Total Calls per Capita. <sup>1</sup> |
|-----------|---------------|----------------------|---------------|-------------------------|----------------|--------|--------------------------------------|
|           |               |                      |               | Local.                  | Long-Distance. | Total. |                                      |
|           | No.           | No.                  | No.           | No.                     | No.            | No.    | No.                                  |
| 1928..... | 2,184,686,000 | 36,177,000           | 2,220,863,000 | 1,637                   | 27.1           | 1,664  | 226                                  |
| 1929..... | 2,425,019,000 | 37,852,000           | 2,462,871,000 | 1,754                   | 27.4           | 1,781  | 246                                  |
| 1930..... | 2,475,323,000 | 37,497,000           | 2,512,820,000 | 1,764                   | 26.7           | 1,791  | 246                                  |
| 1931..... | 2,421,081,000 | 33,198,000           | 2,454,279,000 | 1,775                   | 24.3           | 1,799  | 236                                  |
| 1932..... | 2,319,354,000 | 27,219,000           | 2,346,573,000 | 1,839                   | 21.6           | 1,861  | 223                                  |
| 1933..... | 2,247,144,000 | 24,437,000           | 2,271,581,000 | 1,885                   | 20.5           | 1,905  | 213                                  |
| 1934..... | 2,278,864,000 | 25,396,000           | 2,304,260,000 | 1,904                   | 21.2           | 1,925  | 213                                  |
| 1935..... | 2,270,219,000 | 26,019,000           | 2,296,238,000 | 1,878                   | 21.5           | 1,900  | 211                                  |
| 1936..... | 2,421,202,000 | 27,990,000           | 2,449,192,000 | 1,912                   | 22.1           | 1,934  | 222                                  |

<sup>1</sup> Per capita figures are based on official estimates of population given on p. 155.

## PART VII.—WIRELESS COMMUNICATIONS.\*

Under the Radiotelegraph Act (c. 195, R.S.C. 1927) the administration of radio within the Dominion is vested in the Minister of Transport.

### Section 1.—Radio-telegraphy.

**The Coast Station Radio-telegraph System.**—The present coast station system of 81 stations consists of three chains—one extending from Vancouver to Prince Rupert on the Pacific, another from Port Arthur to the Atlantic ocean in the East, and the third from Port Churchill to Resolution island at the entrance to Hudson strait. The Great Lakes coast stations connect with those of the east coast, which, in turn, connect with the Hudson Bay route chain. There is no direct radio connection between the Great Lakes and the Pacific Coast chain.

Of the above stations, 14 on the east coast and Great Lakes are operated by the Canadian Marconi Co. under contract with the Department, and the remaining 67 on the east coast, west coast, and Hudson bay and strait are operated directly by the Department. Twice daily, at advertised hours, a number of these stations broadcast messages to shipping containing such important information as weather forecasts, storm warnings, reports in connection with floating derelicts, ice, and other dangers to navigation. In the interests of navigators, to whom accurate time is essential in computing observations on celestial bodies, one Canadian coast station transmits time signals at advertised hours daily.

Some years ago the discrimination of underwriters in the matter of insurance rates charged on ships plying to Canadian ports led the Department to feel that any reasonable expenditure which would tend to reduce these charges would be a sound investment. To this end 13 direction-finding stations have been established at specially selected sites with respect to navigational routes—7 on the east coast, 5 on Hudson bay and strait, and 1 on the west coast. These stations are fitted with special apparatus which enables the direction of the incoming radio signal transmitted by a ship to be accurately determined.

A network of 28 radio beacon stations (including one combined direction-finding and beacon station and one combined coast and beacon station) is maintained on the Atlantic and Pacific coasts and on the Great Lakes to enable a ship or aircraft equipped with its own direction-finding apparatus to determine its bearing or direction in relation to the radio beacon station. The operation of these radio beacons is automatic, the transmissions being made in clear weather hourly or half-hourly as advertised, and continuously during foggy weather. At Point Atkinson, B.C., the signals of the radio beacon are synchronized with the emissions of the fog alarm at that place during foggy weather for distance finding. To insure the safety of life at sea, all passenger steamers and freighters plying to and from Canadian ports must carry radio equipment manned by competent operators in possession of a certificate of proficiency in radio. The Department maintains a complete radio inspection service to enforce this regulation. Inspectors located at various ports throughout the Dominion are responsible for checking the efficiency of the radio equipment on ships of all nationalities, and seeing that only competent operators are carried. Ships are also surveyed with a view to the issuance of the necessary certificates prescribed under the Safety of Life at Sea and Load Line Conventions Act, 1931. Examinations for certificates of proficiency in radio are conducted by the Radio Division, and 7,006 certificates had been issued up to Mar. 31, 1937.

\*Section 1 and Subsection 1 of Section 2 have been revised by Commander C. P. Edwards, O.B.E., Chief of Air Services, Department of Transport, Ottawa. A fuller treatment of the historical and descriptive background of radio communication was published at pp. 607-610 of the 1932 Year Book.

## 1.—Government-Owned Radio Stations in Canada, fiscal year ended Mar. 31, 1937.

NOTE.—Of these Government-owned stations some only are operated by the Government. The rest are operated by the Marconi Co. and are indicated by asterisks (\*).

| Name of Station.                     | Situation.                     | Name of Station.                      | Situation.  |
|--------------------------------------|--------------------------------|---------------------------------------|---|
| <b>East Coast.</b>                   |                                | <b>Hudson Bay and Hudson Strait.</b>  |   |
| Belle Isle <sup>1</sup> .....        | Belle Isle Straits, Nfld.      | Cape Hopes Advance <sup>1</sup> ..... | Hudson Strait, Que.                               |
| Canso <sup>1</sup> .....             | Nova Scotia.                   | Nottingham Island <sup>1</sup> .....  | Hudson Strait, N.W.T.                             |
| Cape Race <sup>1</sup> .....         | Newfoundland.                  | Port Churchill <sup>1</sup> .....     | Hudson Bay, Man.                                  |
| Camperdown <sup>1</sup> .....        | Entrance Halifax Harbour N.S.  | Resolution Island <sup>1</sup> .....  | Hudson Strait, N.W.T.                             |
| Clarke City.....                     | Gulf of St. Lawrence, Que.     | Chesterfield Inlet <sup>1</sup> ..... | Hudson Bay, N.W.T.                                |
| Fame Point <sup>*</sup> .....        | " " "                          | <b>DIRECTION-FINDING STATIONS.</b>    |   |
| Father Point <sup>*</sup> .....      | Magdalen Islands, Que.         | Cape Hopes Advance.....               | Hudson Strait, Que.                               |
| Grindstone Island <sup>*</sup> ..... | Halifax, N.S.                  | Nottingham Island.....                | Hudson Strait, N.W.T.                             |
| Halifax Dockyard.....                | St. Lawrence River, Que.       | Port Churchill.....                   | Hudson Bay, Man.                                  |
| Montreal <sup>*</sup> .....          | Cape Breton, N.S.              | Resolution Island.....                | Hudson Strait, N.W.T.                             |
| North Sydney <sup>*</sup> .....      | Gulf of St. Lawrence, Que.     | Chesterfield Inlet.....               | Hudson Bay, N.W.T.                                |
| Point Amour <sup>*</sup> .....       | St. Lawrence River, Que.       | <b>Other Northwest Territories.</b>   |   |
| Quebec <sup>*</sup> .....            | Red Head, N.B.                 | Coppermine.....                       | Coronation Gulf.                                  |
| Saint John.....                      | S.E. of Nova Scotia.           | <b>West Coast.</b>                    |   |
| Yarmouth.....                        |                                | Alert Bay.....                        | Cormorant Island, B.C.                            |
| <b>DIRECTION-FINDING STATIONS.</b>   |                                | Bull Harbour.....                     | Hope Island, Vancouver Is.                        |
| Belle Isle D/F.....                  | Belle Isle Straits, Que.       | Cape Lazo.....                        | Strait of Georgia, near Comox, B.C.               |
| Canso D/F.....                       | Nova Scotia.                   | Dead Tree Point <sup>2</sup> .....    | South of Graham Island, Queen Charlotte Is., B.C. |
| Cape Race D/F.....                   | Newfoundland.                  | Digby Island.....                     | Entrance Prince Rupert Harbour, B.C.              |
| Camperdown D/F.....                  | Entrance Halifax Harbour, N.S. | Estevan.....                          | West Coast, Vancouver Is.                         |
| Saint John D/F.....                  | Red Head, N.B.                 | Gonzales Hill.....                    | Victoria, B.C.                                    |
| Saint Paul D/F <sup>2</sup> .....    | Cabot Strait, N.S.             | Merry Island.....                     | British Columbia.                                 |
| Yarmouth D/F.....                    | Nova Scotia.                   | Pachema Point <sup>1</sup> .....      | West Coast, Vancouver Is.                         |
| <b>RADIO BEACON STATIONS.</b>        |                                | Vancouver (VAB).....                  | Entrance Vancouver Harbour, B.C.                  |
| Cape Whittle.....                    | Gulf of St. Lawrence, Que.     | Vancouver (VAB).....                  | Merchants Exchange, Vancouver, B.C.               |
| East Point.....                      | Prince Edward Island.          | <b>DIRECTION-FINDING STATIONS.</b>    |   |
| West Point.....                      | Anticosti.                     | Pachema Point D/F.....                | West Coast, Vancouver Is.                         |
| Pointe des Monts.....                | Gulf of St. Lawrence, Que.     | <b>RADIO BEACON STATIONS.</b>         |   |
| Perroquet Island.....                | " " "                          | Point Atkinson.....                   | Burrard Inlet, B.C.                               |
| Nataquan Point.....                  | " " "                          | Race Rocks.....                       | Near Victoria, B.C.                               |
| Cape Bauld.....                      | Newfoundland (N.W.)            | Langara.....                          | Langara Island, Queen Charlotte Is., B.C.         |
| Cape Ray.....                        | Newfoundland (S.W.)            | Dead Tree Point.....                  | South of Graham Island, Queen Charlotte Is., B.C. |
| Heath Point.....                     | Anticosti, Que.                | Quaisino.....                         | West Coast, Vancouver Is. (Kains Is.)             |
| Larcher Lightship.....               | Off Yarmouth, N.S.             | Triple Island.....                    | Triple Islets Group, B.C.                         |
| Sable Island.....                    | North Atlantic.                | <b>LIFE-SAVING STATIONS.</b>          |   |
| Sambre Lightship.....                | Off Halifax, N.S.              | Banfield.....                         | West Coast, Vancouver Is.                         |
| Seal Island.....                     | S.E. of Nova Scotia.           | Carmanah.....                         | " "   |
| Saint Paul.....                      | Cabot Strait N.S.              | Cape Beale.....                       | " "   |
| Western Head.....                    | Near Liverpool, N.S.           | Pachena.....                          | " "   |
| <b>LIFE-SAVING STATIONS.</b>         |                                | Tofino.....                           | " "   |
| Grindstone.....                      | Gulf of St. Lawrence, Que.     | Lonnard Island.....                   | " "   |
| Bird Rocks.....                      | " " "                          | <b>Great Lakes.</b>                   |   |
| Little Wood Island.....              | Bay of Fundy, N.B.             | Kingston <sup>*</sup> .....           | Barriefield Common, Ont.                          |
| Gannet Rock.....                     | " " "                          | Midland <sup>*</sup> .....            | Georgian Bay, Ont.                                |
| <b>Great Lakes.</b>                  |                                | Point Edward <sup>*</sup> .....       | Lake Huron, Ont.                                  |
| Kingston <sup>*</sup> .....          | Barriefield Common, Ont.       | Port Arthur <sup>*</sup> .....        | Lake Erie, Ont.                                   |
| Midland <sup>*</sup> .....           | Georgian Bay, Ont.             | Fort Burwell <sup>*</sup> .....       | Sault Ste. Marie, Ont.                            |
| Point Edward <sup>*</sup> .....      | Lake Huron, Ont.               | Tobermory <sup>*</sup> .....          | Entrance Georgian Bay, Ont.                       |
| Port Arthur <sup>*</sup> .....       | Lake Erie, Ont.                | Toronto <sup>*</sup> .....            | Toronto Island, Ont.                              |
| Fort Burwell <sup>*</sup> .....      | Sault Ste. Marie, Ont.         | <b>RADIO BEACON STATIONS.</b>         |   |
| Sault Ste. Marie <sup>*</sup> .....  | Entrance Georgian Bay, Ont.    | Southeast Shoal.....                  | Lake Erie, Ont.                                   |
| Tobermory <sup>*</sup> .....         | Entrance Georgian Bay, Ont.    | Main Duck.....                        | Lake Ontario, Ont.                                |
| Toronto <sup>*</sup> .....           | Toronto Island, Ont.           | Long Point.....                       | Lake Erie, Ont.                                   |
| <b>RADIO BEACON STATIONS.</b>        |                                | Michipicoten Island.....              | Lake Superior, Ont.                               |
| Southeast Shoal.....                 | Lake Erie, Ont.                | Cove Island.....                      | Lake Huron, Ont.                                  |
| Main Duck.....                       | Lake Ontario, Ont.             | Slate Island.....                     | Lake Superior, Ont.                               |
| Long Point.....                      | Lake Erie, Ont.                | Port Weller.....                      | Lake Ontario, Ont.                                |
| Michipicoten Island.....             | Lake Superior, Ont.            |                                       |   |
| Cove Island.....                     | Lake Huron, Ont.               |                                       |   |
| Slate Island.....                    | Lake Superior, Ont.            |                                       |   |
| Port Weller.....                     | Lake Ontario, Ont.             |                                       |   |

<sup>1</sup> This is the same station as that listed under Direction-Finding Stations, but is included under the two headings to indicate its dual function. It is counted only as a D/F station in the summary in Table 3.

<sup>2</sup> Also included under Radio Beacon Stations to show its double function.

In 1937, Government radio-telegraph stations on the east coast, west coast, the Great Lakes, and Hudson bay and strait handled 452,031 messages or 7,872,891 words compared with 342,587 messages or 7,712,803 words handled in 1936. In 1937, the cost of maintenance was \$474,805 compared with \$466,198 in the previous year.

## Section 2.—Radio-telephony.

Broadcasting of the human voice by radio first commenced in Canada with test programs carried out by the Canadian Marconi Co. in Montreal during the winter evenings of 1919. Regular organized programs were commenced in December, 1920, by the same company, on a wavelength of 1,200 metres. In April, 1922, the establishment of broadcasting stations on a general scale commenced, 52 private, commercial and amateur broadcasting licences being granted during the fiscal year 1923. A radio-telephone service between Canada and Great Britain was first made available to the Canadian public, through the medium of the Bell Telephone Co. *via* the transatlantic radio circuit operated by the American Telegraph and Telephone Co. from New York, in March, 1928. In 1932, a direct circuit with Great Britain was opened through the beam station of the Canadian Marconi Co. at Drummondville, Quebec.

### Subsection 1.—Regulation of Radio-telephony.

As explained on p. 727, the administration of radio, including broadcasting, in Canada is vested in the Dominion Department of Transport. All stations must be licensed; the fee for a broadcasting station is \$50 per annum, and for a receiving set, \$2 per annum.\*

Approximately \$200,000 is expended annually by the Radio Division of the Department of Transport for the suppression of inductive interference in the interests of broadcast listeners. This service is entirely free.

The extent to which private receiving sets are used for the reception of public broadcasting is indicated by the number of private receiving licences issued in the various provinces of the Dominion during the fiscal year 1937 as follows: Prince Edward Island, 3,282; Nova Scotia, 40,938; New Brunswick, 27,253; Quebec, 240,105; Ontario, 424,126; Manitoba, 69,861; Saskatchewan, 68,193; Alberta, 72,458; British Columbia, 91,978; Yukon and Northwest Territories, 306.

\*Increased to \$2.50 per annum as from Apr. 1, 1938, by an Order in Council of Jan. 21, 1938, under authority of the Radiotelegraph Act (c. 197, R.S.C. 1927).

### 2.—Wireless and Radio Stations in Operation in Canada, Mar. 31, 1933-37.

| Class of Station.                                  | 1933.          | 1934.          | 1935.          | 1936.          | 1937.            |
|--|----------------|----------------|----------------|----------------|------------------|
|  | No.            | No.            | No.            | No.            | No.              |
| Coast stations (Government-owned).....             | 31             | 30             | 32             | 31             | 31               |
| Direction-finding stations (Government-owned)..... | 12             | 13             | 13             | 13             | 13               |
| Ship stations (Government-owned).....              | 49             | 53             | 55             | 56             | 58               |
| Radio beacon stations (Government-owned).....      | 20             | 20             | 21             | 24             | 26               |
| Radiophone stations (Government-owned).....        | 5              | 5              | 9              | 9              | 10               |
| Land stations.....                                 | 1              | 1              | 1              | 1              | 1                |
| Ship stations (commercial).....                    | 224            | 215            | 217            | 212            | 261              |
| Limited coast stations.....                        | 3              | 4              | 4              | 5              | 5                |
| Public commercial stations.....                    | 30             | 22             | 26             | 36             | 41               |
| Private commercial stations.....                   | 122            | 162            | 210            | 275            | 315              |
| Private commercial broadcasting stations.....      | 70             | 68             | 74             | 78             | 80               |
| Experimental stations.....                         | 110            | 92             | 99             | 82             | 126              |
| Amateur experimental stations.....                 | 1,229          | 1,006          | 2,012          | 2,380          | 2,821            |
| Amateur broadcasting stations <sup>1</sup> .....   | 7              | 6              | 2              | Nil            | Nil              |
| Experimental short-wave broadcasting stations..... | Nil            | Nil            | 9              | 10             | 8                |
| Private receiving stations <sup>2</sup> .....      | 761,288        | 707,625        | 812,335        | 862,109        | 1,038,500        |
| Radio training schools.....                        | 4              | 4              | 4              | 6              | 5                |
| Licensed aircraft.....                             | 2              | 2              | 1              | 4              | 7                |
| <b>Totals.....</b>                                 | <b>763,207</b> | <b>709,928</b> | <b>815,124</b> | <b>865,331</b> | <b>1,042,308</b> |

<sup>1</sup> This class of station discontinued Apr. 1, 1935.  
numbering 2,758 in 1937, 2,314 in 1936, 1,931 in 1935, 1,517 in 1934, and 1,202 in 1933.

<sup>2</sup> Includes licences issued free to the blind.

### Subsection 2.—Canadian Broadcasting Corporation.

National radio broadcasting in Canada entered a second phase on Nov. 2, 1936, when the Canadian Broadcasting Corporation replaced the Canadian Radio Broadcasting Commission. Notable progress was made during 1937 toward improvement in broadcast coverage, reception, and program service.

The most important technical developments were the inauguration of two 50,000-watt transmitting stations, CBF, at Verchères, Que., to serve the province of Quebec, and CBL, Hornby, Ont., to serve the province of Ontario. These have vastly improved the service in those areas and form the nucleus of a chain of such stations ultimately to be placed at strategic points throughout the country.

Care has been given to improving announcing standards, and a special department has been created to deal with this. Reference libraries have been established and a comprehensive handbook for announcers has been published. A guide to the pronunciation of Canadian place names is at present in preparation. This service is available without cost to any private station.

A successful experiment was conducted in the Spring of 1938 when certain Canadian universities were invited to put on programs of undergraduate and student talent. These programs were very well received and it is proposed to continue them from other universities. They provide an excellent field for the discovery of new artistic talent.

A talks department was established during 1937 and a wide variety of informative and popular talks have since been planned and presented. Subjects range from nature study, book reviews, discussions on poetry, history, and science, to stories of travel and adventure. Balanced controversy has been encouraged. Representative groups of citizens across Canada have formed discussion clubs to give broadcasts on current Canadian questions. The forum method has also been used, as in the "Whither Democracy" series on the problems of Canadian politics and economics. Care is taken to ensure that such programs are well balanced, with all major points of view presented. On current affairs, commentaries on international events have been given on Sunday afternoons, while special talks on British and United States affairs have been brought directly to Canadian listeners from London and New York.

In British Columbia, in co-operation with the provincial Department of Education, an interesting experiment was begun with a series of broadcasts to schools.

In June a special mobile unit was added to the CBC's broadcasting equipment. This unit, which consists of a motor van in which is installed the most modern and scientifically correct broadcasting apparatus, enables the CBC to cover important special events of national interest which it hitherto has not been able to present to Canadian listeners. The unit, which is capable of transmitting programs by short-wave to a CBC station for release over the national network, also contains recording machines. These recording machines are being used for the presentation of programs from remote parts, reflecting the varied and distinctive character of Canadian life. Broadcasts of this nature include a series entitled "Summer Over Prince Edward Island", "Summer over Nova Scotia", and "Summer Over New Brunswick". A series of descriptive broadcasts of the National Parks also is planned.

An outstanding feature of the CBC's program policy was the inauguration of a series of broadcasts by leading Canadian symphony orchestras. This series was inaugurated in May when the Toronto Promenade Symphony Orchestra concerts were broadcast over the CBC national network and over the vast blue and red networks of the NBC in the United States. This series proved very successful and the broadcasting of symphony music of Canadian orchestras over such networks is

to be encouraged. All the more important music organizations in Canada eventually are to be included in this plan.

**Select Standing Committee on National Broadcasting.**—On Feb. 24, 1938, the Government appointed a Select Standing Committee to review the policies of the CBC, with special reference to revenues, expenditure, and development. The Committee held seven meetings and, following deliberations of its findings, the Committee reported to the Government that it approved the policies followed by the CBC, its business administration and set-up and that it was in accord with the CBC's plan for national coverage, involving ownership of high-power stations and the extension of Corporation coverage through its own comprehensive facilities—facilities which, it was pointed out, are urgently required. A feature of the Committee's report was the recommendation that a high-power short-wave transmitting station should be established at an early date for the purpose of interpreting and advertising Canada abroad and to facilitate the exchange of programs between Canada and other countries. It should be financed, the Committee recommended, as a national project, operated and controlled by the CBC. Canada, at the present time, is the only major trading nation without such facilities.

Early in the year, the CBC entered into an arrangement with the BBC which made possible exchange of producers between the two systems. A CBC representative spent six months with the BBC, during which time he made a study of broadcasting in England; at the same time a BBC representative was the guest of the CBC. It is the intention of the CBC to effect other exchanges with various countries from time to time.

During the year the CBC continued with even greater success than in previous years the exchange of programs with Great Britain, the United States, and a number of European and South American countries.

## PART VIII.—THE POST OFFICE.\*

**Historical.**—A brief account of the pre-Confederation development of postal services in Canada was given on pp. 789-790 of the 1934-35 Year Book.

At Confederation the provincial systems were transferred to the Dominion. The Post Office Act of 1867 established a service throughout Canada. The domestic rate on letters was reduced from 5 to 3 cents per half-ounce, and in 1870 the rates to the United States and the United Kingdom were reduced from 10 to 6 cents and from 12½ to 6 cents, respectively, per half-ounce. In 1875 a convention between Canada and the United States reduced postal rates between the countries to the domestic level. In 1878, on the admission of Canada to the Postal Union, letter postage to the countries of the Postal Union was reduced to 5 cents per half-ounce. After a conference in 1897 Imperial penny postage (2 cents per half-ounce) was established on Dec. 25, 1898, while the domestic rate was reduced from 3 to 2 cents per ounce. These rates were maintained until 1915, when, with the rising costs of the war period, rates were increased. Penny postage again became effective for Canada, to the United States, Newfoundland and other countries of North America on July 1, 1926, and to the United Kingdom and all other places within the British Empire on Dec. 25, 1928, with later extensions to France and South America. On July 1, 1931, a special revenue tax, imposed by the Government for the purpose of obtaining additional revenue, came into effect on letters addressed to places in Canada, throughout the Empire, to France, to Spain and to North and South America generally, making the rate in these cases 3 cents for the first ounce and 2 cents for each additional ounce.

\*Revised by H. Beaulieu, Director, Administrative Services, Post Office Department.



The Post Office Department is administered by the Postmaster General. Besides the several administrative branches at Ottawa, the Dominion is divided into 15 districts, each in charge of a District Director or Superintendent of Postal Service. The Canadian system embraces a territory more extensive than that served by any other system, excepting those of United States and Russia, and the relatively small population compared with the great distance to be covered makes inevitable a peculiarly difficult and relatively expensive service.

**Rural Mail Delivery.**—A system of rural mail delivery was inaugurated in Canada on Oct. 10, 1908, limited at that time to existing stage routes. The service was greatly extended by new regulations taking effect on Apr. 1, 1912. The result has been an increase in the number of rural routes from approximately 900 in 1912 to 4,436 in 1936, having 246,462 mail boxes as against approximately 25,000 in 1912.

**Mail Transportation.**—The conveyance of mail by land, water, and air entailed a total expenditure of \$13,358,239 during the fiscal year ended 1937. Railway carriage cost \$6,808,896, land transportation (largely that by rural delivery) cost \$5,988,040, conveyance by steamship cost \$272,721, while that by air cost \$288,582. These amounts were paid solely for services rendered as carriers. For details regarding air-mail services, see p. 737. Special subsidies are granted to assure the maintenance of certain steamship services. Since these subsidized services provide transportation for passengers and freight as well as mail, the subsidies are included with other expenditures on water transportation on pp. 694-696.

**Statistics.**—Tables 1 to 3 show, respectively, the numbers of post offices in operation in Canada in the latest six years, the gross revenue in each office collecting \$10,000 and upwards in 1936 and 1937, and the net revenues and expenditures the Department in various years since 1890.

**1.—Numbers of Post Offices in Operation, by Provinces, Mar. 31, 1932-37.**

| Province.                  | 1932.         | 1933.         | 1934.         | 1935.         | 1936.         | 1937.         |
|----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Prince Edward Island.....  | 116           | 114           | 115           | 114           | 114           | 114           |
| Nova Scotia.....           | 1,673         | 1,629         | 1,600         | 1,571         | 1,565         | 1,551         |
| New Brunswick.....         | 1,025         | 1,016         | 1,004         | 1,000         | 1,002         | 1,009         |
| Quebec.....                | 2,451         | 2,440         | 2,450         | 2,466         | 2,494         | 2,542         |
| Ontario.....               | 2,522         | 2,524         | 2,523         | 2,540         | 2,559         | 2,589         |
| Manitoba.....              | 781           | 778           | 778           | 788           | 788           | 794           |
| Saskatchewan.....          | 1,424         | 1,423         | 1,426         | 1,433         | 1,460         | 1,482         |
| Alberta.....               | 1,200         | 1,215         | 1,213         | 1,228         | 1,243         | 1,246         |
| British Columbia.....      | 905           | 892           | 889           | 892           | 895           | 908           |
| Yukon.....                 | 19            | 19            | 18            | 18            | 18            | 18            |
| Northwest Territories..... | 17            | 18            | 19            | 19            | 18            | 19            |
| <b>Totals.....</b>         | <b>12,133</b> | <b>12,074</b> | <b>12,035</b> | <b>12,069</b> | <b>12,156</b> | <b>12,272</b> |

**2.—Statistics of Gross Postal Revenues of Offices Collecting \$10,000 and upwards, fiscal years ended Mar. 31, 1936 and 1937.**

| Name of Post Office.            | 1936.          | 1937.          | Name of Post Office.            | 1936.            | 1937.            |
|---------------------------------|----------------|----------------|---------------------------------|------------------|------------------|
| <b>P.E. Island.</b>             | <b>\$</b>      | <b>\$</b>      | <b>Nova Scotia—concluded.</b>   | <b>\$</b>        | <b>\$</b>        |
| Charlottetown.....              | 79,155         | 80,282         | North Sydney.....               | 16,426           | 16,345           |
| Summerside.....                 | 24,664         | 25,053         | Pictou.....                     | 14,248           | 13,912           |
| <b>Totals for Province.....</b> | <b>177,984</b> | <b>173,542</b> | Springhill.....                 | 12,542           | 11,995           |
| <b>Nova Scotia.</b>             |                |                | Stellarton.....                 | 10,434           | 10,283           |
| Amherst.....                    | 35,700         | 35,607         | Sydney.....                     | 75,126           | 76,004           |
| Antigonish.....                 | 16,135         | 17,252         | Truro.....                      | 57,072           | 57,313           |
| Bridgetown.....                 | 10,089         | 10,021         | Windsor.....                    | 19,453           | 21,533           |
| Bridgewater.....                | 19,727         | 19,685         | Wolfville.....                  | 15,840           | 14,973           |
| Digby.....                      | 11,691         | 11,606         | Yarmouth.....                   | 31,494           | 30,773           |
| Glace Bay.....                  | 19,294         | 18,649         | <b>Totals for Province.....</b> | <b>1,486,944</b> | <b>1,468,049</b> |
| Halifax.....                    | 534,701        | 553,272        | <b>New Brunswick.</b>           |                  |                  |
| Kentville.....                  | 23,603         | 22,974         | Bathurst.....                   | 13,811           | 14,429           |
| Liverpool.....                  | 15,781         | 15,511         | Campbellton.....                | 23,973           | 24,314           |
| Lunenburg.....                  | 15,364         | 14,080         | Chatham.....                    | 11,623           | 10,961           |
| New Glasgow.....                | 39,469         | 39,306         | Dalhousie.....                  | 10,142           | 10,089           |

2.—Statistics of Gross Postal Revenues of Offices Collecting \$10,000 and upwards, fiscal years ended Mar. 31, 1936 and 1937—continued.

| Name of Post Office.            | 1936.             | 1937.             | Name of Post Office.      | 1936.     | 1937.     |
|---------------------------------|-------------------|-------------------|---------------------------|-----------|-----------|
| <b>New Brunswick—conc.</b>      | \$                | \$                | <b>Ontario—concluded.</b> | \$        | \$        |
| Edmundston.....                 | 17,203            | 17,400            | Gravenhurst.....          | 12,203    | 11,838    |
| Fredericton.....                | 78,203            | 82,550            | Grimsby.....              | 12,495    | 11,791    |
| Moncton.....                    | 432,243           | 463,578           | Guelph.....               | 106,449   | 107,465   |
| Newcastle.....                  | 13,821            | 13,526            | Haileybury.....           | 13,780    | 13,622    |
| Saint John.....                 | 277,391           | 278,722           | Hamilton.....             | 660,554   | 658,862   |
| St. Stephen.....                | 19,608            | 18,836            | Hanover.....              | 15,297    | 15,889    |
| Sackville.....                  | 20,127            | 20,257            | Hawkesbury.....           | 11,554    | 11,226    |
| Sussex.....                     | 16,398            | 16,255            | Hespeler.....             | 11,420    | 11,724    |
| Woodstock.....                  | 19,329            | 19,671            | Huntsville.....           | 17,893    | 17,239    |
| <b>Totals for Province.....</b> | <b>1,272,555</b>  | <b>1,396,674</b>  | Ingersoll.....            | 33,864    | 24,877    |
| <b>Quebec.</b>                  |                   |                   | Knapskasing.....          | 11,915    | 12,095    |
| Amos.....                       | 18,110            | 21,155            | Kenora.....               | 31,374    | 31,780    |
| Chicoutimi.....                 | 29,162            | 32,088            | Kincardine.....           | 16,271    | 19,581    |
| Coaticook.....                  | 12,748            | 12,504            | Kingsville.....           | 125,690   | 127,563   |
| Drummondville East.....         | 34,470            | 34,629            | Kirkland Lake.....        | 10,185    | 10,831    |
| Farnham.....                    | 16,050            | 16,179            | Kitchener.....            | 52,977    | 59,870    |
| Gardenvale.....                 | 45,141            | 29,153            | Leamington.....           | 141,407   | 148,821   |
| Granby.....                     | 29,996            | 31,090            | Lindsay.....              | 23,112    | 22,557    |
| Grand Mère.....                 | 13,532            | 13,854            | Listowel.....             | 39,211    | 36,305    |
| Hull.....                       | 40,645            | 39,752            | London.....               | 13,184    | 12,773    |
| Joliette.....                   | 24,532            | 24,523            | Meaford.....              | 518,446   | 534,018   |
| Lachute.....                    | 10,224            | 10,820            | Meadow.....               | 10,626    | 11,574    |
| La Tuque.....                   | 13,823            | 13,702            | Midland.....              | 21,979    | 21,848    |
| Lennoxville.....                | 10,652            | 10,989            | Napanee.....              | 21,929    | 22,385    |
| Lévis.....                      | 24,574            | 24,980            | New Liskeard.....         | 24,775    | 24,810    |
| Magog.....                      | 13,827            | 13,169            | Newmarket.....            | 19,951    | 19,240    |
| Montmagny.....                  | 12,213            | 12,591            | Niagara Falls.....        | 112,452   | 124,587   |
| Montreal.....                   | 4,082,060         | 4,918,172         | North Bay.....            | 70,414    | 72,937    |
| Noranda.....                    | 10,109            | 21,114            | Oakville.....             | 20,518    | 21,817    |
| Quebec.....                     | 650,332           | 683,480           | Orangeville.....          | 13,454    | 13,011    |
| Rimouski.....                   | 20,124            | 20,515            | Orillia.....              | 43,219    | 43,506    |
| Rock Island.....                | 13,490            | 12,918            | Oshawa.....               | 103,116   | 119,951   |
| Rouyn.....                      | 21,583            | 22,550            | Ottawa.....               | 926,459   | 731,202   |
| Ste. Agathe des Monts.....      | 12,346            | 11,881            | Owen Sound.....           | 52,015    | 50,878    |
| Ste. Anne de Beaupré.....       | 13,285            | 13,364            | Paris.....                | 22,753    | 22,825    |
| St. Hyacinthe.....              | 45,630            | 47,418            | Parry Sound.....          | 18,472    | 17,155    |
| St. Jean.....                   | 32,852            | 33,187            | Pembroke.....             | 31,352    | 30,268    |
| St. Jérôme.....                 | 10,187            | 18,773            | Perth.....                | 30,734    | 29,182    |
| Shawinigan Falls.....           | 26,394            | 27,317            | Peterborough.....         | 128,756   | 131,054   |
| Sherbrooke.....                 | 125,482           | 128,895           | Petrolia.....             | 11,668    | 10,848    |
| Sorel.....                      | 20,103            | 20,508            | Pictou.....               | 20,386    | 19,569    |
| Thetford Mines.....             | 19,397            | 20,253            | Port Arthur.....          | 66,675    | 68,419    |
| Three Rivers.....               | 78,946            | 82,960            | Port Colborne.....        | 19,809    | 21,238    |
| Valleyfield.....                | 15,705            | 19,133            | Port Credit.....          | 11,251    | 11,186    |
| Victoriaville.....              | 21,533            | 22,538            | Port Hope.....            | 23,870    | 22,476    |
| <b>Totals for Province.....</b> | <b>7,736,908</b>  | <b>8,020,065</b>  | Prescott.....             | 13,760    | 13,348    |
| <b>Ontario.</b>                 |                   |                   | Preston.....              | 25,603    | 26,783    |
| Amherstburg.....                | 11,162            | 10,056            | Red Lake.....             | 8,832     | 10,962    |
| Arnprior.....                   | 14,649            | 14,638            | Renfrew.....              | 26,282    | 26,153    |
| Aurora.....                     | 13,065            | 13,108            | St. Catharines.....       | 120,376   | 121,736   |
| Aylmer West.....                | 12,969            | 12,960            | St. Marys.....            | 16,993    | 10,454    |
| Barrie.....                     | 32,313            | 32,817            | St. Thomas.....           | 59,757    | 60,020    |
| Bellefleur.....                 | 71,514            | 73,571            | Sarnia.....               | 97,105    | 67,266    |
| Bowmanville.....                | 14,317            | 15,154            | Sault Ste. Marie.....     | 68,902    | 71,542    |
| Bracebridge.....                | 16,063            | 15,677            | Schumacher.....           | 10,307    | 10,208    |
| Brampton.....                   | 28,054            | 31,122            | Seaford.....              | 10,442    | 10,618    |
| Brantford.....                  | 142,423           | 142,514           | Simcoe.....               | 43,917    | 46,222    |
| Brockville.....                 | 62,608            | 55,280            | Sioux Lookout.....        | 11,730    | 12,861    |
| Burlington.....                 | 11,038            | 11,040            | Smiths Falls.....         | 25,066    | 25,249    |
| Campbellford.....               | 12,569            | 10,689            | South Porcupine.....      | 12,480    | 14,454    |
| Carleton Place.....             | 18,314            | 16,910            | Stratford.....            | 66,666    | 65,620    |
| Chatham.....                    | 79,008            | 81,544            | Strathroy.....            | 14,162    | 13,693    |
| Cobalt.....                     | 14,552            | 14,291            | Sudbury.....              | 55,724    | 65,034    |
| Cobourg.....                    | 30,241            | 29,601            | Therold.....              | 11,651    | 18,302    |
| Cochrane.....                   | 18,361            | 18,819            | Tilsonburg.....           | 17,624    | 16,460    |
| Collingwood.....                | 17,217            | 16,637            | Timmins.....              | 63,688    | 68,300    |
| Copper Cliff.....               | 11,258            | 12,095            | Toronto.....              | 7,085,300 | 7,628,323 |
| Cornwall.....                   | 53,900            | 52,594            | Trenton.....              | 25,732    | 26,256    |
| Dundas.....                     | 10,478            | 16,721            | Walkerton.....            | 12,125    | 11,659    |
| Dunville.....                   | 24,620            | 24,091            | Wallaceburg.....          | 14,762    | 14,915    |
| Fergus.....                     | 20,304            | 21,694            | Waterloo.....             | 56,389    | 53,890    |
| Fort Erie North.....            | 22,344            | 22,344            | Welland.....              | 44,258    | 44,259    |
| Fort Frances.....               | 20,554            | 21,574            | Weston.....               | 24,514    | 23,082    |
| Fort William.....               | 83,758            | 86,863            | Whitby.....               | 13,998    | 14,126    |
| Galt.....                       | 64,129            | 67,797            | Winkton.....              | 8,857     | 10,201    |
| Gananoque.....                  | 17,331            | 18,048            | Windsor.....              | 400,098   | 417,201   |
| Georgetown.....                 | 21,650            | 22,607            | Wingham.....              | 11,587    | 11,483    |
| Goderich.....                   | 18,555            | 18,097            | Woodstock.....            | 58,064    | 60,520    |
| <b>Totals for Province.....</b> | <b>15,212,885</b> | <b>15,735,895</b> |                           |           |           |

**2.—Statistics of Gross Postal Revenues of Offices Collecting \$10,000 and upwards, fiscal years ended Mar. 31, 1936 and 1937—concluded.**

| Name of Post Office.           | 1936.            | 1937.            | Name of Post Office.           | 1936.             | 1937.             |
|--------------------------------|------------------|------------------|--------------------------------|-------------------|-------------------|
| <b>Manitoba.</b>               |                  |                  | <b>Alberta—concluded.</b>      |                   |                   |
| Brandon.....                   | \$ 83,201        | \$ 81,012        | Wetaskiwin.....                | 17,280            | 15,916            |
| Dauphin.....                   | 23,813           | 23,627           | <b>Totals for Province....</b> |                   |                   |
| Finlayson.....                 | 17,217           | 17,713           |                                | <b>2,379,588</b>  | <b>2,296,789</b>  |
| Neepawa.....                   | 11,669           | 11,739           | <b>British Columbia.</b>       |                   |                   |
| Norwood Grove.....             | 8,650            | 10,026           | Chilliwack.....                | 22,962            | 22,874            |
| Portage la Prairie.....        | 29,089           | 29,626           | Courtenay.....                 | 11,531            | 11,717            |
| St. Boniface.....              | 25,993           | 26,682           | Cranbrook.....                 | 21,242            | 20,424            |
| The Pas.....                   | 17,366           | 17,491           | Duncan.....                    | 23,797            | 24,008            |
| Wawanesa.....                  | 10,819           | 11,928           | Fernie.....                    | 12,436            | 11,082            |
| Winnipeg.....                  | <b>2,957,539</b> | <b>3,049,995</b> | Kamloops.....                  | 39,298            | 39,463            |
| <b>Totals for Province....</b> |                  |                  | Kelowna.....                   | 33,695            | 32,576            |
|                                | <b>3,744,076</b> | <b>3,862,996</b> | Kimberley.....                 | 11,290            | 10,328            |
| <b>Saskatchewan.</b>           |                  |                  | Mission City.....              | 10,557            | 10,177            |
| Assiniboia.....                | 11,210           | 10,979           | Nanaimo.....                   | 31,336            | 32,350            |
| Betevan.....                   | 16,115           | 15,719           | Nelson.....                    | 59,187            | 59,237            |
| Humboldt.....                  | 14,286           | 14,220           | New Westminster.....           | 99,491            | 100,313           |
| Lloydminster.....              | 14,846           | 13,437           | Pentteton.....                 | 28,810            | 29,610            |
| Melfort.....                   | 16,937           | 15,928           | Port Alberni.....              | 16,402            | 18,400            |
| Melville.....                  | 15,250           | 14,838           | Powell River.....              | 14,841            | 13,321            |
| Moose Jaw.....                 | 100,592          | 104,168          | Prince George.....             | 12,084            | 11,581            |
| North Battleford.....          | 37,226           | 35,895           | Prince Rupert.....             | 31,122            | 29,988            |
| Prince Albert.....             | 54,341           | 55,051           | Revelstoke.....                | 15,441            | 14,953            |
| Regina.....                    | 816,156          | 863,020          | Rossland.....                  | 10,907            | 10,223            |
| Rosetown.....                  | 11,849           | 11,941           | Salmon Arm.....                | 11,857            | 11,182            |
| Saskatoon.....                 | 326,739          | 334,454          | Trail.....                     | 45,988            | 43,275            |
| Shamway.....                   | 12,184           | 11,299           | Vancouver.....                 | 1,518,919         | 1,617,289         |
| Swift Current.....             | 35,550           | 33,807           | Vernon.....                    | 35,734            | 34,618            |
| Tisdale.....                   | 11,856           | 11,044           | Victoria.....                  | 324,306           | 342,264           |
| Weyburn.....                   | 25,165           | 24,090           | <b>Totals for Province....</b> |                   |                   |
| Yorkton.....                   | 37,393           | 38,468           |                                | <b>3,071,394</b>  | <b>3,156,310</b>  |
| <b>Totals for Province....</b> |                  |                  | <b>Yukon.</b>                  |                   |                   |
|                                | <b>2,834,336</b> | <b>2,750,110</b> | <b>Totals for Yukon....</b>    |                   |                   |
| <b>Alberta.</b>                |                  |                  |                                | <b>16,704</b>     | <b>17,129</b>     |
| Banff.....                     | 17,379           | 19,547           | <b>Summary.</b>                |                   |                   |
| Calgary.....                   | 588,109          | 598,258          | Prince Edward Island.....      | 177,985           | 173,542           |
| Camrose.....                   | 17,965           | 16,791           | Nova Scotia.....               | 1,486,945         | 1,468,040         |
| Drumheller.....                | 22,168           | 22,450           | Nova Scotia.....               | 1,272,555         | 1,296,074         |
| Edmonton.....                  | 577,549          | 592,073          | New Brunswick.....             | 7,736,908         | 8,020,005         |
| Grande Prairie.....            | 11,794           | 12,035           | Ontario.....                   | 15,212,886        | 15,735,895        |
| Lacombe.....                   | 12,129           | 11,564           | Manitoba.....                  | 3,764,077         | 3,592,969         |
| Lethbridge.....                | 81,286           | 77,855           | Saskatchewan.....              | 2,833,336         | 2,750,110         |
| Medicine Hat.....              | 43,464           | 42,981           | Alberta.....                   | 2,379,888         | 2,296,780         |
| Ponoka.....                    | 10,724           | 10,338           | British Columbia.....          | 3,071,394         | 3,156,310         |
| Red Deer.....                  | 21,646           | 21,591           | Yukon.....                     | 16,704            | 17,129            |
| Vegreville.....                | 11,961           | 10,798           | <b>Totals for Canada....</b>   |                   |                   |
| Vermilion.....                 | 10,389           | 10,076           |                                | <b>37,932,678</b> | <b>38,716,850</b> |

**3.—Revenues and Expenditures of the Post Office Department for the quinquennial fiscal years ended 1890-1910, and fiscal years ended Mar. 31, 1911-37.**

NOTE.—For all other years since Confederation, see 1911 Year Book, p. 288.

| Fiscal Year. | Net Revenue. <sup>1</sup> | Expenditure. | Deficit.  | Surplus.  | Fiscal Year. | Net Revenue. <sup>1</sup> | Expenditure. | Deficit.  | Surplus.  |
|--------------|---------------------------|--------------|-----------|-----------|--------------|---------------------------|--------------|-----------|-----------|
| \$           | \$                        | \$           | \$        | \$        | \$           | \$                        | \$           | \$        | \$        |
| 1890...      | 2,357,389                 | 3,074,470    | 717,081   | -         | 1922...      | 26,554,538                | 28,121,425   | 1,566,887 | -         |
| 1895...      | 2,702,790                 | 3,593,647    | 800,857   | -         | 1923...      | 29,262,233                | 27,794,502   | -         | 1,467,731 |
| 1900...      | 3,183,984                 | 3,045,646    | 461,662   | -         | 1924...      | 29,100,492                | 28,305,937   | -         | 794,555   |
| 1905...      | 5,125,373                 | 4,634,528    | -         | 490,845   | 1925...      | 28,581,993                | 29,873,802   | 1,291,809 | -         |
| 1910...      | 7,958,547                 | 7,215,337    | -         | 743,210   | 1926...      | 31,024,404                | 30,469,686   | -         | 554,718   |
| 1911...      | 9,146,952                 | 7,954,223    | -         | 1,192,729 | 1927...      | 29,378,697                | 31,007,699   | 1,629,001 | -         |
| 1912...      | 10,452,255                | 9,172,055    | -         | 1,310,220 | 1928...      | 30,529,155                | 32,379,199   | 1,850,041 | -         |
| 1913...      | 12,000,479                | 10,832,806   | -         | 1,177,671 | 1929...      | 31,170,904                | 33,453,058   | 2,312,154 | -         |
| 1914...      | 12,950,216                | 12,822,058   | -         | 134,158   | 1930...      | 32,909,293                | 35,036,022   | 2,067,326 | -         |
| 1915...      | 13,046,650                | 15,961,191   | 2,914,541 | -         | 1931...      | 30,415,107                | 36,202,604   | 5,676,497 | -         |
| 1916...      | 18,858,410                | 10,009,139   | -         | 2,849,271 | 1932...      | 32,476,604                | 34,448,956   | 1,972,352 | -         |
| 1917...      | 20,902,384                | 16,300,579   | -         | 4,601,805 | 1933...      | 30,825,155                | 30,167,827   | -         | 657,328   |
| 1918...      | 21,345,394                | 18,046,558   | -         | 3,298,836 | 1934...      | 30,367,465                | 29,220,730   | -         | 1,146,735 |
| 1919...      | 21,602,713                | 19,273,554   | -         | 2,329,159 | 1935...      | 31,248,324                | 28,974,316   | -         | 2,274,007 |
| 1920...      | 24,449,917                | 20,774,385   | -         | 3,675,532 | 1936...      | 32,507,888                | 30,100,102   | -         | 2,407,787 |
| 1921...      | 26,331,119                | 24,661,262   | -         | 1,669,857 | 1937...      | 34,274,652                | 30,538,575   | -         | 3,736,077 |

<sup>1</sup> "Net Revenue" is exclusive of commissions and allowances to postmasters and some other smaller items. The gross revenue in the fiscal year 1936 was \$39,403,500 and in 1937, \$41,181,506.

**Postage.**—The net revenue receipts shown in Table 3 are mainly received in the form of postage as is indicated by the following gross figures.

The gross value of the postage stamps, post cards, etc., sold during each of the latest eight fiscal years, was: \$27,101,353 in 1930, \$25,769,781 in 1931, \$27,242,715 in 1932, \$25,999,159 in 1933, \$25,541,129 in 1934, \$26,303,451 in 1935, \$27,341,608 in 1936, and \$28,179,323 in 1937. Receipts from postage paid in cash were as follows: \$9,045,805 in 1930, \$8,887,322 in 1931, \$9,078,136 in 1932, \$8,173,950 in 1933, \$8,129,387 in 1934, \$8,619,712 in 1935, \$9,277,072 in 1936, and \$10,203,389 in 1937.

**Auxiliary Services.**—The auxiliary postal services—the issuing of money orders (including postal notes) and the facilities offered by the Post Office savings banks—have expanded enormously since Confederation. In 1868, there were 515 money order offices in operation, issuing orders to an amount of \$3,342,574, while the following tables show the magnitude of operations now. Statistical tables showing deposits with the Government savings banks since Confederation and the business of the Post Office savings banks, 1932-37 are included in the chapter on Currency and Banking (Chapter XXII).

#### 4.—Operations of the Money Order System in Canada, fiscal years ended Mar. 31, 1911-37.

NOTE.—For 1868 to 1910, see Canada Year Book, 1911, p. 289; for 1901-10, see 1932 Year Book, p. 622.

| Fiscal Year. | Money Order Offices in Canada. | Orders Issued in Canada. | Value of Orders Issued in Canada. | Payable in— |                  | Value of Orders Issued in other Countries, Payable in Canada. |
|--------------|--------------------------------|--------------------------|-----------------------------------|-------------|------------------|---|
|              |                                |                          |                                   | Canada.     | Other Countries. |   |
|              | No.                            | No.                      | \$                                | \$          | \$               | \$  |
| 1911.....    | 3,501                          | 4,840,896                | 70,614,862                        | 45,451,425  | 25,163,437       | 8,664,567   |
| 1912.....    | 3,673                          | 5,777,757                | 84,065,891                        | 52,568,433  | 31,497,458       | 8,712,667   |
| 1913.....    | 3,923                          | 8,688,563                | 101,153,272                       | 61,324,030  | 39,829,242       | 9,081,627   |
| 1914.....    | 4,274                          | 7,227,964                | 109,500,670                       | 66,113,221  | 43,387,440       | 9,807,313   |
| 1915.....    | 4,499                          | 8,990,813                | 89,957,906                        | 64,723,941  | 25,233,965       | 9,707,383   |
| 1916.....    | 4,690                          | 7,171,375                | 94,469,871                        | 75,781,582  | 18,688,289       | 9,868,137   |
| 1917.....    | 4,810                          | 8,698,502                | 119,095,535                       | 97,203,961  | 22,431,574       | 9,704,610   |
| 1918.....    | 4,930                          | 9,919,665                | 142,959,167                       | 116,784,491 | 26,194,676       | 9,385,627   |
| 1919.....    | 4,953                          | 9,100,707                | 142,375,809                       | 116,646,096 | 25,729,713       | 10,351,021  |
| 1920.....    | 5,106                          | 9,947,018                | 159,224,937                       | 135,201,816 | 24,023,121       | 10,050,361  |
| 1921.....    | 5,197                          | 11,013,167               | 173,523,322                       | 155,916,232 | 17,607,090       | 6,680,971   |
| 1922.....    | 5,206                          | 10,031,198               | 139,914,186                       | 124,316,726 | 15,597,460       | 5,515,069   |
| 1923.....    | 5,337                          | 11,098,222               | 143,065,120                       | 126,617,350 | 16,437,770       | 8,986,041   |
| 1924.....    | 5,472                          | 12,561,490               | 159,855,115                       | 141,620,372 | 18,234,743       | 13,508,396  |
| 1925.....    | 5,578                          | 13,435,448               | 163,519,320                       | 145,769,761 | 17,749,559       | 13,957,613  |
| 1926.....    | 5,706                          | 14,784,230               | 177,840,231                       | 158,844,821 | 18,995,400       | 15,600,917  |
| 1927.....    | 5,797                          | 15,760,994               | 188,219,777                       | 167,206,859 | 21,012,918       | 15,532,673  |
| 1928.....    | 5,923                          | 17,505,563               | 200,773,406                       | 177,680,056 | 22,993,367       | 15,398,181  |
| 1929.....    | 6,066                          | 17,210,316               | 203,129,237                       | 179,833,100 | 23,296,138       | 14,096,027  |
| 1930.....    | 6,209                          | 17,525,979               | 197,699,353                       | 174,285,024 | 23,414,329       | 14,016,240  |
| 1931.....    | 6,401                          | 16,313,134               | 167,749,651                       | 149,012,359 | 18,737,292       | 12,906,437  |
| 1932.....    | 6,414                          | 14,324,715               | 132,625,260                       | 121,391,212 | 11,234,048       | 9,097,686   |
| 1933.....    | 6,467                          | 12,668,379               | 107,767,394                       | 102,009,862 | 5,757,532        | 5,079,234   |
| 1934.....    | 6,464                          | 12,633,710               | 107,471,321                       | 101,926,369 | 5,544,952        | 5,401,118   |
| 1935.....    | 6,531                          | 12,673,794               | 114,832,665                       | 107,981,978 | 6,850,687        | 5,932,762   |
| 1936.....    | 6,627                          | 13,133,854               | 121,810,539                       | 114,761,204 | 7,049,635        | 6,559,594   |
| 1937.....    | 6,737                          | 13,746,743               | 133,159,222                       | 124,470,322 | 8,675,900        | 7,280,169   |

**5.—Money Order Statistics, by Provinces, and Total Postal Notes, fiscal years ended Mar. 31, 1933-37.**

| Province.  | 1933.       | 1934.       | 1935.       | 1936.       | 1937.       |
|--|-------------|-------------|-------------|-------------|-------------|
|  | No.         | No.         | No.         | No.         | No.         |
| <b>Money Order Offices in—</b>                           |             |             |             |             |             |
| Canada.....  | 6,467       | 6,464       | 6,531       | 6,627       | 6,737       |
| Prince Edward Island.....                                | 73          | 73          | 73          | 73          | 72          |
| Nova Scotia.....   | 427         | 425         | 428         | 420         | 441         |
| New Brunswick.....                                       | 300         | 305         | 310         | 315         | 317         |
| Quebec.....  | 1,371       | 1,373       | 1,380       | 1,400       | 1,427       |
| Ontario.....   | 1,700       | 1,678       | 1,690       | 1,725       | 1,736       |
| Manitoba.....  | 458         | 460         | 471         | 476         | 481         |
| Saskatchewan.....  | 919         | 935         | 948         | 960         | 993         |
| Alberta.....   | 680         | 684         | 691         | 708         | 753         |
| British Columbia.....                                    | 524         | 525         | 534         | 535         | 541         |
| Yukon.....   | 6           | 6           | 6           | 6           | 6           |
| <b>Money Orders Issued in—</b>                           |             |             |             |             |             |
| Canada.....  | 12,659,379  | 12,633,710  | 12,673,794  | 13,133,354  | 13,746,743  |
| Prince Edward Island.....                                | 108,485     | 117,322     | 109,122     | 114,868     | 118,827     |
| Nova Scotia.....   | 832,395     | 880,606     | 891,104     | 911,153     | 927,924     |
| New Brunswick.....                                       | 459,879     | 483,746     | 488,075     | 496,936     | 523,288     |
| Quebec.....  | 1,877,359   | 1,864,996   | 1,874,251   | 1,979,501   | 2,127,105   |
| Ontario.....   | 3,372,544   | 3,320,911   | 3,426,532   | 3,465,843   | 3,648,744   |
| Manitoba.....  | 925,613     | 932,236     | 900,860     | 925,054     | 990,123     |
| Saskatchewan.....  | 2,219,345   | 2,228,527   | 2,146,163   | 2,318,370   | 2,348,036   |
| Alberta.....   | 1,634,159   | 1,654,541   | 1,643,725   | 1,673,634   | 1,725,801   |
| British Columbia.....                                    | 1,218,591   | 1,140,596   | 1,174,553   | 1,236,914   | 1,324,818   |
| Yukon.....   | 10,704      | 10,229      | 10,079      | 10,991      | 12,077      |
| <b>Value of Money Orders in—</b>                         | \$          | \$          | \$          | \$          | \$          |
| Canada.....  | 107,767,394 | 107,471,321 | 114,832,665 | 121,810,839 | 133,155,223 |
| Prince Edward Island.....                                | 985,242     | 1,016,634   | 950,870     | 1,014,092   | 1,090,648   |
| Nova Scotia.....   | 7,247,985   | 7,268,581   | 7,805,723   | 8,130,794   | 8,512,734   |
| New Brunswick.....                                       | 4,085,415   | 4,181,138   | 4,341,140   | 4,509,600   | 4,837,795   |
| Quebec.....  | 15,729,506  | 15,213,011  | 16,308,034  | 17,554,015  | 19,738,187  |
| Ontario.....   | 28,998,040  | 28,211,079  | 30,868,605  | 32,039,765  | 35,379,028  |
| Manitoba.....  | 7,642,324   | 7,843,981   | 8,238,040   | 8,211,359   | 9,441,609   |
| Saskatchewan.....  | 18,556,560  | 18,944,362  | 10,654,440  | 22,384,564  | 23,851,266  |
| Alberta.....   | 14,908,895  | 14,840,731  | 15,876,608  | 16,302,997  | 17,424,010  |
| British Columbia.....                                    | 9,453,581   | 9,807,995   | 10,620,810  | 11,415,066  | 12,685,912  |
| Yukon.....   | 104,843     | 143,809     | 142,430     | 150,458     | 175,033     |
| <b>Money Orders Paid in—</b>                             | No.         | No.         | No.         | No.         | No.         |
| Canada.....  | 12,239,065  | 12,215,611  | 12,228,783  | 12,549,695  | 13,080,556  |
| Prince Edward Island.....                                | 44,654      | 43,041      | 41,686      | 42,380      | 44,378      |
| Nova Scotia.....   | 528,288     | 538,841     | 562,941     | 557,860     | 563,167     |
| New Brunswick.....                                       | 744,867     | 774,924     | 777,627     | 792,991     | 817,643     |
| Quebec.....  | 1,572,443   | 1,541,862   | 1,568,062   | 1,657,924   | 1,764,060   |
| Ontario.....   | 3,972,323   | 3,906,095   | 3,922,944   | 3,957,593   | 4,162,562   |
| Manitoba.....  | 2,588,330   | 2,688,168   | 2,604,340   | 2,706,591   | 2,732,889   |
| Saskatchewan.....  | 1,527,786   | 1,473,521   | 1,459,978   | 1,477,251   | 1,511,150   |
| Alberta.....   | 648,958     | 640,394     | 656,848     | 679,123     | 701,203     |
| British Columbia.....                                    | 610,333     | 607,896     | 638,887     | 677,186     | 732,245     |
| Yukon.....   | 1,083       | 869         | 761         | 790         | 780         |
| <b>Value of Money Orders Paid in—</b>                    | \$          | \$          | \$          | \$          | \$          |
| Canada.....  | 107,908,214 | 106,908,174 | 114,054,692 | 120,725,752 | 131,257,438 |
| Prince Edward Island.....                                | 573,511     | 557,281     | 538,204     | 545,060     | 588,983     |
| Nova Scotia.....   | 5,272,743   | 5,131,281   | 5,530,006   | 5,741,560   | 6,090,030   |
| New Brunswick.....                                       | 9,157,997   | 9,136,968   | 9,552,549   | 9,755,746   | 7,104,652   |
| Quebec.....  | 14,545,094  | 13,966,660  | 15,152,171  | 16,185,467  | 18,180,150  |
| Ontario.....   | 33,407,867  | 32,529,477  | 34,734,816  | 36,288,177  | 39,787,894  |
| Manitoba.....  | 20,161,603  | 21,378,560  | 22,091,686  | 23,313,484  | 24,396,689  |
| Saskatchewan.....  | 12,590,724  | 12,104,519  | 12,860,754  | 14,298,781  | 15,553,218  |
| Alberta.....   | 8,384,182   | 8,061,119   | 8,984,483   | 9,428,761   | 10,391,350  |
| British Columbia.....                                    | 6,798,175   | 6,887,535   | 7,594,103   | 8,151,767   | 9,144,277   |
| Yukon.....   | 10,318      | 14,765      | 14,776      | 16,349      | 14,289      |
| <b>Postal Notes—</b>                                     |             |             |             |             |             |
| Total notes paid.....No.                                 | 5,963,810   | 5,115,761   | 5,772,119   | 6,730,361   | 7,077,540   |
| Total value, including postal note stamps affixed.....\$ | 10,530,490  | 9,247,459   | 10,246,800  | 11,374,903  | 12,020,467  |

**Air-Mail Services.**—The total weight of mail carried by air throughout Canada during the year ended Mar. 31, 1937, was 1,200,831 lb., while the mileage flown was 977,864.

An interesting feature of the returns is the continued volume of mail carried by air into the several mining districts, and there would seem to be little doubt that aerial postal communication contributes materially to the development of Canada's natural resources.

**6.—Mileage Flown and Weight of Mail Carried by Air, fiscal year ended Mar. 31, 1937.**

| Service.   | Distance.<br>miles. | Single Trips. |                         | Mileage<br>Travelled.<br>miles. | Weight<br>of Mail<br>Carried.<br>lb. |
|--|---------------------|---------------|-------------------------|---------------------------------|--------------------------------------|
|  |                     | Scheduled.    | Performed. <sup>1</sup> |                                 |                                      |
|  |                     | No.           | No.                     |                                 |                                      |
| Amos-Siscoe-Val d'Or—Bourlamaque <sup>2</sup> ...      | 52                  | 28            | 33                      | 1,716                           | 14,650                               |
| Atlin-Telegraph.....                                   | 146                 | 20            | 20                      | 2,920                           | 3,510                                |
| Cameron Bay-Coppermine.....                            | 105                 | 4             | 24                      | 3,900                           | 2,885                                |
| Central Manitoba and Northern Ontario<br>Mining Areas— |                     |               |                         |                                 |                                      |
| Kenora-Red Lake.....                                   | 105                 | 300           | 439                     | 45,995                          | 106,252                              |
| Sioux Lookout-Casummit Lake.....                       | 212 <sup>3</sup>    | 280           | 272                     | 29,122                          | 35,731                               |
| Sioux Lookout-Red Lake.....                            | 115                 | 245           | 283                     | 32,535                          | 49,106                               |
| Winnipeg-Lac du Bonnet.....                            | 188                 | 201           | 500                     | 97,700                          | 113,406                              |
| Charlottetown-Magdalen Islands.....                    | 106                 | 44            | 60                      | 6,860                           | 20,170                               |
| Edmonton-Port St. John <sup>4</sup> .....              | 443                 | 6             | 6                       | 2,058                           | 445                                  |
| Port Chipewyan-Goldfields.....                         | 108                 | 24            | 108                     | 11,664                          | 11,080                               |
| Mackenzie River Service—                               |                     |               |                         |                                 |                                      |
| Port McMurray-Port Smith.....                          | 1,459               | 160           | 255                     | 118,917                         | 74,235                               |
| Port Smith-Port Resolution.....                        |                     | 80            | 153                     |                                 |                                      |
| Port Resolution-Port Norman.....                       |                     | 24            | 49                      |                                 |                                      |
| Port Norman-Aklavik.....                               |                     | 12            | 19                      |                                 |                                      |
| Port Resolution-Cameron Bay.....                       | 428                 | 24            | 89                      | 31,709                          | 17,778                               |
| Port St. John-Port Graham <sup>5</sup> .....           | 170                 | 4             | 4                       | 716                             | 1,477                                |
| Port St. John-Port Nelson <sup>6</sup> .....           | 220                 | 2             | 2                       | 440                             | 650                                  |
| Gods Lake-Cross Lake-Norway House.....                 | 177                 | 22            | 25                      | 4,337                           | 4,661                                |
| Goldfields-Pond du Lac.....                            | 42                  | 8             | 10                      | 420                             | 678                                  |
| Haleybury-Mud Lake.....                                | 50                  | 132           | 129                     | 6,450                           | 7,734                                |
| Ile à la Crosse-La Loche <sup>7</sup> .....            | 96                  | 10            | 24                      | 1,794                           | 3,931                                |
| Kenora-Cole.....                                       | 115                 | 183           | 189                     | 2,310                           | 15,233                               |
| Kenora-Machin <sup>8</sup> .....                       | 25                  | 97            | 98                      | 2,450                           | 3,597                                |
| Kenora-Whitefish Bay.....                              | 40                  | 94            | 94                      | 3,700                           | 5,881                                |
| Leamington-Peel Island.....                            | 22                  | 188           | 180                     | 3,960                           | 19,349                               |
| Moncton-Charlottetown.....                             | 100                 | 626           | 621                     | 63,100                          | 250,303                              |
| Montreal-Albany.....                                   | 200                 | 313           | 257                     | 52,204                          | 47,114                               |
| Montreal-Rimouski.....                                 | 309.5               | 63            | 54                      | 16,014                          | 42,676                               |
| North Shore—   |                     |               |                         |                                 |                                      |
| Quebec-Rimouski-Sept Iles.....                         | 358                 | 111           | 107                     | 20,670                          | 46,133                               |
| Sept Iles-Natashquan.....                              | 205                 | 60            | 60                      | 12,300                          | 18,547                               |
| Havre St. Pierre-Port Mennet.....                      | 45.5                | 14            | 14                      | 637                             | 3,392                                |
| Natashquan-Harrington Harbour.....                     | 112                 | 16            | 16                      | 1,792                           | 2,441                                |
| Special flights.....                                   | Varied.             | 56            | 56                      | 6,606                           | 18,090                               |
| Oskelaneo-Chibougamau <sup>9</sup> .....               | 130                 | 36            | 43                      | 5,380                           | 3,552                                |
| Ottawa-Montreal <sup>10</sup> .....                    | 108                 | 426           | 301                     | 32,508                          | 1,691                                |
| Prince Albert-Goldfields <sup>11</sup> .....           | 465                 | 66            | 109                     | 50,085                          | 14,081                               |
| Prince Albert-Ile à la Crosse-Lac la<br>Ronge.....     | 177                 | 171           | 172                     | 28,708                          | 27,158                               |
| Rouyn-Kewagama <sup>12</sup> .....                     | 135                 | 10            | 10                      | 250                             | 902                                  |
| Sioux Lookout-Pickle Crow.....                         | 126                 | 326           | 338                     | 41,620                          | 53,517                               |
| Vancouver-Seattle.....                                 | 122                 | 636           | 669                     | 79,132                          | 35,238                               |
| Vancouver-Victoria.....                                | 61                  | 362           | 342                     | 20,892                          | 1,764                                |
| Winnipeg-Gods Lake.....                                | 791 <sup>3</sup>    | 94            | 139                     | 40,674                          | 76,546                               |
| Winnipeg-Pembina.....                                  | 66.4                | 730           | 691                     | 45,884                          | 31,153                               |
| Winnipeg-Red Lake <sup>14</sup> .....                  | 170                 | 76            | 114                     | 19,380                          | 6,336                                |
| Special flights.....                                   | Varied.             | 113           | 113                     | 26,570                          | 7,278                                |
| <b>Totals.....</b>                                     | <b>-</b>            | <b>6,637</b>  | <b>7,211</b>            | <b>977,864</b>                  | <b>1,200,831</b>                     |

<sup>1</sup>Extra trips performed at contractors' convenience.  
<sup>2</sup>Round trip.  
<sup>3</sup>Jan. 11, 1937.  
<sup>4</sup>Dec. 11, 1936.  
<sup>5</sup>July 13, 1936.  
<sup>6</sup>Inaugurated Mar. 17, 1937.  
<sup>7</sup>Inaugurated July 21, 1936.  
<sup>8</sup>Inaugurated Oct. 1, 1936.  
<sup>9</sup>Discontinued Apr. 17, 1936.

<sup>10</sup>Inaugurated Jan. 13, 1937.  
<sup>11</sup>Inaugurated Nov. 13, 1936.  
<sup>12</sup>Inaugurated July 27, 1938.  
<sup>13</sup>Inaugurated Feb. 13, 1937.  
<sup>14</sup>Discontinued Apr. 23, 1936.  
<sup>15</sup>Inaugurated  
<sup>16</sup>Discontinued  
<sup>17</sup>Inaugurated

## PART IX.—THE PRESS.

The Dominion Bureau of Statistics does not collect statistics regarding the circulation of newspapers and periodicals in Canada but a short treatment compiled from data published in *McKim's Directory of Canadian Publications* is introduced here. Industrial statistics of the printing and publishing, and of the printing and bookbinding industries will be found on p. 426, in Chapter XIV, dealing with manufactures. The press is a very important factor in carrying information to the people and in crystallizing and expressing public opinion on current questions. In any survey of methods of communication it occupies a noteworthy place.

The publications enumerated in Table 1 include a number for which no estimate of circulation is given. Such publications are therefore omitted from the compilation of circulations in Tables 2 and 3. This accounts for the difference in the number of daily, semi-weekly, and weekly publications shown in Tables 1 and 2. Comparison of the figures of Table 3 showing publications in cities of 20,000 population or over, with those for the same year of Table 2, showing publications for the whole of Canada, indicates that the daily newspapers are confined almost entirely to these larger urban communities, but that, in the field of weekly publications, while the greater part of the circulation is accounted for by the publications of these cities, by far the greatest number of weeklies are issued in smaller communities. The weekly seems to be the standard medium for local news in small towns and villages.

Since circulations in many cases are only roughly estimated, totals in the tables are given in round numbers.

## 1.—Number of Publications in Canada, by Frequency of Issue, 1926-36.

NOTE.—Compiled from *McKim's Directory of Canadian Publications*. Figures do not include Newfoundland.

| Year.    | Daily. | Tri-Weekly. | Semi-Weekly. | Weekly. | Bi-Weekly and Semi-Monthly. | Monthly. | Bi-Monthly and Quarterly. | Miscellaneous. | Total. |
|----------|--------|-------------|--------------|---------|-----------------------------|----------|---------------------------|----------------|--------|
| 1926.... | 113    | 7           | 28           | 929     | 46                          | 365      | 38                        | 10             | 1,536  |
| 1927.... | 113    | 6           | 23           | 955     | 48                          | 355      | 37                        | 9              | 1,556  |
| 1928.... | 113    | 7           | 21           | 950     | 56                          | 390      | 38                        | 15             | 1,590  |
| 1929.... | 114    | 5           | 21           | 958     | 56                          | 384      | 37                        | 19             | 1,594  |
| 1930.... | 113    | 4           | 20           | 994     | 47                          | 402      | 35                        | 18             | 1,633  |
| 1931.... | 112    | 8           | 18           | 965     | 53                          | 425      | 36                        | 24             | 1,641  |
| 1932.... | 110    | 7           | 20           | 975     | 50                          | 415      | 47                        | 27             | 1,651  |
| 1933.... | 110    | 6           | 19           | 960     | 51                          | 426      | 50                        | 38             | 1,670  |
| 1934.... | 113    | 6           | 25           | 988     | 55                          | 454      | 56                        | 38             | 1,733  |
| 1935.... | 115    | 8           | 22           | 1,000   | 58                          | 449      | 60                        | 50             | 1,768  |
| 1936.... | 115    | 9           | 24           | 996     | 56                          | 450      | 77                        | 52             | 1,779  |

2.—Circulation<sup>1</sup> of Daily, Semi-Weekly, and Weekly Publications in Canada, 1926-36, with Details by Provinces, 1936.

NOTE.—Figures for circulation given to the nearest thousand as some publications are not exactly reported. Compiled from *McKim's Directory of Canadian Publications*.

| Year.     | Daily. <sup>2</sup> |              | Semi-Weekly. <sup>3</sup> |              | Weekly. <sup>4</sup> |              |
|-----------|---------------------|--------------|---------------------------|--------------|----------------------|--------------|
|           | No.                 | Circulation. | No.                       | Circulation. | No.                  | Circulation. |
| 1926..... | 112                 | 1,943,000    | 26                        | 93,000       | 522                  | 2,729,000    |
| 1927..... | 112                 | 2,001,000    | 26                        | 93,000       | 521                  | 3,008,000    |
| 1928..... | 112                 | 2,087,000    | 25                        | 89,000       | 516                  | 3,081,000    |
| 1929..... | 116                 | 2,197,000    | 24                        | 84,000       | 525                  | 3,204,000    |
| 1930..... | 113                 | 2,212,000    | 26                        | 106,000      | 558                  | 3,318,000    |
| 1931..... | 111                 | 2,233,000    | 26                        | 102,000      | 567                  | 3,445,000    |
| 1932..... | 108                 | 2,115,000    | 25                        | 102,000      | 583                  | 3,726,000    |
| 1933..... | 106                 | 2,052,000    | 24                        | 91,000       | 580                  | 3,349,000    |
| 1934..... | 107                 | 2,147,000    | 30                        | 127,000      | 597                  | 3,665,000    |
| 1935..... | 109                 | 2,230,000    | 28                        | 113,000      | 584                  | 3,929,000    |

For footnotes, see end of table, p. 738.

## 2.—Circulation<sup>1</sup> of Daily, Semi-Weekly, and Weekly Publications in Canada, 1926-36, with Details by Provinces, 1936—concluded.

| Year and Province.                  | Daily. <sup>2</sup> |                  | Semi-Weekly. <sup>3</sup> |                | Weekly. <sup>4</sup> |                  |
|-------------------------------------|---------------------|------------------|---------------------------|----------------|----------------------|------------------|
|                                     | No.                 | Circulation.     | No.                       | Circulation.   | No.                  | Circulation.     |
| 1936.                               |                     |                  |                           |                |                      |                  |
| Prince Edward Island.....           | 2                   | 11,000           | Nil                       | —              | 4                    | 15,000           |
| Nova Scotia.....                    | 9                   | 115,000          | 2                         | 5,000          | 37                   | 74,000           |
| New Brunswick.....                  | 6                   | 56,000           | 3                         | 5,000          | 18                   | 41,000           |
| Quebec.....                         | 19                  | 588,000          | Nil                       | —              | 122                  | 1,376,000        |
| Ontario.....                        | 38                  | 1,003,000        | 15                        | 92,000         | 304                  | 1,511,000        |
| Manitoba.....                       | 7                   | 114,000          | 5                         | 26,000         | 85                   | 440,000          |
| Saskatchewan.....                   | 5                   | 66,000           | Nil                       | —              | 145                  | 260,000          |
| Alberta.....                        | 6                   | 98,000           | 1                         | 2,000          | 86                   | 144,000          |
| British Columbia <sup>5</sup> ..... | 17                  | 225,000          | 6                         | 9,000          | 74                   | 198,000          |
| <b>Totals, 1936.....</b>            | <b>100</b>          | <b>2,276,000</b> | <b>32</b>                 | <b>139,000</b> | <b>875</b>           | <b>4,065,000</b> |

<sup>1</sup> For newspapers—average for 12 months ended Sept. 30; for periodicals—average for 6 months ended Dec. 31. <sup>2</sup> Includes the sum of morning and evening editions of the same newspaper. Also includes papers issued five times a week. <sup>3</sup> Includes papers published two, three, or four times a week.

<sup>4</sup> Includes special Saturday and Sunday editions of daily papers. <sup>5</sup> Includes figures for Yukon.

## 3.—Circulation<sup>1</sup> of Daily, Semi-Weekly, and Weekly Publications, in Cities of 20,000 Population or Over, 1936.

NOTE.—Figures for circulation given in round numbers as some publications are not exactly reported. Compiled from *McKim's Directory of Canadian Publications*.

| City.                 | Census of 1931.  |                | Daily. <sup>2</sup> |                  | Semi-Weekly. <sup>3</sup> |               | Weekly. <sup>4</sup> |                  |
|-----------------------|------------------|----------------|---------------------|------------------|---------------------------|---------------|----------------------|------------------|
|                       | Population.      | Households.    | No.                 | Circulation.     | No.                       | Circulation.  | No.                  | Circulation.     |
| Montreal.....         | 818,577          | 170,811        | 10                  | 427,000          | Nil                       | —             | 37                   | 1,115,000        |
| Toronto.....          | 631,207          | 149,538        | 7                   | 617,000          | 3                         | 28,000        | 42                   | 999,000          |
| Vancouver.....        | 248,593          | 60,530         | 4                   | 181,000          | 3                         | 5,000         | 13                   | 59,000           |
| Winnipeg.....         | 218,785          | 48,294         | 4                   | 106,000          | 4                         | 24,000        | 25                   | 384,000          |
| Hamilton.....         | 155,547          | 37,217         | 1                   | 51,000           | Nil                       | —             | 3                    | 29,000           |
| Quebec.....           | 180,594          | 23,043         | 6                   | 133,000          | Nil                       | —             | 8                    | 24,000           |
| Ottawa.....           | 129,872          | 27,658         | 3                   | 83,000           | 1                         | 15,000        | 1                    | 17,000           |
| Calgary.....          | 83,761           | 20,371         | 2                   | 43,000           | Nil                       | —             | 2                    | 36,000           |
| Edmonton.....         | 79,197           | 18,868         | 2                   | 47,000           | 1                         | 2,000         | 6                    | 21,000           |
| London.....           | 71,148           | 17,549         | 1                   | 39,000           | Nil                       | —             | 4                    | 54,000           |
| Windsor.....          | 63,108           | 14,900         | 1                   | 44,000           | Nil                       | —             | Nil                  | —                |
| Verdun.....           | 60,745           | 13,914         | Nil                 | —                | Nil                       | —             | 2                    | 28,000           |
| Halifax.....          | 59,275           | 12,147         | 4                   | 91,000           | Nil                       | —             | 3                    | 4,000            |
| Regina.....           | 53,209           | 12,017         | 2                   | 39,000           | Nil                       | —             | 1                    | 7,000            |
| Saint John.....       | 47,514           | 10,890         | 2                   | 33,000           | Nil                       | —             | 1                    | 5,000            |
| Saskatoon.....        | 43,281           | 9,663          | 1                   | 19,000           | Nil                       | —             | 6                    | 145,000          |
| Victoria.....         | 39,082           | 10,431         | 3                   | 25,000           | Nil                       | —             | 2                    | 28,000           |
| Three Rivers.....     | 35,450           | 6,191          | 1                   | 11,000           | Nil                       | —             | 2                    | 10,000           |
| Kitchener.....        | 30,793           | 7,180          | 1                   | 11,000           | Nil                       | —             | Nil                  | —                |
| Brantford.....        | 30,107           | 7,487          | 1                   | 12,000           | Nil                       | —             | Nil                  | —                |
| Hull.....             | 29,433           | 5,394          | Nil                 | —                | Nil                       | —             | 4                    | 14,000           |
| Sherbrooke.....       | 28,933           | 5,666          | 2                   | 16,000           | Nil                       | —             | 2                    | 15,000           |
| Outremont.....        | 28,641           | 6,086          | Nil                 | —                | Nil                       | —             | Nil                  | —                |
| Port William.....     | 26,277           | 5,676          | 1                   | 5,300            | Nil                       | —             | 1                    | 6,400            |
| St. Catharines.....   | 24,753           | 6,115          | 1                   | 10,000           | 1                         | 6,000         | Nil                  | —                |
| Westmount.....        | 24,235           | 5,454          | Nil                 | —                | Nil                       | —             | 1                    | 7,000            |
| Kingston.....         | 23,439           | 5,514          | 1                   | 11,000           | 1                         | 2,000         | 1                    | 4,000            |
| Oshawa.....           | 23,439           | 5,605          | 1                   | 3,000            | Nil                       | —             | 1                    | 5,300            |
| Sydney.....           | 22,089           | 4,494          | 1                   | 11,000           | Nil                       | —             | Nil                  | —                |
| Sault Ste. Marie..... | 22,053           | 4,989          | 1                   | 6,000            | Nil                       | —             | Nil                  | —                |
| Peterborough.....     | 22,327           | 5,295          | 1                   | 8,900            | Nil                       | —             | Nil                  | —                |
| Moose Jaw.....        | 21,299           | 5,176          | 1                   | 4,500            | Nil                       | —             | 3                    | 9,000            |
| Guelph.....           | 21,075           | 5,096          | 1                   | 7,000            | Nil                       | —             | Nil                  | —                |
| Glace Bay.....        | 20,706           | 3,819          | 1                   | 7,400            | Nil                       | —             | Nil                  | —                |
| Moncton.....          | 20,689           | 4,201          | 2                   | 13,000           | Nil                       | —             | 1                    | 5,000            |
| <b>Totals.....</b>    | <b>3,386,272</b> | <b>757,223</b> | <b>72</b>           | <b>2,116,100</b> | <b>14</b>                 | <b>82,000</b> | <b>171</b>           | <b>3,060,700</b> |

<sup>1</sup> For newspapers—average for 12 months ended Sept. 30; for periodicals—average for 6 months ended Dec. 31. <sup>2</sup> Includes the sum of morning and evening editions of the same newspaper. Also includes papers issued five times a week. <sup>3</sup> Includes papers published two, three, or four times a week.

<sup>4</sup> Includes special Saturday and Sunday editions of daily papers.



**Publications in the French Language.**—Such publications include a comparatively large proportion of periodicals dealing with literature, music, religion, and similar cultural subjects, and the circulations of many of these periodicals are not reported in *McKim's Directory of Canadian Publications*. Publications for which the circulations are not reported are not included in either the number or circulation figures of Table 4 below. Since the majority of such unreported publications are likely to have fairly small circulations, the figures of the table represent a larger proportion of total circulation than of the total number of publications. Among daily newspapers, there is only one small publication unreported in each year.

**4.—Number and Circulation of French Language Publications in Canada, by Provinces, 1935 and 1936.**

NOTE.—Figures of circulation given to nearest thousand as some publications are not exactly reported. Compiled from *McKim's Directory of Canadian Publications*.

| Year and Province.       | Daily.    |                      | Weekly.   |                        | Semi-Monthly and Monthly. |                      | Other. <sup>1</sup> |                |
|--------------------------|-----------|----------------------|-----------|------------------------|---------------------------|----------------------|---------------------|----------------|
|                          | No.       | Circulation.         | No.       | Circulation.           | No.                       | Circulation.         | No.                 | Circulation.   |
| <b>1935.</b>             |           |                      |           |                        |                           |                      |                     |                |
| New Brunswick.....       | Nil       | —                    | 2         | 8,000                  | 1                         | 3,000                | Nil                 | —              |
| Quebec.....              | 11        | 342,000 <sup>2</sup> | 81        | 724,000 <sup>2,3</sup> | 55                        | 688,000 <sup>2</sup> | 8                   | 176,000        |
| Ontario.....             | 1         | 15,000               | 4         | 23,000 <sup>2</sup>    | 2                         | 21,000               | 1                   | 1,000          |
| Manitoba.....            | Nil       | —                    | 1         | 7,000                  | 2                         | 5,000                | Nil                 | —              |
| Saskatchewan.....        | Nil       | —                    | 2         | 9,000 <sup>2</sup>     | Nil                       | —                    | Nil                 | —              |
| Alberta.....             | Nil       | —                    | 1         | 2,000                  | 1                         | 2,000                | Nil                 | —              |
| <b>Totals, 1935.....</b> | <b>12</b> | <b>357,000</b>       | <b>91</b> | <b>773,000</b>         | <b>61</b>                 | <b>717,000</b>       | <b>9</b>            | <b>177,000</b> |
| <b>1936.</b>             |           |                      |           |                        |                           |                      |                     |                |
| New Brunswick.....       | Nil       | —                    | 2         | 8,000                  | 1                         | 3,000                | Nil                 | —              |
| Quebec.....              | 11        | 381,000 <sup>2</sup> | 84        | 747,000 <sup>2,3</sup> | 63                        | 745,000 <sup>2</sup> | 10                  | 258,000        |
| Ontario.....             | 1         | 15,000               | 3         | 21,000 <sup>2</sup>    | 3                         | 22,000               | 1                   | 2,000          |
| Manitoba.....            | Nil       | —                    | 1         | 7,000                  | 2                         | 5,000                | Nil                 | —              |
| Saskatchewan.....        | Nil       | —                    | 2         | 9,000 <sup>2</sup>     | Nil                       | —                    | Nil                 | —              |
| Alberta.....             | Nil       | —                    | 1         | 3,000                  | Nil                       | —                    | Nil                 | —              |
| <b>Totals, 1936.....</b> | <b>12</b> | <b>396,000</b>       | <b>93</b> | <b>795,000</b>         | <b>69</b>                 | <b>775,000</b>       | <b>11</b>           | <b>260,000</b> |

<sup>1</sup> Bi-monthly, quarterly, and annual.

<sup>2</sup> Includes bilingual publications.

<sup>3</sup> Includes special editions for United States circulation averaging: in 1935, 12,200 daily, and 12,200 weekly; and in 1936, 11,300 daily, and 11,300 weekly.

# CHAPTER XIX.—LABOUR AND WAGES.\*

## PART I.—LABOUR.

### Section 1.—Occupations of the Wage-Earning Population.

At the census, the total population in gainful occupations is recorded. In Section 15 of Chapter IV, pp. 128-146 of the 1937 Year Book, the gainfully occupied in 1931 were dealt with rather extensively under the heading "Occupations of the Canadian People". This Section is limited to the treatment of occupations of wage-earners. The gainfully occupied population is composed of four classes of persons: (1) employers, (2) own accounts, (3) wage-earners, (4) unpaid family workers. The third class, *i.e.*, the wage-earners, comprises that portion of the gainfully occupied which in the course of its employment receives either wage or salary payment. In Canada the wage-earners numbered 2,570,097 at the 1931 Census, representing 65.44 p.c. of the total population in gainful occupations. The number of male wage-earners was 2,022,260 or 78.68 p.c. of the total of both sexes combined, and the number of female wage-earners was 547,837 or 21.32 p.c. of the total.

The only complete record of the industrial distribution of the gainfully occupied population is obtained at the decennial censuses. The usefulness of such decennial compilations, however, is considerably enhanced if the trend during intercensal years can be approximately ascertained. In this respect statistics of employment regularly collected by the Bureau of Statistics covering employees in the major fields of industry, with the exception of agriculture, fishing and some of the services, are valuable. Although difficulties of classification exist, there is reason to feel that the employment data provide the basis for projecting the figures of Table 2 for intercensal comparisons. More information on this subject will be found under the heading "Employment as Reported by Employers" on p. 768.

Table 1 shows the numerical and percentage distribution of the wage-earners by provinces in 1931.

\*The sections and subsections of this chapter, with the exceptions of Sections 1, 3, 7, and 9 (Subsections 3, and 5) and Section 10, all of Part I, and Section 4 of Part II, have been revised by, or under the direction of W. M. Dickson, Deputy Minister, Department of Labour, Ottawa; the summary of Labour Legislation given in Section 12 has been specially prepared by Miss M. Mackintosh, M.A., Chief, Library and Research, of the Department. The information in Section 3, Part I, has been obtained through the courtesy of the Provincial Departments of Labour or Bureaus of Labour, and that in Section 7, Part I, has been revised by the chairmen of the respective provincial Workmen's Compensation Boards. Section 10 has been revised under the direction of Dr. W. C. Clark, Deputy Minister, Department of Finance, Ottawa. The remaining sections have been prepared and revised in the Dominion Bureau of Statistics.

### 1.—Numerical and Percentage Distribution of Wage-Earners, by Provinces, 1931.

| Province.                 | Numbers.         |                  |                | Percentages.  |               |               |
|---------------------------|------------------|------------------|----------------|---------------|---------------|---------------|
|                           | Total.           | Male.            | Female.        | Total.        | Male.         | Female.       |
| Prince Edward Island..... | 12,344           | 9,159            | 3,185          | 0.48          | 0.45          | 0.58          |
| Nova Scotia.....          | 117,781          | 95,244           | 22,537         | 4.53          | 4.71          | 4.11          |
| New Brunswick.....        | 84,232           | 66,310           | 17,922         | 3.28          | 3.28          | 3.27          |
| Quebec.....               | 696,339          | 535,203          | 161,136        | 27.09         | 26.47         | 29.41         |
| Ontario.....              | 965,907          | 752,851          | 213,756        | 37.57         | 37.23         | 38.84         |
| Manitoba.....             | 170,739          | 132,883          | 37,856         | 6.64          | 6.57          | 6.91          |
| Saskatchewan.....         | 145,568          | 116,157          | 29,411         | 5.66          | 5.74          | 5.37          |
| Alberta.....              | 142,421          | 116,005          | 26,416         | 5.54          | 5.74          | 4.82          |
| British Columbia.....     | 235,096          | 198,448          | 36,618         | 9.15          | 9.81          | 6.08          |
| <b>Totals.....</b>        | <b>2,570,097</b> | <b>2,022,260</b> | <b>547,837</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |

It will be seen that almost two-thirds of the wage-earners were found in Ontario and Quebec at the latest decennial census, a little less than one-fifth in the Prairie Provinces, and somewhat less than one-tenth in British Columbia or in the Maritimes.

In Table 2 the numbers and percentages of the wage-earners in the main industrial groups are given for Canada, while in Table 3 the distribution is according to broad occupational groupings. It should be noted that the industrial grouping of the gainfully occupied is not concerned with the type or kind of occupation, but rather with the product made or the service rendered, grouping together all persons in a given industry such, for example, as clothing manufacturing whether directly employed in the manufacturing process, or in the warehousing or sales branch of the business, or in clerical occupations in the office, and so on. On the other hand, the occupational grouping shown in Table 3 includes all persons following the listed occupations irrespective of the industry in which they may be engaged.

## 2.—Numerical and Percentage Distribution of Wage-Earners, by Industrial Groups, for Canada, 1931.

| Industrial Group.                      | Numbers.         |                  |                | Percentages.  |               |               |
|--|------------------|------------------|----------------|---------------|---------------|---------------|
|  | Total.           | Male.            | Female.        | Total.        | Male.         | Female.       |
| Agriculture.....                       | 198,592          | 196,675          | 1,917          | 7.73          | 9.73          | 0.35          |
| Forestry, fishing, trapping.....       | 57,844           | 57,550           | 294            | 2.25          | 2.85          | 0.05          |
| Mining, quarrying.....                 | 68,902           | 68,610           | 292            | 2.68          | 3.39          | 0.06          |
| Manufacturing.....                     | 606,617          | 496,865          | 109,752        | 23.60         | 24.57         | 20.03         |
| Electric light and power.....          | 18,938           | 17,471           | 1,467          | 0.74          | 0.86          | 0.27          |
| Construction.....                      | 217,105          | 215,505          | 1,600          | 8.45          | 10.66         | 0.29          |
| Transportation and communications..... | 283,676          | 260,429          | 23,246         | 11.04         | 12.88         | 4.24          |
| Trade.....                             | 281,107          | 204,763          | 76,344         | 10.94         | 10.13         | 13.94         |
| Finance, insurance.....                | 82,963           | 58,102           | 24,861         | 3.23          | 2.87          | 4.54          |
| Service.....                           | 585,413          | 281,118          | 304,295        | 22.78         | 13.90         | 55.54         |
| Unspecified.....                       | 168,881          | 165,172          | 3,709          | 6.57          | 8.17          | 0.68          |
| <b>All Industries.....</b>             | <b>2,570,697</b> | <b>2,022,260</b> | <b>547,837</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |

Table 2 shows that almost one-quarter of the wage-earners are employed in the manufacturing industries, over one-fifth in the services, and just over 10 p.c. both in transportation and communications, and in trade. It will be noted that 55 p.c. of the females find employment in service, chiefly in personal and professional services.

## 3.—Numerical and Percentage Distribution of Wage-Earners, by Occupational Groups, for Canada, 1931.

| Occupational Group.   | Numbers.         |                  |                | Percentages.  |               |               |
|---|------------------|------------------|----------------|---------------|---------------|---------------|
|   | Total.           | Male.            | Female.        | Total.        | Male.         | Female.       |
| Agriculture.....  | 202,137          | 200,468          | 1,669          | 7.86          | 9.91          | 0.30          |
| Fishing and logging.....  | 51,901           | 51,859           | 42             | 2.02          | 2.56          | 0.01          |
| Mining, quarrying.....  | 55,320           | 55,323           | 3              | 2.15          | 2.74          | 1             |
| Manufacturing <sup>1</sup> .....  | 416,913          | 341,542          | 75,371         | 16.22         | 10.89         | 13.76         |
| Construction.....   | 163,904          | 163,814          | 90             | 6.38          | 8.10          | 0.02          |
| Transportation and communications <sup>2</sup> .....                        | 280,035          | 254,674          | 25,361         | 10.90         | 12.59         | 4.63          |
| Trade.....  | 208,017          | 182,299          | 25,718         | 8.09          | 8.03          | 8.35          |
| Finance, insurance.....   | 27,457           | 27,010           | 447            | 1.07          | 1.34          | 0.08          |
| Service <sup>3</sup> .....  | 480,024          | 217,947          | 271,077        | 19.03         | 10.78         | 49.48         |
| Professional.....   | 106,368          | 85,508           | 20,860         | 4.17          | 4.23          | 14.70         |
| Personal <sup>4</sup> .....   | 285,418          | 95,388           | 189,524        | 11.11         | 4.74          | 34.59         |
| Clerical.....   | 239,882          | 123,749          | 116,133        | 9.33          | 6.12          | 21.20         |
| Labourers and unskilled workers (not agricultural, mining, or logging)..... | 433,916          | 422,284          | 11,632         | 16.88         | 20.88         | 2.12          |
| Unspecified.....  | 1,685            | 1,291            | 294            | 0.06          | 0.06          | 0.05          |
| <b>All Occupations.....</b>   | <b>2,570,697</b> | <b>2,022,260</b> | <b>547,837</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |

<sup>1</sup> Less than one-hundredth of one per cent.

<sup>2</sup> Includes "Electric Light and Power".

<sup>3</sup> Includes

"Warehousing and Storage".

<sup>4</sup> Includes Public Administration and Recreational Services in addition to Professional and Personal.

<sup>5</sup> Includes "Laundering, Cleaning, Dyeing and Pressing".

In Table 3, where the wage-earners are classified into broad occupational groups, separate groups have been shown for clerical workers and labourers in other than primary pursuits—two groups with wide industrial range. Over one-fifth of all female wage-earners reported clerical occupations at the 1931 Census, while a similar proportion of males were returned as labourers in secondary industries and services.

A table at p. 732 of the 1937 Year Book shows the numerical and percentage distribution of wage-earners, by age groups, as at the Census of 1931.

## Section 2.—The Dominion Department of Labour.

The Department of Labour of the Dominion Government was established in 1900 under the authority of the Conciliation Act. At the outset its chief duties comprised the administration of certain provisions of this statute which were designed to aid in the prevention and settlement of labour disputes, the administration of the Government's fair wages policy for the protection of workmen employed on Dominion Government contracts and on works aided by grants of public funds, the collection and classification of statistical and other information relative to conditions of labour, and the publication of a monthly periodical known as the *Labour Gazette*. From 1900 to 1909 the Department was administered by the Postmaster General, who was also Minister of Labour. It was constituted a separate Department under the Labour Department Act, 1909.

The work of the Department was greatly increased in 1907 by the passage of the Industrial Disputes Investigation Act. At present the Department is also charged with the administration of an Act passed in 1918 known as the Employment Offices Co-ordination Act, the Government Annuities Act of 1908, the Technical Education Act enacted in 1919, the White Phosphorous Matches Act of 1914, the Fair Wages and Hours of Labour Act, 1935, the Vocational Education Act, 1931, the Combines Investigation Act, 1923, as amended in 1935 and 1937, and the Dominion relief legislation. The work of the Department has developed in other directions, especially in the collection and publication of information as to industrial disputes, wages, industrial agreements, prices, industrial accidents, labour legislation and labour organization; also in connection with the International Labour Organization of the League of Nations. For the operation of the Government Annuities Act and the Technical Education Act, see the chapters on Insurance and Education, respectively.

**Industrial Disputes Investigation Act.**—The Industrial Disputes Investigation Act (R.S.C., 1927, c. 112) has attracted considerable favourable attention from legislators and publicists throughout the world. As enacted in 1907, it forbids strikes and lockouts in mines and certain public utility industries until the matters in dispute have been dealt with by a board of conciliation and investigation consisting of three members, two appointed by the Minister of Labour on the recommendation of the respective parties to the dispute, the third on the recommendation of the first two, or, if they fail to agree, by the Minister himself. Should either of the parties fail to nominate a board member, the Minister may appoint a fit person on its behalf. After such a board has made its report, either of the parties to the dispute may reject its findings and declare a strike or a lockout, a course adopted, however, only in a small percentage of cases. The machinery of the Act may be extended to other industries with the consent of the parties concerned.

In January, 1925, a judgment was rendered by the Judicial Committee of the Privy Council declaring that the Act as it stood was not within the competence

of the Dominion Parliament.\* At the ensuing session of Parliament amendments were made to the statute with the object of limiting its operation to matters not within exclusive provincial jurisdiction. It was also provided by these amendments that the statute should apply in the case of "any dispute which is within the exclusive legislative jurisdiction of any province and which by the legislation of the province is made subject to the provisions of this Act". The legislatures of all provinces except Prince Edward Island took advantage of this provision and enacted enabling legislation by which the Dominion Industrial Disputes Investigation Act became operative in respect of disputes of the classes named in the Dominion law and otherwise within exclusive provincial jurisdiction. In December, 1937, however, a statute entitled "Industrial Conciliation and Arbitration Act" was enacted by the British Columbia Legislature providing provincial machinery for dealing with industrial disputes within the legislative jurisdiction of the province and repealing the "Industrial Disputes Investigation (British Columbia) Act".

A review of the proceedings under the Industrial Disputes Investigation Act from its enactment in March, 1907, to Mar. 31, 1937, shows that, during the 30 years, 866 applications were received for the establishment of boards of conciliation and investigation, as a result of which 557 boards were established. In all but 39 cases, strikes or lockouts were averted or ended.

**Fair Wages Branch.**—The Fair Wages Branch of the Department of Labour is charged with the preparation and enforcement of the labour conditions and schedules of minimum wage rates which are inserted in Dominion Government contracts for works of construction, remodelling, repair or demolition. The number of fair wages schedules prepared from the time the Fair Wages Policy was adopted by the Dominion Government in 1900 up to the end of the fiscal year 1936-37 was 7,517. The number of fair wages schedules furnished during the fiscal year 1936-37 was 512.

The Department of Labour also co-operates closely with other Departments of the Government in ensuring the observance of fair wages conditions inserted in contracts for the manufacture of various classes of equipment and supplies for Government use, and is frequently consulted by other Departments regarding the prevailing rates of wages to be observed on works carried out by day labour.

The Fair Wages Policy of the Government of Canada was originally based on a resolution adopted by the House of Commons in 1900. It was later expressed in an Order in Council adopted on June 7, 1922, amended on Apr. 9, 1924, and again on Dec. 31, 1934. Under these Orders in Council certain specified conditions were designated as being applicable to contracts for building and construction operations, and other conditions as being applicable in the case of contracts for the manufacture of certain classes of Government equipment and supplies. The policy required that the current wage rates and working hours of the district should be observed in the case of all workmen employed, or, if there were no current rates or hours in existence, then fair and reasonable conditions should be observed in both respects. Contracts for railway construction to which the Dominion Government has granted financial aid, either by way of subsidy or guarantee, are likewise subject to fair wages conditions. The policy has, moreover, been extended within recent years to cover contracts for works carried out by the several Harbour Commissions and by the National Harbours Board which replaced them.

\* See p. 241 of the *Labour Gazette* for February, 1925, for text of judgment of the Judicial Committee of the Privy Council in regard to the validity of this statute.

On May 30, 1930, an Act of Parliament was adopted known as the Fair Wages and Eight Hour Day Act, 1930, providing for the payment of current wage rates to all persons employed on contracts made with the Government of Canada for works of construction, remodelling, repair or demolition, provided that the wages in all cases should be fair and reasonable. This statute also directed that the working hours of persons while so employed should not exceed eight hours a day. It was further declared that the foregoing conditions were to be applied to all workmen employed by the Government itself on the construction, remodelling, repair or demolition of any work.

The Fair Wages and Eight Hour Day Act, 1930, was superseded, however, on May 1, 1936, by the Fair Wages and Hours of Labour Act, 1935, which was adopted by Parliament on June 28, 1935. This latter statute re-enacts a number of the sections of the former Act and adds new provisions to comply with the recommendations of the Royal Commission on Price Spreads. Like its predecessor, the Act makes provision for fair wages and an eight-hour day on Government contracts for works of construction, remodelling, repair or demolition, imposing, however, a limit of forty-four hours a week on such works and extending the Dominion Government's policy of fair wages and an eight-hour day to works carried out by any provincial or municipal authority with the aid of Dominion Government funds, as well as to other works aided by the Government of Canada.

The Act sets out that the term 'fair wages' means such wages as are generally accepted as current for competent workmen in the district in which the work is being performed for the character or class of work in which such workmen are respectively engaged; but shall in all cases be such wages as are fair and reasonable.

The benefits of the Fair Wages Policy apply also to workmen employed by Government Departments on a day labour basis in building and construction works.

On Mar. 27, 1930, an Order in Council was passed providing that, except in cases where the work of employees was intermittent in character, or the application of the rule was not deemed to be practicable, or in the public interest, the hours of work of any Dominion Government employees who had up to that time been required to work more than eight hours daily should be reduced to eight hours a day, with a half-holiday on Saturday.

An Order in Council was adopted on Dec. 31, 1934, rescinding the labour conditions previously applied to contracts for the manufacture of various classes of government supplies, and substituting other conditions therefor. The provision for the payment of wages not less than current rates, or fair and reasonable rates if there are no current rates, is retained in the new conditions, but with the added proviso that in no event shall the wage rate for male workers 18 years of age or over be less than 30 cents an hour, and for female workers 18 years of age or over, 20 cents an hour. It is also declared that males and females under 18 years of age shall be entitled to rates of wages not less than those provided for women and girls in the minimum wage scales of the respective provinces, and that, in any cases where the provincial minimum wage laws require the payment of higher wages than those set out above, such higher rates shall apply in the execution of Dominion contract work.

**Labour Gazette.\***—Since the establishment of the Department of Labour in 1900, a monthly publication known as the *Labour Gazette* has been issued. From its inception the *Labour Gazette* has maintained a continuous record of industrial,

\* A charge of 20 cents per annum, postage prepaid, is made for this publication to subscribers in Canada, the United States of America, and Mexico, and of \$1.00 per annum to subscribers in all other countries.

social, and economic conditions in Canada, as reflected in legislation, employment and unemployment, price trends, labour disputes, conventions and recommendations of labour organizations, and industrial relations programs. One of the particular functions of the Department is the promotion of industrial harmony, and prominence is therefore given in the *Labour Gazette* to proceedings under the Industrial Disputes Investigation Act and the Conciliation and Labour Act. Complete information is also given with respect to proceedings under other measures administered by the Department, including the Employment Offices Co-ordination Act, the Combines Investigation Act, the Technical Education Act, the Government Annuities Act, the Relief Acts, and the Fair Wages and Eight Hour Day Act.

Included in the statistical information published is a monthly analysis of prices, wholesale and retail, in Canada, indicating trends in the cost of living, the prices of staple articles, and index numbers of price movements over a series of years. A special section records the work of the International Labour Organization (League of Nations), the draft conventions and recommendations adopted by that body being published in full.

The *Labour Gazette* is widely distributed throughout Canada, and the statistical and other information contained therein is constantly used in connection with the discussion of wages and other issues between employers and workers.

**Labour Legislation.**—The Department gives considerable attention to labour legislation in Canada and abroad. Notes and articles are published in the *Labour Gazette* and special bulletins in printed or mimeographed form are issued from time to time. While each of these deals with some particular phase of labour legislation in the Dominion or in some of the provinces, information is usually given concerning legislation on the same subject in other countries.

Since 1917, the Department has published a series of reports on labour legislation in Canada. Three reports reproduced the text or a summary of all the labour legislation in force at the ends of the years 1915, 1920, and 1928, respectively. The report for 1937 also covers all the Dominion and provincial legislation on the statute books at the end of that year. The reports for the intervening years relate only to the laws enacted during the year.

### Section 3.—Provincial Labour Departments and Bureaus.

The rapid industrial development at the end of the nineteenth century in Quebec and Ontario, the leading manufacturing provinces, brought with it the recognition of the need of special provincial offices to safeguard the interests of labour, with the result that the Ontario Bureau of Labour was established in 1900 and the Quebec Department of Public Works and Labour in 1905. In 1904, an Act was passed in New Brunswick providing for a Bureau of Labour, but this never became operative. Some years later, to cope with conditions created by the growth of industry in the West, Acts were passed providing for the creation of Provincial Bureaus of Labour in Manitoba (1915), in Saskatchewan (1920), and in Alberta (1922), while a Department of Labour was established in British Columbia in 1917. A Department of Labour was established in Nova Scotia by c. 3 of the Statutes of 1932, and the Manitoba Bureau of Labour became a Department in 1934. All these authorities publish annual reports on their activities.

**The Nova Scotia Department of Labour.**—The Act establishing the Nova Scotia Department of Labour provides that "the Department of Labour shall take cognizance of all matters relating to labour and shall administer such affairs, matters,

Acts and regulations as the Governor in Council from time to time assigns to that Department, whether or not the same have been assigned or have belonged by or under any Act of the Legislature of Nova Scotia or otherwise to some other Department or to some member of the Executive Council”.

The Department is in charge of a Minister of Labour, who has under him a Deputy Minister of Labour. The latter is empowered to collect and publish information and statistics affecting labour, and to administer such Acts as may be assigned to the Department by Order in Council. At present, labour bureaus in the province, the administration of the Factories Act, Minimum Wage Board, Limitation of Hours Board, Industrial Standards Act, Trade Union Act as affects check-off, and unemployment relief have been assigned by Order in Council to the Department of Labour.

**The Quebec Department of Labour.**—This Department was formerly known as the Department of Public Works and Labour, each division having a separate Deputy Minister, but in 1931 each division was recognized as a distinct Department.

The duties of the Department of Labour include the institution and control of inquiries into important industrial questions and it may collect useful facts and statistics relating thereto, to be transmitted to the Quebec Bureau of Statistics. The Department is charged with the administration of provincial Acts respecting industrial and commercial establishments, trade disputes, and the maintenance of fair wages clauses in Provincial Government contracts. The Quebec Workmen's Compensation Commission is under its jurisdiction, together with the Provincial Employment Service.

The Department is responsible for the licensing and qualification of electricians, moving-picture machine operators, stationary enginemen and firemen, and pipe mechanics; it is also charged with the inspection of electrical installations, heating installations, steam, hot-water and hot-air furnaces, boilers registered under the Interprovincial Code, together with the registering of blue prints in connection with the construction of boilers. A special branch of the Department is entrusted with the inspection of public buildings and the approval of the plans of new buildings.

The Department, since the 1934 session, was charged with the enforcement of the Collective Labour Agreements Extension Act which has been repealed and replaced during the 1937 session by the Act respecting Workmen's Wages. However, this new legislation, while an improvement, carries out the policy of the earlier Act. It is not the duty of the Government to lead employers and employees into the preparation of agreements, but when a collective labour agreement has been passed and adopted by the Lieutenant-Governor in Council, a joint committee is formed to supervise the enforcement of the Order in Council. The joint committee, under the authority of the Act, may adopt regulations for its own administration, render obligatory the certificate of competency in a given trade in cities of more than 5,000 population and collect an assessment, not exceeding one-half of one per cent, on the payrolls of employers and on the wages of employees for the purposes of the putting into force of the Order in Council. During the fiscal year 1936-37, 57 collective labour agreements were enforced in the province in various industries.

In order to supply the needs of unorganized trades wherein collective labour agreements could not be entered into, the Fair Wage Act was adopted in 1937. The Fair Wage Board, created under its authority, is a permanent arbitration tribunal having the powers and rights of a corporation. It may determine even



on its own initiative, for the periods of time fixed by it, for the territories it may designate and for any category of employees it may indicate, fair wages, working hours, and, in general, deal with any matter pertaining to employment. However, this Act does not affect collective labour agreements in force or which may become compulsory thereafter. It replaced the former Women's Minimum Wage Act which, of course, was only devoted to the welfare of women.

The 1937 session has given fresh life to the Old Age Pension Act adopted in 1936 according to the Dominion Old Age Pension Legislation; a commission is formed to supervise the carrying out of this Act and since September 1936, it is placed under the jurisdiction of the Department of Labour.

An Act respecting the welfare of youth authorizes the Lieutenant-Governor in Council to prohibit work by boys and girls under 16 years of age in industrial or commercial establishments designated by him and, with respect to such dangerous work as he may designate, the employment of boys and girls of less than 18 years of age.

Allowances to needy mothers will be granted in virtue of the Act to provide such assistance. The Old Age Pension Commission, which is entrusted with the carrying out of this social legislation, is also the organization supervising the enforcement of the Blind Persons Aid Act. Blind men and women over 40 years old are now in receipt of an allowance.

The Department has jurisdiction over the limitation of hours of work; since the coming into force of the Act giving it authority, hours of labour in the building trades have been limited to 44 and 48 per week throughout the province.

Since September, 1936, the Department of Labour has been charged with the control of unemployment relief in the province; such service was formerly under the jurisdiction of the Department of Public Works.

The Department issues qualification certificates to workmen charged with the use and handling of explosives and is responsible for the enforcement of the Scaffolding Inspection Act in towns where there is no municipal service providing for such duties.

**The Department of Labour of Ontario.**—The Department of Labour of Ontario was established in 1919 and placed under the direction of a Minister and a Deputy Minister of Labour. This Department had its origin in the Bureau of Industries formed in 1882 under the Department of Agriculture, to collect and publish statistics relating to the industries of the province and (later) to administer the first Factory Act of 1886. In 1900 a Bureau of Labour, attached to the Department of Public Works, was authorized to collect and publish information relating to employment, wages and hours, strikes, labour organizations, and general conditions of labour. Several investigations were made regarding such matters and the first free employment offices were opened by the Bureau of Labour. In 1916 this Bureau was in turn superseded by the Trades and Labour Branch, also under the Ministry of Public Works but administered by a Superintendent. The establishment of the Branch had been recommended by the Ontario Commission on Unemployment and the expansion of the work undertaken by the Branch, and the increase in the demands made upon its resources led to the creation of a special Department of the Government by the Department of Labour Act, 1919.

The Department of Labour administers the following Acts: the Department of Labour Act; the Factory, Shop and Office Building Act; the Steam Boiler Act; the Operating Engineers Act; the Building Trades Protection Act; the Employment Agencies Act; the Apprenticeship Act; the Regulations respecting the Protection of

Persons working in Compressed Air; the Regulations respecting the Protection of Persons working in Tunnels and Open Caissons; the Minimum Wage Act, 1937; the Industrial Standards Act; the One Day's Rest in Seven Act; and the Government Contracts Hours and Wages Act.

The Minimum Wage Act, 1937, revises the former Minimum Wage Act as it applies to female workers and extends the scope of the Act to include male employees. Pursuant to an amendment to the Department of Labour Act, the Industry and Labour Board was established in 1937. It consists of five members, one of whom is chairman and three of whom are officers of the Department of Labour. One member is a woman. The Board has power to administer the provisions of any Act assigned to it, and the Minimum Wage Act, 1937, the Apprenticeship Act, and the Industrial Standards Act have been assigned for administrative purposes.

The Department is required to maintain employment offices, to collect information respecting employment, sanitary and other conditions in work places, wages and hours of work, and to study labour legislation in other parts of the British Empire and in foreign countries, as well as any suggested changes in the labour laws of Ontario. The representatives of the Department of Labour have right of access to offices, factories, and other work places at any reasonable hour, and may be authorized to hold inquiries under the Public Inquiries Act. The Department publishes annual reports which cover the work of the officers employed in the administration of the various Acts assigned to it.

**The Manitoba Department of Labour.**—The Act of 1915, establishing the Manitoba Bureau of Labour, provided that it be attached to the Department of Public Works; an amendment of 1922, however, provided for its attachment to any other Department as the Lieutenant-Governor in Council may determine. The Bureau was created a separate Department by c. 28 of the Statutes of Manitoba, 1931, but the Act was not proclaimed until July 6, 1934.

The Department is charged with the administration of the following Acts: the Bureau of Labour Act; the Manitoba Factories Act; the Bake Shop Act; the Shops Regulation Act; the Minimum Wage Act; the Elevator and Hoist Act; the Steam Boiler Act; the Building Trades Protection Act; the Public Buildings Act; the Fair Wage Act; the Electricians' Licence Act; the Amusements Act (Secs. 11 to 15); the One Day's Rest in Seven Act; the Employment Bureau Act; The Strikes and Lockouts Prevention Act.

The Bureau of Labour and Fires Prevention Branch is a sub-department of the Department of Labour (formerly a sub-department of the Department of Public Works). The Bureau also enforces the Fires Prevention Act.

**The Saskatchewan Bureau of Labour and Public Welfare.**—This Bureau was created by an Act of 1934 to replace the Department of Railways, Labour and Industries. It is administered by the Minister of Municipal Affairs, assisted by a permanent Commissioner. The function of the Bureau is to administer matters relating to the relief of distress in addition to the following Acts: the Factories Act; the Building Trades Protection Act; the Employment Agencies Act; the One Day's Rest in Seven Act; the Weekly Half-Holiday Act; the Minimum Wage Act; the Workmen's Wage Act and the Industrial Standards Act. It is also charged with the operation of public free employment offices; the collection and publication of information and statistics relating to employment; wages and hours of labour throughout the province; strikes and other labour difficulties; trade unions and labour organizations; the relations between capital and labour, and other subjects connected with industrial problems; the commercial, industrial, and sanitary conditions of employment.

**The Alberta Department of Trade and Industry.**—This Department supervises the administration of the following Acts: the Minimum Wage Act, 1925, relating to the wages of women workers; the Male Minimum Wage Act; the Industrial Standards Act; the Alberta Trades Disputes Act; the Factories Act; the Theatres Act; the Trade Schools Act; and the Qualification of Tradesmen Act. The Department of Health has the administration of the Alberta Employment Offices Act as well as measures for unemployment relief.

**The British Columbia Department of Labour.**—This Department was instituted by an Act of 1917, under a Minister and Deputy Minister of Labour. It administers the laws of British Columbia affecting labour, and is empowered to collect information respecting industries, wages, employment, prices, labour organizations, and other data pertaining to labour problems. Prominent among the Acts administered by the Department are: the Male Minimum Wage Act 1934; the Female Minimum Wage Act 1934; the Hours of Work Act 1934. These are administered by the Board of Industrial Relations, the Deputy Minister of Labour being Chairman of the Board. Other activities of the Department include the administration of: the Semi-monthly Payment of Wages Act; the Factories Act; the Apprenticeship Act; the Trade-Schools Regulation Act; the Industrial Conciliation and Arbitration Act 1937; and the operation of employment bureaus within the province.

#### Section 4.—Canada and the International Labour Organization.\*

The International Labour Organization of the League of Nations was set up in 1919 in accordance with Part XIII of the Treaties of Peace to promote the improvement of industrial conditions by legislative action and international agreement.

The Organization comprises the International Labour Conference, which meets annually and is composed of four representatives of each Member State, two of whom are government delegates, while two represent employers and workers respectively, and the International Labour Office in Geneva, which functions as a secretariat of the annual conference and also collects and publishes information on subjects relating to industrial life and labour. The Office is under the control of a Governing Body, consisting of 32 persons, appointed by the International Labour Conference, of whom 16 represent governments, 8 represent employers and 8 represent workers. In addition to its control of the Labour Office, the Governing Body is charged with the preparation of the agenda of the annual conference.

Under the terms of the Peace Treaties, eight of the government seats on the Governing Body are held by the countries of "chief industrial importance". Canada has been designated by the Council of the League of Nations as one of these eight States of chief industrial importance. Sixty-one countries are members of the International Labour Organization, comprising all of the industrial states of the world with the exception of Germany. The United States, although not a member of the League of Nations, joined the International Labour Organization in 1935, as did also Russia. Egypt, which was not a member of the League, also joined the International Labour Organization in 1936. Dr. W. A. Riddell, who had served as Canadian Advisory Officer to the League of Nations in Geneva since 1924, was transferred to the staff of the Canadian Legation in Washington in the autumn of 1937 and was replaced by Mr. H. Hume Wrong, who had previously served as Counsellor of the Canadian Legation in Washington since its establishment in 1927. At the triennial election of the Governing Body of the International Labour Office in

\* On this subject see also the 1921 Year Book, pp. 607-609; 1922-23 Year Book, pp. 704-707; and 1924 Year Book, pp. 660-670.

1937, Mr. P. M. Draper, the President of the Trades and Labour Congress of Canada, was elected as a deputy member of the workers' representatives on this body.

The conclusions of the International Labour Conference are cast in the form of draft conventions or recommendations, addressed to the national governments which comprise the membership of the International Labour Organization. A two-thirds majority of the Conference is required for the adoption of either a draft convention or recommendation. Under the Treaties of Peace, the Member States are bound to bring the draft convention or recommendations before the authority or authorities within whose competence the subject matter lies, for the enactment of legislation or other action. Thus the findings of the Conference become binding in the various countries concerned only if and when action regarding them is taken by the latter.

The Dominion Department of Labour is entrusted with the duties arising out of the relations of Canada with the International Labour Organization. These have entailed much correspondence, not only with the International Labour Organization, but also with the different departments of the Dominion Government, with the provinces, and with employers' and workers' organizations. Replies have also been prepared in the Department of Labour to various questionnaires issued by the International Labour Office. Performance of these duties has necessitated a close study of the different technical questions which have figured on the agenda of the various conferences and at the meetings of the Governing Body.

Twenty-three sessions of the International Labour Conference have been held since its inception in 1919. Sixty-one draft conventions and 56 recommendations have been adopted at these annual gatherings. The draft conventions and recommendations of the Conference have, among other subjects, related to the following: hours of labour, measures for the avoidance of unemployment, employment conditions of women and children, employment conditions of seamen, employment in agriculture, weekly rest, statistics of immigration and emigration, principles of factory inspection, inspection of emigrants on board ship, workmen's compensation for accidents and occupational diseases, social insurance, minimum wages, prevention of accidents to dockers, forced labour, holidays with pay, and regulation of hours of work of salaried employees and of workers in coal mines.

Up to Dec. 31, 1937, 742 ratifications of these conventions had been registered with the League of Nations, of which 11 were conditional or with delayed application; 40 had been approved by the competent national authority; and 136 had been recommended to the competent national authority for approval.

**Canadian Action on Draft Conventions and Recommendations.**—Seven draft conventions in all have been ratified by the Dominion Government, namely: (1) minimum age for employment of children at sea; (2) unemployment indemnity for seamen in case of the loss or foundering of a ship; (3) minimum age for employment as trimmers and stokers; (4) medical examination of children and young persons employed at sea; (5) limiting hours of work in industrial undertakings to eight in the day and forty-eight in the week; (6) weekly rest in industrial undertakings; and (7) creation of minimum-wage-fixing machinery. The first four of these conventions were ratified in March, 1926, following the adoption of legislation by Parliament to give effect to the proposals which were respectively involved. The last three conventions were ratified in March, 1935, following the adoption of legislation by Parliament on these respective subject matters, i.e., hours of labour, weekly rest and minimum wages. Doubts having arisen as to the legal competence of the Dominion Parliament to deal with these matters, a reference was submitted

to the Supreme Court of Canada, which was later carried in appeal to the Judicial Committee of the Privy Council. The judgments of the latter body, given in January, 1937, were to the effect that all three of these statutes were *ultra vires* of the Parliament of Canada.

At the 1935 session of Parliament resolutions were also adopted approving of three other draft conventions of the International Labour Conference with a view to their subsequent ratification, namely: seamen's articles of agreement; safety of workers engaged in loading and unloading ships; and the marking of weights on heavy packages transported by vessel.

### Section 5.—Organized Labour in Canada.

The Dominion Department of Labour publishes annually a report on labour organization in Canada. This report outlines the composition and development of the various organizations of wage-earners in the Dominion, and gives statistical and other information respecting membership, benefits, registration of trade unions, etc.

**Total Reported Membership of Organized Labour in Canada.**—The numerical strength of organized labour in Canada at the close of 1936 was given by the Department of Labour as follows: international organizations, 1,896 local branches with an aggregate membership of 174,769; Canadian central labour bodies, 740 branches and 83,841 members; independent units, 60 with 18,863 members; National Catholic unions, 190 with 45,000 members; grand total, 2,886 local branches and 322,473 members. As compared with 1935 this represents an increase of 158 branches, and of 41,769 members. Table 4 shows, by years, the membership of trade unions in Canada since 1911.

4.—Membership of Trade Unions in Canada, 1911-36.

| Year.     | Members. | Year.     | Members. | Year.     | Members. |
|-----------|----------|-----------|----------|-----------|----------|
| 1911..... | 133,132  | 1920..... | 373,842  | 1929..... | 319,476  |
| 1912..... | 160,120  | 1921..... | 313,320  | 1930..... | 322,429  |
| 1913..... | 178,799  | 1922..... | 276,621  | 1931..... | 310,544  |
| 1914..... | 166,163  | 1923..... | 278,092  | 1932..... | 283,576  |
| 1915..... | 143,343  | 1924..... | 260,643  | 1933..... | 286,220  |
| 1916..... | 160,407  | 1925..... | 271,064  | 1934..... | 281,774  |
| 1917..... | 204,650  | 1926..... | 274,604  | 1935..... | 280,704  |
| 1918..... | 248,837  | 1927..... | 290,222  | 1936..... | 322,473  |
| 1919..... | 378,047  | 1928..... | 300,602  |           |          |

**Main Groups.**—The following paragraphs outline the main groups into which Canadian labour organizations now fall.

**Trades and Labour Congress of Canada.**—The Trades and Labour Congress is representative of the international trade union movement in the Dominion, the bulk of its membership being drawn from the international organizations which have local branches in Canada. According to reports for 1936, the Congress had in affiliation the Canadian membership of 62 international bodies and the membership of 4 national organizations as well as that of 98 directly chartered unions, the combined membership being 149,398, comprised in 1,679 local branches.

**All-Canadian Congress of Labour.**—The All-Canadian Congress of Labour was organized in Montreal, Mar. 16, 1927, by representatives of national and independent organizations. At the close of 1936, the All-Canadian Congress of Labour had 6 central bodies in affiliation, with a combined membership of 27,489, as well as 42 directly chartered local unions with a membership of 3,894, making a total combined reported membership of 31,383.

*Canadian Federation of Labour.*—Following a disagreement among the executive of the All-Canadian Congress of Labour prior to the scheduled convention of that body in September, 1936, a new organization was formed under the name of Canadian Federation of Labour. At the close of 1936, according to available information, the Federation was composed of 5 directly chartered unions, of which the membership was not reported, and in addition 6 central organizations, embracing 60 local branches, with a combined reported membership of 25,081.

*Federation of Catholic Workers of Canada.*—In 1918, a conference of National Catholic Unions, which were first established in 1901, was held in Quebec city, followed by other meetings in Three Rivers in 1919 and Chicoutimi in 1920. The delegates at the latter conference, numbering 225 from 120 unions, decided to establish a permanent central body to co-ordinate the work of the scattered units. Accordingly, at the 1921 conference held in Hull, at which approximately 200 delegates representing 89 unions were present, a constitution to govern the new body was approved. The name selected was "Federation of Catholic Workers of Canada", and permanent officers were elected, the constitution and by-laws becoming effective on Jan. 1, 1922. From information at hand, there were at the close of the year (1936) 190 National Catholic Unions, with a combined membership of 45,000.

*One Big Union.*—At a conference held at Calgary, Alberta, Mar. 13, 1919, by representatives of local trade unions, principally from the four western provinces, the One Big Union was established as an industrial organization. According to information supplied by the general secretary, the O.B.U., at the close of 1936, had 44 units under charter, as well as 2 central labour councils (bodies similar to trades and labour councils), the combined reported membership being 23,745.

*International Trade Unions Operating in Canada.*—Table 5 gives the names of the 87 international craft labour organizations and the 1 industrial union which now carry on operations in Canada, and shows: (1) the number of branches which were in existence in the Dominion at the close of 1936, and (2) the reported membership.

**5.—International Trade Unions Operating in Canada, showing Numbers of Branches and Members, December, 1936.**

| International Organization.   | Number of Branches in Canada. | Reported Members in Canada. |
|---|-------------------------------|-----------------------------|
| American Federation of Labor.....   | 9                             | 237                         |
| Asbestos Workers, International Association of Heat and Frost Insulators, and.....    | 1                             | 7                           |
| Automobile Workers of America, International Union United.....                        | 2                             | 6,000                       |
| Bakery and Confectionery Workers' International Union of America.....                 | 10                            | 350                         |
| Barbers' International Union of America, Journeymen.....                              | 22                            | 622                         |
| Bill Posters and Billers of America, International Alliance of.....                   | 1                             | 79                          |
| Blacksmiths, Drop Forgers and Helpers, International Brotherhood of.....              | 18                            | 880                         |
| Boilermakers, Iron Shipbuilders and Helpers, International Brotherhood of.....        | 36                            | 1,880                       |
| Bookbinders, International Brotherhood of.....  | 10                            | 451                         |
| Boot and Shoe Workers' Union.....   | 5                             | 1,306                       |
| Brewery, Flour, Cereal and Soft Drink Workers, International Union of the United..... | 17                            | 679                         |
| Bricklayers', Masons' and Plasterers' International Union of America.....             | 43                            | 4,540                       |
| Bridge, Structural and Ornamental Iron Workers, International Association of.....     | 3                             | 79                          |
| Building Service Employees' International Union.....                                  | 1                             | 33                          |
| Carpenters and Joiners, United Brotherhood of.....                                    | 84                            | 4,458                       |
| Carvers' Association of North America, International Wood.....                        | 1                             | 14                          |
| Cigarmakers' International Union of America.....                                      | 3                             | 225                         |
| Clothing Workers of America, Amalgamated.....   | 14                            | 7,000                       |
| Commercial Telegraphers' Union of America.....  | 7                             | 748                         |
| Conductors, Order of Sleeping Car.....  | 1                             | 21                          |
| Coopers' International Union of North America.....                                    | 1                             | 1                           |
| Electrical Workers, International Brotherhood of.....                                 | 40                            | 2,057                       |
| Elevator Constructors, Operators and Starters, International Union of.....            | 8                             | 423                         |
| Engineers, International Union of Operating.....                                      | 17                            | 662                         |
| Firemen and Oilers, International Brotherhood of.....                                 | 40                            | 782                         |

<sup>1</sup> No branches are reported in Canada.

**5.—International Trade Unions Operating in Canada, showing Numbers of Branches and Members, December, 1936—concluded.**

| International Organization.   | Number of Branches in Canada. | Reported Members in Canada. |
|---|-------------------------------|-----------------------------|
| Fire Fighters, International Association of.....                              | 35                            | 2,329                       |
| Foundry Employees, International Brotherhood of.....                          | 1                             | 115                         |
| Fur Workers' Union, International.....  | 6                             | 1,547                       |
| Garment Workers of America, United.....                                       | 7                             | 500                         |
| Garment Workers' Union, International Ladies.....                             | 13                            | 4,838                       |
| Glass Bottle Blowers' Association of the United States and Canada.....        | 4                             | 140                         |
| Glass Workers' Union, American Flint.....                                     | 5                             | 218                         |
| Government Employees, American Federation of.....                             | 1                             | 11                          |
| Granite Cutters' International Association of America.....                    | 2                             | 40                          |
| Hatters', Cap and Millinery Workers' International Union, United.....         | 5                             | 1,500                       |
| Hod Carriers', Building and Common Labourers' Union of America, International | 5                             | 130                         |
| Hotel and Restaurant Employees' International Alliance and Bartenders' Inter- |                               |                             |
| national League.....  | 23                            | 2,928                       |
| Iron, Steel and Tin Workers of North America, Amalgamated Association of..... | 13                            | 3,140                       |
| Jewellery Workers' Union, International.....                                  | 3                             | 441                         |
| Lathers, International Union of Wood, Wire, and Metal.....                    | 4                             | 100                         |
| Lithographers of America, Amalgamated.....                                    | 7                             | 426                         |
| Locomotive Engineers, Brotherhood of.....                                     | 100                           | 4,669                       |
| Locomotive Firemen and Enginemen, Brotherhood of.....                         | 96                            | 4,855                       |
| Longshoremen's Association, International.....                                | 20                            | 1,500                       |
| Machinists, International Association of.....                                 | 77                            | 7,500                       |
| Maintenance-of-Way Employees, Brotherhood of.....                             | 194                           | 12,109                      |
| Marble, Stone and Slate Polishers, Rubbers and Sawyers, Tile and Marble       |                               |                             |
| Setters' Helpers and Terrazo Workers' Helpers, International Association of   | 3                             | 68                          |
| Metal Polishers' International Union.....                                     | 2                             | 384                         |
| Metal Workers' International Association, Sheet.....                          | 13                            | 496                         |
| Mine, Mill and Smelter Workers, International Union of.....                   | 12                            | 30                          |
| Mine Workers of America, United.....  | 66                            | 16,600                      |
| Moulders' Union of North America, International.....                          | 27                            | 1,369                       |
| Musicians, American Federation of.....  | 28                            | 5,009                       |
| Painters, Decorators and Paperhangers of America, Brotherhood of.....         | 35                            | 905                         |
| Paper Makers, International Brotherhood of.....                               | 25                            | 1,783                       |
| Pattern Makers' League of North America.....                                  | 5                             | 171                         |
| Paving Cutters' Union of the United States and Canada.....                    | 5                             | 100                         |
| Photo-Engravers' Union of North America, International.....                   | 5                             | 404                         |
| Plasterers' and Cement Finishers' International Association, Operative.....   | 11                            | 357                         |
| Plumbers, Gas and Steam Fitters, United Association of Journeymen.....        | 34                            | 2,400                       |
| Pocketbook Workers' Union of the United States of America and Canada, Inter-  |                               |                             |
| national.....   | 2                             | 500                         |
| Printers', Die Stampers' and Engravers' Union, International Plate.....       | 1                             | 35                          |
| Printing Pressmen and Assistants' Union, International.....                   | 18                            | 1,458                       |
| Pulp, Sulphite and Paper Mill Workers of the United States and Canada, Inter- |                               |                             |
| national Brotherhood of.....  | 20                            | 5,000                       |
| Quarry Workers' International Union of North America.....                     | 1                             | 48                          |
| Railroad Signalmen of America, Brotherhood of.....                            | 10                            | 225                         |
| Railroad Telegraphers, Order of.....  | 13                            | 5,000                       |
| Railroad Trainmen, Brotherhood of.....  | 92                            | 10,929                      |
| Railway and Steamship Clerks, Freight Handlers, Express and Station Employ-   |                               |                             |
| ees, Brotherhood of.....  | 88                            | 5,959                       |
| Railway and Motor Coach Employees of America, Amalgamated Association of      |                               |                             |
| Street, Electric.....   | 23                            | 6,769                       |
| Railway Carmen of America, Brotherhood of.....                                | 112                           | 10,942                      |
| Railway Conductors, Order of.....   | 67                            | 2,355                       |
| Retail Clerks, International Protective Association.....                      | 4                             | 25                          |
| Roofers, Damp and Waterproof Workers' Association, United Slate, Tile and     |                               |                             |
| Composition.....  | 1                             | 26                          |
| Rubber Workers of America, International United.....                          | 1                             | 21                          |
| Seamen's Union, International.....  | 2                             | 124                         |
| Siderographers, International Association of.....                             | 1                             | 8                           |
| Stage Employees and Moving Picture Machine Operators, International Alliance  |                               |                             |
| of Theatrical.....  | 36                            | 900                         |
| Stereotypers' and Electrotypers' Union, International.....                    | 10                            | 346                         |
| Stonemasons' Union of North America, Journeymen.....                          | 15                            | 500                         |
| Switchmen's Union of North America.....                                       | 6                             | 31                          |
| Tailors' Union of America, Journeymen.....                                    | 4                             | 155                         |
| Teamsters, Chauffeurs, Stablemen and Helpers, International Brotherhood of... | 17                            | 1,545                       |
| Textile Workers of America, United.....                                       | 5                             | 300                         |
| Train Despatchers' Association, American.....                                 | 1                             | 15                          |
| Typographical Union, International.....                                       | 40                            | 4,246                       |
| Upholsterers', Carpet and Linoleum Mechanics' International Union.....        | 3                             | 350                         |
| Totals.....   | 1,885                         | 170,569                     |
| Industrial Workers of the World.....  | 11                            | 4,200                       |
| <b>Grand Totals.....</b>  | <b>1,896</b>                  | <b>174,769</b>              |

<sup>1</sup> No branches are reported in Canada.

Table 6 gives the numbers of branches and the membership of Canadian central labour bodies operating in Canada at the close of 1936.

6.—Canadian<sup>1</sup> Central Labour Bodies Operating in Canada, showing Numbers of Branches and Members, December, 1936.

| Organization.   | Number of Branches or Affiliations. | Members Reported. |
|---|-------------------------------------|-------------------|
| Algoma Steel Workers' National Union.....                       | 1                                   | 2,200             |
| All-Canadian Congress of Labour.....                            | 42                                  | 3,894             |
| Building Workers of Canada, Amalgamated.....                    | 31                                  | 9,000             |
| Canadian Brotherhood of Ships' Employees.....                   | 3                                   | 4,800             |
| Canadian Federation of Labour.....                              | 5                                   | 1                 |
| Canadian Federation of Musicians <sup>2</sup> .....             | 8                                   | 530               |
| Carpet Weavers' Beneficial Association, Canadian Brussels'..... | 6                                   | 170               |
| Civil Servants of Canada, Amalgamated.....                      | 40                                  | 3,910             |
| Civil Service Association of Alberta.....                       | 11                                  | 1,204             |
| Electrical Communication Workers of Canada <sup>2</sup> .....   | 2                                   | 28                |
| Electrical Trades Union, Canadian.....                          | 4                                   | 620               |
| Engineers, Canadian Association of Stationary.....              | 21                                  | 619               |
| Express Employees, Brotherhood of.....                          | 27                                  | 1,898             |
| Fire Fighters, Provincial Federation of Ontario.....            | 7                                   | 106               |
| Letter Carriers, Federated Association of.....                  | 57                                  | 1,684             |
| Marine Engineers of Canada, National Association of.....        | 16                                  | 638               |
| National Union of Operating Engineers <sup>2</sup> .....        | 1                                   | 202               |
| Native Brotherhood of British Columbia.....                     | 16                                  | 727               |
| One Big Union <sup>2</sup> .....                                | 44                                  | 23,745            |
| Postal Employees, Canadian.....                                 | 25                                  | 957               |
| Printing Trades Union, Canadian National <sup>2</sup> .....     | 1                                   | 146               |
| Railway Employees, Canadian Brotherhood of.....                 | 162                                 | 11,668            |
| Railway Mail Clerks' Federation, Dominion.....                  | 18                                  | 895               |
| Railwaymen, Canadian Association of.....                        | 76                                  | 3,251             |
| Shoe Workers' Union and Allied Crafts, Canadian.....            | 11                                  | 2,350             |
| Trades and Labour Congress of Canada.....                       | 98                                  | 8,224             |
| Transport and General Workers of Canada <sup>2</sup> .....      | 4                                   | 430               |
| Victuallers and Caterers' Union, Canadian.....                  | 2                                   | 750               |
| <b>Totals.....</b>  | <b>740</b>                          | <b>83,841</b>     |

<sup>1</sup> The Labour Department's definition of 'Canadian' does not include the National Catholic or Independent Unions with reported memberships of 45,000 and 18,863 respectively. <sup>2</sup> Membership not reported.

<sup>3</sup> Affiliated with the Canadian Federation of Labour.

## Section 6.—Fatal Industrial Accidents.

Statistics of fatal industrial accidents have been compiled by the Dominion Department of Labour since 1903, the data being obtained from provincial Workmen's Compensation Boards, the Board of Railway Commissioners for Canada and various other governmental authorities, from departmental correspondents and from press clippings. Table 7 shows the numbers of fatal industrial accidents reported to the Department during each year from 1933 to 1937, inclusive. The number of fatalities in each of the different industries is also shown as a percentage of the total number. Preliminary figures show 1,209 fatal accidents in 1937.



## 7.—Fatal Industrial Accidents in Canada, by Industries, 1933-37.

| Industry.                                       | Numbers of Fatal Accidents. |              |              |              |              | Percentages of Fatal Accidents. |              |              |              |              |
|---|-----------------------------|--------------|--------------|--------------|--------------|---------------------------------|--------------|--------------|--------------|--------------|
|   | 1933.                       | 1934.        | 1935.        | 1936.        | 1937.        | 1933.                           | 1934.        | 1935.        | 1936.        | 1937.        |
| Agriculture.....                                | 111                         | 151          | 124          | 127          | 154          | 13.7                            | 15.1         | 12.3         | 11.5         | 12.7         |
| Logging.....                                    | 91                          | 114          | 110          | 133          | 145          | 11.3                            | 11.4         | 11.5         | 12.0         | 12.0         |
| Fishing and trapping.....                       | 36                          | 47           | 38           | 57           | 50           | 4.5                             | 4.7          | 3.7          | 5.1          | 4.1          |
| Mining, non-ferrous smelting and quarrying..... | 112                         | 144          | 175          | 181          | 198          | 13.9                            | 14.4         | 17.4         | 16.3         | 16.4         |
| Manufacturing.....                              | 103                         | 103          | 133          | 112          | 154          | 12.7                            | 10.3         | 13.2         | 10.1         | 12.7         |
| Construction.....                               | 65                          | 113          | 103          | 105          | 164          | 8.0                             | 11.8         | 10.2         | 9.5          | 13.6         |
| Electric light and power.....                   | 15                          | 20           | 25           | 14           | 22           | 1.9                             | 2.0          | 2.5          | 1.3          | 1.8          |
| Transportation and public utilities.....        | 161                         | 165          | 184          | 240          | 214          | 19.9                            | 16.5         | 18.2         | 21.7         | 17.7         |
| Trade.....                                      | 48                          | 52           | 44           | 45           | 45           | 5.9                             | 5.2          | 4.4          | 4.1          | 3.7          |
| Service.....                                    | 63                          | 80           | 66           | 89           | 62           | 7.8                             | 8.6          | 6.5          | 8.0          | 5.2          |
| Miscellaneous.....                              | 3                           | Nil          | 1            | 4            | 1            | 0.4                             | -            | 0.1          | 0.4          | 0.1          |
| <b>Totals.....</b>                              | <b>888</b>                  | <b>1,000</b> | <b>1,009</b> | <b>1,107</b> | <b>1,209</b> | <b>100.0</b>                    | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> |

†Figures subject to revision.

**Causes of Fatal Accidents.**—The classification of fatal accidents in 1937, by causes, shows that the largest number, 385, came under the category "by moving trains, vehicles, etc". This includes all accidents due to cars or engines, including mine and quarry cars, and to automobiles and other power vehicles and horse-drawn vehicles, as well as moving implements, water craft and aircraft.

"Falling objects" caused 223 fatalities. Next in order as a cause came "falls of persons", including those (186 in number) who fell into pits, shafts, holds of vessels, harbours, rivers, etc. Fatalities numbering 148 were caused by dangerous substances, including electric current, explosives, hot and inflammable substances, gas fumes, boiler explosions, etc. Animals caused 33 fatalities, including 21 caused by horses. There were 28 fatalities caused by striking against or being struck by objects, 25 by prime movers, 25 by hoisting apparatus, 24 by working machines, 18 by the handling of heavy or sharp objects, and 11 by tools. The heading "other causes" includes 33 caused by lightning, frost, storms, and sunstroke, 31 due to industrial diseases, strain, etc., 18 to cave-ins, etc., 13 caused by shooting and violence, and 5 by drownings not otherwise specified.

Numbers of industrial accidents, fatal and non-fatal, dealt with by the various provincial Workmen's Compensation Boards, are included in the following section on Workmen's Compensation.

## Section 7.—Workmen's Compensation in Canada.

An account of the development of workmen's compensation legislation in Canada from employers' liability legislation was given at pp. 744-746 of the 1927-28 Year Book, while a summary of the legislation with regard to workmen's compensation, including a statement of the current scale of compensation in each province, appears in the general sketch of labour legislation in Canada at pp. 787-796 of the current edition. Details regarding the operation of the various Workmen's Compensation Boards of the provinces are given below.

**Operations of the Workmen's Compensation Boards.**—*Nova Scotia.*—The Workmen's Compensation Act was passed in 1915, but only became effective on Jan. 1, 1917. During the twenty-one years between that date and Dec. 31, 1937, 161,272 accidents were reported to the Board of which 143,413 were compensated as shown in Table 8. Prior to Jan. 1, 1920, medical aid was furnished only in special cases.

## 8.—Compensation Paid and Accidents Compensated by the Nova Scotia Workmen's Compensation Board, 1917-37.

(Estimates for outstanding claims not included.)

| Year.     | Compensation. | Medical Aid. | Total.    | Accidents Compensated. |
|-----------|---------------|--------------|-----------|------------------------|
|           | \$            | \$           | \$        | No.                    |
| 1917..... | 503,258       | 202          | 503,460   | 4,837                  |
| 1918..... | 826,740       | Nil          | 826,740   | 4,931                  |
| 1919..... | 629,156       | 491          | 629,647   | 4,949                  |
| 1920..... | 1,135,235     | 36,561       | 1,171,796 | 7,116                  |
| 1921..... | 705,752       | 36,296       | 742,048   | 4,903                  |
| 1922..... | 576,906       | 40,147       | 617,053   | 5,022                  |
| 1923..... | 808,500       | 56,484       | 865,044   | 6,250                  |
| 1924..... | 874,478       | 63,974       | 938,452   | 5,786                  |
| 1925..... | 638,787       | 68,740       | 707,527   | 5,340                  |
| 1926..... | 875,940       | 84,122       | 960,062   | 6,662                  |
| 1927..... | 1,052,303     | 88,078       | 1,141,281 | 6,880                  |
| 1928..... | 1,076,074     | 95,069       | 1,171,143 | 7,683                  |
| 1929..... | 936,210       | 117,632      | 1,053,842 | 9,479                  |
| 1930..... | 949,828       | 120,399      | 1,079,227 | 8,821                  |
| 1931..... | 951,256       | 106,578      | 1,057,834 | 6,357                  |
| 1932..... | 688,448       | 84,281       | 772,729   | 5,024                  |
| 1933..... | 570,701       | 60,575       | 640,276   | 5,168                  |
| 1934..... | 794,717       | 113,860      | 908,577   | 8,063                  |
| 1935..... | 954,061       | 130,952      | 1,085,013 | 8,971                  |
| 1936..... | 1,160,738     | 167,255      | 1,327,993 | 10,240 <sup>1</sup>    |
| 1937..... | 1,189,710     | 190,846      | 1,380,556 | 10,925                 |

<sup>1</sup>Revised since the publication of the 1937 Year Book.

*New Brunswick.*—The Workmen's Compensation Act of New Brunswick was passed in 1918. It extends to a wide range of industries, and is administered by a Board of three persons, levying assessments and paying benefits. For the sums paid out annually from 1920 to 1937 as compensation and for medical aid, see Table 9.

## 9.—Compensation Paid by the New Brunswick Workmen's Compensation Board, 1920-37.

| Year.                   | Weekly Compensation. | Permanent Partial Disability. | Fatal.            |                       | Medical Aid.                      |                               | Permanent Total Disability Reserve. |
|-------------------------|----------------------|-------------------------------|-------------------|-----------------------|-----------------------------------|-------------------------------|-------------------------------------|
|                         |                      |                               | Funeral Expenses. | Reserve for Pensions. | Doctors' Fees and Transportation. | Hospital and Nursing Service. |                                     |
|                         | \$                   | \$                            | \$                | \$                    | \$                                | \$                            | \$                                  |
| 1920.....               | 195,063              | 73,440                        | 1,799             | 128,158               | 39,324                            | 15,606                        | 1                                   |
| 1921.....               | 159,096              | 103,054                       | 3,661             | 188,945               | 56,631                            | 22,378                        | 1                                   |
| 1922.....               | 162,988              | 84,316                        | 2,906             | 124,088               | 76,046                            | 31,568                        | 1                                   |
| 1923.....               | 204,353              | 90,349                        | 3,573             | 180,339               | 83,530                            | 35,935                        | 1                                   |
| 1924.....               | 203,946              | 113,555                       | 3,425             | 162,740               | 87,261                            | 41,528                        | 1                                   |
| 1925.....               | 186,946              | 90,044                        | 2,784             | 144,285               | 84,897                            | 38,020                        | 1                                   |
| 1926.....               | 185,624              | 76,780                        | 2,033             | 93,838                | 73,149                            | 40,293                        | 1                                   |
| 1927.....               | 211,692              | 103,430                       | 2,427             | 88,299                | 79,481                            | 43,994                        | 1                                   |
| 1928.....               | 217,890              | 116,208                       | 3,141             | 127,490               | 80,212                            | 51,984                        | 1                                   |
| 1929.....               | 243,770              | 99,266                        | 3,388             | 137,667               | 85,238                            | 59,217                        | 1                                   |
| 1930.....               | 199,313              | 92,344                        | 2,682             | 116,055               | 77,722                            | 54,172                        | 0,237                               |
| 1931.....               | 181,676              | 73,774                        | 1,581             | 72,481                | 79,021                            | 60,183                        | 1                                   |
| 1932.....               | 137,762              | 71,527                        | 1,403             | 33,280                | 68,712                            | 46,907                        | 1                                   |
| 1933.....               | 145,063              | 103,742                       | 2,126             | 63,649                | 88,304                            | 63,572                        | 20,521                              |
| 1934.....               | 192,207              | 80,967                        | 2,104             | 83,485                | 110,103                           | 85,724                        | 1                                   |
| 1935.....               | 195,763              | 91,382                        | 2,388             | 86,161                | 111,470                           | 83,221                        | 10,273                              |
| 1936.....               | 247,204              | 85,596                        | 2,290             | 106,633               | 130,266                           | 101,262                       | 9,347 <sup>2</sup>                  |
| 1937 <sup>2</sup> ..... | 239,974              | 43,330                        | 2,001             | 62,770                | 97,829                            | 79,797                        | 9,346                               |

<sup>1</sup> No reserve reported.<sup>2</sup> Provisional.

*Quebec.*—The Quebec Workmen's Compensation Commission was established in 1928 by authority of cc. 79 and 80 of the Statutes of that year. The Act was brought into force by proclamation on Mar. 22, 1928, operations of the Commission commencing as of Sept. 1, 1928. Under this Act, the Quebec Commission did not insure employers against their liability. On Apr. 4, 1931, a new Act was enacted by the Quebec Legislature (21 Geo. V, c. 100), effective Sept. 1, 1931, providing for state insurance, practically along the same lines as the Workmen's Compensation Act of Ontario. This new Act was amended by 23 Geo. V, c. 98, enacted on Apr. 13, 1933; by 25-26 Geo. V, c. 80, enacted on Apr. 11, 1935; by 1 Edw. VIII, cc. 39-40, enacted on Nov. 12, 1936; and by 1 Geo. VI, c. 94, enacted on May 20, 1937. Table 10 shows the operations of the Quebec Commission from Sept. 1, 1928, to Dec. 31, 1937.

**10.—Compensation Paid and Accidents Compensated by the Quebec Workmen's Compensation Commission, 1928-37.**

| Year.                        | Claims. | Accidents<br>Compensated. | Accident<br>Cost. |
|------------------------------|---------|---------------------------|-------------------|
|                              | No.     | No.                       | \$                |
| 1928 (4 months).....         | 8,266   | 2,625                     | 209,764           |
| 1929.....                    | 25,610  | 21,377                    | 3,229,554         |
| 1930.....                    | 20,900  | 10,850                    | 3,792,346         |
| 1931 (8 months) Old Act..... | 12,534  | 13,204                    | 2,758,785         |
| 1931 (4 months) New Act..... | 12,734  | 12,717                    | 1,237,738         |
| 1932.....                    | 34,414  | 30,643                    | 3,048,055         |
| 1933.....                    | 30,462  | 26,723                    | 2,237,504         |
| 1934.....                    | 35,436  | 31,557                    | 2,579,002         |
| 1935.....                    | 40,521  | 35,163                    | 3,396,413         |
| 1936.....                    | 43,838  | 39,581                    | 3,917,462         |
| 1937 <sup>1</sup> .....      | 71,000  | 63,000                    | 5,742,656         |

<sup>1</sup> Figures subject to revision.

*Ontario.*—Under the system operated by the Ontario Workmen's Compensation Board in Schedule 1, where the liability is collective, 24 classes of industries pay various percentages of their payrolls annually to the Board, and escape individual civil liability for accidents and certain specified industrial diseases. The percentage of payroll collected by the Board is graded according to the degree of hazard in the occupation and ranged in 1937 from 20 cents per \$100 of payroll in printing to \$14.30 for wrecking and window cleaning. The average for all classes was \$1.39 per \$100 of payrolls which amounted to \$488,259,000. Certain other industries under Schedule 2, including municipal undertakings, railways, car shops, telegraphs, telephones, etc., are made individually liable to pay the rates of compensation fixed under the Act. Employees of the Dominion or of the province, killed or injured in the discharge of their duty, are by special legislation placed on the same footing as those of private employers of the second class.

Statistics of the benefits awarded and the accidents to workers reported during the 23 years of the operation of the Act appear in Table 11. During the year 1937, 66,868 accidents were *paid for*, including 353 cases of death, 20 of permanent total disability, 1,091 of permanent partial disability, 29,806 of temporary disability, and 35,098 in which medical aid only was provided; the latter are all under Schedule 1, as medical aid in Schedule 2 cases and Crown cases is furnished directly by the employer.

**11.—Benefits Awarded and Accidents Reported by the Ontario Workmen's Compensation Board, 1915-37.**

| Year.     | Benefits Awarded. |                     |                                    |                 | Accidents Reported. |             |        |        |
|-----------|-------------------|---------------------|------------------------------------|-----------------|---------------------|-------------|--------|--------|
|           | Schedule 1.       |                     | Schedule 2 and Crown Compensation. | Total Benefits. | Schedule 1.         | Schedule 2. | Crown. | Total. |
|           | Compensation.     | Medical Aid.        |                                    |                 | No.                 | No.         | No.    | No.    |
|           | \$                | \$                  | \$                                 | \$              | No.                 | No.         | No.    | No.    |
| 1915..... | 692,359           | 1                   | 200,932                            | 893,321         | 13,878              | 3,144       | 11     | 17,033 |
| 1916..... | 1,553,653         | 1                   | 451,710                            | 2,005,363       | 21,269              | 4,806       | 17     | 26,092 |
| 1917..... | 2,286,955         | 83,514 <sup>2</sup> | 623,556                            | 2,994,025       | 30,701              | 5,813       | 18     | 36,532 |
| 1918..... | 2,751,137         | 360,346             | 763,511                            | 3,883,995       | 40,662              | 7,113       | 73     | 47,848 |
| 1919..... | 2,808,639         | 386,299             | 997,923                            | 4,192,860       | 38,236              | 7,918       | 106    | 44,260 |
| 1920..... | 5,113,180         | 703,706             | 1,968,390                          | 7,780,245       | 46,177              | 7,222       | 1,452  | 54,851 |
| 1921..... | 3,858,017         | 662,794             | 1,668,452                          | 6,189,264       | 36,272              | 7,666       | 1,258  | 45,191 |
| 1922..... | 3,417,102         | 692,820             | 1,532,975                          | 5,642,897       | 42,139              | 7,124       | 1,148  | 50,411 |
| 1923..... | 4,036,170         | 785,905             | 1,348,786                          | 6,173,862       | 51,655              | 6,080       | 3,374  | 61,109 |
| 1924..... | 4,052,288         | 835,956             | 1,234,576                          | 6,122,820       | 49,558              | 4,916       | 4,201  | 58,675 |
| 1925..... | 3,635,530         | 875,836             | 1,054,077                          | 5,565,443       | 50,883              | 5,079       | 4,050  | 60,012 |
| 1926..... | 3,664,040         | 988,487             | 1,168,825                          | 5,821,352       | 57,032              | 4,942       | 3,942  | 65,916 |
| 1927..... | 3,930,418         | 1,062,360           | 1,091,378                          | 6,084,655       | 62,063              | 5,412       | 4,504  | 71,979 |
| 1928..... | 4,565,689         | 1,106,698           | 1,335,751                          | 7,067,948       | 69,011              | 5,815       | 4,573  | 79,398 |
| 1929..... | 5,346,621         | 1,385,625           | 1,280,012                          | 8,012,158       | 76,029              | 6,008       | 5,066  | 87,103 |
| 1930..... | 4,942,756         | 1,356,046           | 1,144,216                          | 7,423,018       | 61,490              | 4,486       | 3,291  | 69,267 |
| 1931..... | 3,917,045         | 1,060,763           | 1,043,584                          | 6,021,392       | 46,069              | 3,348       | 3,477  | 52,894 |
| 1932..... | 3,202,639         | 817,240             | 1,105,741                          | 5,125,621       | 35,264              | 2,474       | 3,782  | 41,470 |
| 1933..... | 2,208,788         | 607,582             | 732,699                            | 3,699,069       | 33,227              | 1,890       | 2,925  | 38,042 |
| 1934..... | 2,745,239         | 841,738             | 912,780                            | 4,499,707       | 44,858              | 2,244       | 7,628  | 54,730 |
| 1935..... | 3,225,899         | 1,037,683           | 1,050,531                          | 5,314,113       | 50,690              | 2,208       | 5,648  | 58,546 |
| 1936..... | 3,553,282         | 1,058,642           | 1,031,874                          | 5,643,798       | 55,878              | 2,515       | 2,989  | 61,382 |
| 1937..... | 3,837,589         | 1,251,848           | 1,040,523                          | 6,129,961       | 64,845              | 2,564       | 3,183  | 70,582 |

<sup>1</sup>No provision for medical aid.

<sup>2</sup>Half year only.

*Manitoba.*—Under the Workmen's Compensation Act, effective Mar. 1, 1917, Part I of the Act, dealing with workmen in hazardous occupations, is administered by the Workmen's Compensation Board, which charges insurance rates according to the hazard of the industry, the sums received by the workman being in lieu of the rights of action previously existing. The province, the city of Winnipeg, and certain corporations operating public utilities are permitted by the law to practise self-insurance.

The Workmen's Compensation Board also administers the provisions of the Dominion Act respecting payment of compensation of employees of His Majesty who are killed or suffer injuries while performing their duties, being c. 15 of the Statutes of 1918 and subsequent amendments.

From the date of the coming into force of the Manitoba Workmen's Compensation Act to Dec. 31, 1936, the Board has dealt with 119,103 compensable accidents and paid out \$15,490,867 for compensation and medical aid. Of the accidents in 1936, 4,860 involved medical aid costs only, 4,186 involved temporary and 216 permanent disability, while 37 resulted in death. The figures quoted above and hereunder cover accidents dealt with under both provincial and Dominion legislation.

**12.—Compensation Paid and Accidents Compensated by the Manitoba Workmen's Compensation Board, 1917-36.**

| Year.                 | Benefits Awarded. |              |           | Accidents Compensated. |
|-----------------------|-------------------|--------------|-----------|------------------------|
|                       | Compensation.     | Medical Aid. | Total.    |                        |
|                       | \$                | \$           | \$        | No.                    |
| 1917 (10 months)..... | 289,870           | 23,002       | 312,872   | 1,323                  |
| 1918.....             | 304,135           | 35,121       | 339,256   | 1,731                  |
| 1919.....             | 280,222           | 40,748       | 320,970   | 1,805                  |
| 1920.....             | 399,734           | 79,885       | 479,619   | 2,509                  |
| 1921.....             | 708,418           | 155,295      | 863,713   | 3,731                  |
| 1922.....             | 691,547           | 175,206      | 866,753   | 5,480                  |
| 1923.....             | 686,124           | 170,826      | 856,950   | 5,469                  |
| 1924.....             | 510,815           | 171,441      | 682,256   | 5,468                  |
| 1925.....             | 591,715           | 197,378      | 789,093   | 5,393                  |
| 1926.....             | 640,530           | 210,010      | 850,540   | 7,635                  |
| 1927.....             | 644,969           | 226,173      | 871,142   | 7,726                  |
| 1928.....             | 858,470           | 270,868      | 1,129,338 | 9,591                  |
| 1929.....             | 966,203           | 285,350      | 1,251,553 | 10,449                 |
| 1930.....             | 952,760           | 240,734      | 1,193,494 | 8,310                  |
| 1931.....             | 670,461           | 177,552      | 848,013   | 6,671                  |
| 1932.....             | 636,975           | 165,969      | 802,944   | 5,665                  |
| 1933.....             | 456,180           | 141,539      | 597,719   | 5,505                  |
| 1934.....             | 562,276           | 109,568      | 671,844   | 6,578                  |
| 1935.....             | 572,262           | 199,829      | 772,091   | 8,237                  |
| 1936.....             | 702,321           | 211,307      | 913,628   | 9,299                  |

*Saskatchewan.*—The Workmen's Compensation (Accident Fund) Act became fully effective July 1, 1930, and covers practically all employees in the province except railway employees engaged in the running trades, casual workers, farm and ranch labourers, domestic and menial servants, janitors, retail store employees, and persons who cannot be classed as workmen.

The Act is administered by a Board of three and imposes compulsory collective liability on the employers covered. The schedule of benefits is similar to that provided by other compensation Acts. Table 13 shows the number of accidents and benefits paid to the end of 1936.

**13.—Compensation Paid and Accidents Compensated by the Saskatchewan Workmen's Compensation Board, 1930-36.**

| Year.                | Benefits Awarded. |              |         | Accidents Compensated. |
|----------------------|-------------------|--------------|---------|------------------------|
|                      | Compensation.     | Medical Aid. | Total.  |                        |
|                      | \$                | \$           | \$      | No.                    |
| 1930 (6 months)..... | 131,338           | 28,434       | 159,772 | 2,639                  |
| 1931.....            | 308,662           | 100,748      | 409,410 | 3,960                  |
| 1932.....            | 258,933           | 73,398       | 332,331 | 2,844                  |
| 1933.....            | 224,735           | 58,099       | 282,835 | 2,359                  |
| 1934.....            | 207,842           | 60,029       | 267,871 | 3,222                  |
| 1935.....            | 245,065           | 70,670       | 315,735 | 3,568                  |
| 1936.....            | 357,545           | 89,980       | 447,525 | 4,642                  |

*Alberta.*—The Workmen's Compensation Act of 1918 became effective Aug. 1, 1918, as regards mining, and Jan. 1, 1919, in respect of almost all industries except agriculture, railroading, and the operation of retail stores and offices. Railroading (except for the running trades) was brought within the scope of the Act in 1919, and a further amendment in 1928 left only conductors and trainmen exempt from the operations of the Act.

Table 14 shows the operations of the Board for the calendar years 1921 to 1936. Of the 12,381 accidents reported in 1936, 39 were fatal and 91 resulted in some permanent injury. The amounts shown below do not include sums transferred to the pension fund, which had assets amounting to \$3,217,085 on Dec. 31, 1936, nor do they include administration expenses nor sums set aside to cover estimated liabilities. The numbers of accidents compensated shown in the last column do not include claims disposed of by payment only of account for medical aid.

**14.—Compensation Paid, and Accidents Reported and Compensated by the Alberta Workmen's Compensation Board, 1921-36.**

| Year.     | Benefits Awarded. |              |         | Accidents Reported. | Accidents Compensated. |
|-----------|-------------------|--------------|---------|---------------------|------------------------|
|           | Compensation.     | Medical Aid. | Total.  |                     |                        |
|           | \$                | \$           | \$      | No.                 | No.                    |
| 1921..... | 253,669           | 113,433      | 367,102 | 7,069               | 3,566                  |
| 1922..... | 265,326           | 134,252      | 399,578 | 7,513               | 3,314                  |
| 1923..... | 323,369           | 161,732      | 485,101 | 9,160               | 4,268                  |
| 1924..... | 241,090           | 127,397      | 368,487 | 7,383               | 3,627                  |
| 1925..... | 312,990           | 154,870      | 467,860 | 8,355               | 4,099                  |
| 1926..... | 298,404           | 124,138      | 422,542 | 8,930               | 4,629                  |
| 1927..... | 371,787           | 161,537      | 533,324 | 10,149              | 5,547                  |
| 1928..... | 456,526           | 207,602      | 664,128 | 13,400              | 6,636                  |
| 1929..... | 507,438           | 265,636      | 773,074 | 14,899              | 7,138                  |
| 1930..... | 498,015           | 264,780      | 762,795 | 12,607              | 6,091                  |
| 1931..... | 452,643           | 216,212      | 668,855 | 10,049              | 4,878                  |
| 1932..... | 407,284           | 203,745      | 611,029 | 8,974               | 4,607                  |
| 1933..... | 291,406           | 143,675      | 435,081 | 8,160               | 3,398                  |
| 1934..... | 312,092           | 169,490      | 481,582 | 9,608               | 4,090                  |
| 1935..... | 353,292           | 205,801      | 559,193 | 11,058              | 4,813                  |
| 1936..... | 436,498           | 262,801      | 699,299 | 12,381              | 4,834                  |

*British Columbia.*—The Workmen's Compensation Act, effective Jan. 1, 1917, provides compulsory accident insurance in almost every industrial occupation carried on in the province, protecting in 1936 approximately 135,000 employees with a payroll of almost \$145,000,000. Insurance rates levied against employers are graded according to the hazard of the industry. All employers under the Act are required, in addition, to deduct one cent per day or part thereof from the wages of employees and to remit this money to the Board to the credit of the medical aid fund, which provides all necessary medical, surgical and hospital expenses for injured employees. Silicosis was added as an industrial disease in metal mining commencing Jan. 1, 1936. For figures see Table 15.

15.—Compensation Paid and Accidents Compensated by the British Columbia Workmen's Compensation Board, 1917-36.

| Year.     | Benefits Awarded. |              |           | Claims (gross). |
|-----------|-------------------|--------------|-----------|-----------------|
|           | Compensation.     | Medical Aid. | Total.    |                 |
|           | \$                | \$           | \$        | No.             |
| 1917..... | 603,274           | 62,668       | 665,942   | 13,685          |
| 1918..... | 1,224,039         | 268,985      | 1,493,024 | 22,498          |
| 1919..... | 1,394,696         | 289,108      | 1,683,804 | 18,185          |
| 1920..... | 1,709,759         | 397,451      | 2,107,210 | 20,905          |
| 1921..... | 1,771,126         | 431,748      | 2,202,874 | 16,833          |
| 1922..... | 1,767,260         | 457,196      | 2,224,456 | 19,647          |
| 1923..... | 2,157,918         | 514,762      | 2,672,680 | 24,184          |
| 1924..... | 2,309,007         | 602,733      | 2,911,740 | 25,566          |
| 1925..... | 2,419,372         | 618,942      | 3,038,314 | 27,563          |
| 1926..... | 2,481,456         | 678,231      | 3,159,687 | 30,365          |
| 1927..... | 2,654,200         | 643,594      | 3,297,794 | 30,066          |
| 1928..... | 2,898,021         | 688,446      | 3,586,467 | 32,793          |
| 1929..... | 3,588,626         | 752,623      | 4,341,249 | 36,760          |
| 1930..... | 3,408,743         | 773,397      | 4,177,140 | 33,285          |
| 1931..... | 2,672,254         | 568,289      | 3,140,543 | 25,877          |
| 1932..... | 1,890,021         | 447,423      | 2,337,445 | 19,011          |
| 1933..... | 1,501,700         | 368,482      | 1,870,183 | 18,274          |
| 1934..... | 1,590,817         | 410,126      | 2,000,943 | 22,354          |
| 1935..... | 2,092,389         | 506,741      | 2,599,130 | 26,280          |
| 1936..... | 2,536,166         | 595,894      | 3,132,060 | 29,677          |

### Section 8.—Strikes and Lockouts.

Statistics of strikes and lockouts in Canada have been collected by the Dominion Department of Labour since its establishment in 1900. Table 16 shows the numbers of disputes, of employees involved in disputes, and the time loss in working days for each year from 1921 to 1937 and the totals for the period 1901-20, inclusive. The items in the columns headed "time loss in man-working days" in the tables following are calculated by multiplying the number of persons directly involved in strikes and lockouts by the number of working days they are so affected during the time the disputes are in existence. Tables 17 and 18 give detailed analyses, by provinces and by industries, for 1936 and 1937.

Summary tables of the figures with details as to strikes and lockouts during 1937 will be found in the *Labour Gazette* for March, 1938, pp. 241-271.

**Industrial Disputes in Recent Years.**—From 1930 to 1937 the figures as to numbers of strikes and lockouts, numbers of employees involved and time loss were substantially greater than during the period 1926 to 1930, but were still much lower than during the years prior to 1926 when coal-mining strikes involved large numbers of employees and resulted in great time loss. Since 1930 most of the important disputes have been in clothing manufacturing, logging, sawmilling and wood-working industries, with a substantial number in coal mining. In 1937, as in 1936, there were important disputes in textile factories, especially cotton, both in Quebec and Ontario. Other disputes of importance were of coal miners at Stellarton, N.S., and Minto, N.B., lumber mill workers in Miramichi district, N.B., foundry and ship repair workers at Sorel, Que., women's clothing workers at Montreal, Que., automobile workers at Oshawa, Ont., loggers at Flanders, Ont., meat packers at Calgary and Edmonton, Alta., also at Vancouver, B.C. The number of disputes in 1937 was 278 as compared with 156 in 1936, the number of workers involved was 71,905 as compared with 34,182 in 1936, and the time loss 886,393 man-working days as compared with 276,997 in 1936. Table 16 includes figures regarding coal mining, industries other than coal mining, and all industries.

## 16.—Strikes and Lockouts in the Coal Mining, Other, and All Industries in Canada, calendar years 1921-37.

NOTE.—For the years 1901-20, see the 1933 Year Book, p. 763.

| Year.                | Coal Mining.                                 |                             |                                | Industries other than Coal Mining.           |                             |                                | All Industries.                                       |                        |                             |                                |
|----------------------|--|-----------------------------|--------------------------------|--|-----------------------------|--------------------------------|---|------------------------|-----------------------------|--------------------------------|
|                      | Number of Disputes in Existence During Year. | Number of Workers Involved. | Time Loss in Man-Working Days. | Number of Disputes in Existence During Year. | Number of Workers Involved. | Time Loss in Man-Working Days. | Numbers of Disputes—<br>In Existence During the Year. | Beginning in the Year. | Number of Workers Involved. | Time Loss in Man-Working Days. |
| Totals, 1901-20..... | 229 <sup>1</sup>                             | 138,126 <sup>1</sup>        | 5,508,233 <sup>1</sup>         | 2,701 <sup>1</sup>                           | 534,397 <sup>1</sup>        | 10,732,592 <sup>1</sup>        | 2,930 <sup>1</sup>                                    | 2,863 <sup>1</sup>     | 722,523 <sup>1</sup>        | 16,240,825 <sup>1</sup>        |
| 1921.....            | 10   | 1,456                       | 31,315                         | 158  | 26,801                      | 1,017,596                      | 168   | 159                    | 28,257                      | 1,048,914                      |
| 1922.....            | 21   | 26,475                      | 798,548                        | 38   | 17,300                      | 730,113                        | 104   | 89                     | 43,775                      | 1,528,656                      |
| 1923.....            | 23   | 20,514                      | 589,539                        | 63   | 13,447                      | 372,211                        | 86  | 77                     | 34,261                      | 671,776                        |
| 1924.....            | 15   | 21,201                      | 1,089,484                      | 55   | 13,109                      | 205,570                        | 70  | 64                     | 34,310                      | 1,265,054                      |
| 1925.....            | 17   | 13,672                      | 1,040,277                      | 70   | 10,277                      | 153,005                        | 87  | 85                     | 28,949                      | 1,193,281                      |
| 1926.....            | 16   | 8,445                       | 35,193                         | 61   | 15,389                      | 231,408                        | 77  | 75                     | 23,834                      | 266,601                        |
| 1927.....            | 20   | 16,653                      | 53,833                         | 54   | 5,646                       | 98,737                         | 74  | 72                     | 22,200                      | 152,577                        |
| 1928.....            | 14   | 5,033                       | 88,000                         | 84   | 12,548                      | 136,212                        | 98  | 96                     | 17,581                      | 224,212                        |
| 1929.....            | 8  | 3,045                       | 6,805                          | 52   | 9,901                       | 145,275                        | 90  | 88                     | 12,940                      | 152,080                        |
| 1930.....            | 16   | 6,228                       | 24,163                         | 82   | 7,540                       | 67,614                         | 67  | 67                     | 13,768                      | 91,797                         |
| 1931.....            | 9  | 2,129                       | 11,523                         | 79   | 8,609                       | 192,715                        | 83  | 86                     | 10,738                      | 204,233                        |
| 1932.....            | 33   | 8,540                       | 132,766                        | 63   | 14,850                      | 122,334                        | 116   | 111                    | 23,330                      | 255,000                        |
| 1933.....            | 21   | 3,023                       | 33,019                         | 104  | 23,630                      | 284,528                        | 125   | 122                    | 20,558                      | 317,547                        |
| 1934.....            | 26   | 11,461                      | 91,459                         | 165  | 34,339                      | 483,060                        | 191   | 189                    | 45,800                      | 574,519                        |
| 1935.....            | 17   | 6,131                       | 61,032                         | 103  | 27,138                      | 222,990                        | 120   | 120                    | 33,269                      | 284,028                        |
| 1936.....            | 22   | 8,655                       | 56,766                         | 134  | 26,157                      | 220,231                        | 156 <sup>1</sup>                                      | 155 <sup>1</sup>       | 34,812                      | 276,997                        |
| 1937.....            | 44   | 15,477                      | 112,826                        | 234  | 56,428                      | 773,567                        | 278   | 274                    | 71,905                      | 886,393                        |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

Table 17 is a record of industrial disputes by provinces for the years 1936 and 1937. In 1936, the important disputes by provinces and industries were as follows: in Ontario in textile and clothing manufacturing; in British Columbia in fishing, logging and water transportation (longshoremen); in Nova Scotia in coal mining; in Quebec in cotton, silk and dress manufacturing, and in transportation (taxi drivers); in Alberta in coal mining; and in Manitoba in fur and men's work-clothing manufacturing. In 1937 the important strikes by industries were located in the provinces as follows: in Ontario in textile, automobile, furniture, sawmilling, rubber, boot and shoe industries, and water transportation (pulpwood loaders and longshoremen); in Quebec in textile, clothing, meat-packing, foundry and ship repair industries; in Nova Scotia in coal mining; in New Brunswick in coal mining and sawmilling; in Manitoba in fur manufacturing; in Alberta in coal mining and meat packing; in British Columbia in gold mining and meat packing.

## 17.—Strikes and Lockouts, showing Numbers of Workers Involved and Time Loss, by Provinces, calendar years 1936 and 1937.

| Provinces.            | 1936.            |                          |                   |                    | 1937.            |                          |                   |                    |
|-----------------------|------------------|--------------------------|-------------------|--------------------|------------------|--------------------------|-------------------|--------------------|
|                       | No. of Disputes. | No. of Workers Involved. | Time Loss.        |                    | No. of Disputes. | No. of Workers Involved. | Time Loss.        |                    |
|                       |                  |                          | Man-Working Days. | Per cent of Total. |                  |                          | Man-Working Days. | Per cent of Total. |
| P.E. Island.....      | 1                | 20                       | 40                | 0.0                | Nil              | —                        | —                 | —                  |
| Nova Scotia.....      | 11               | 7,089                    | 39,315            | 14.2               | 43               | 14,300                   | 51,147            | 5.8                |
| New Brunswick.....    | Nil              | —                        | —                 | —                  | 8                | 3,642                    | 78,790            | 8.9                |
| Quebec.....           | 20               | 5,922                    | 33,251            | 12.0               | 46               | 24,419                   | 358,024           | 40.4               |
| Ontario.....          | 80               | 11,119                   | 87,955            | 31.8               | 130              | 24,531                   | 320,025           | 36.1               |
| Manitoba.....         | 13               | 2,094                    | 20,057            | 7.2                | 11               | 734                      | 15,629            | 1.7                |
| Saskatchewan.....     | 1                | 4                        | 20                | 0.0                | 4                | 124                      | 990               | 0.1                |
| Alberta.....          | 14               | 2,783                    | 20,987            | 7.6                | 17               | 2,413                    | 15,094            | 1.7                |
| British Columbia..... | 15               | 5,709                    | 75,122            | 27.1               | 18               | 1,583                    | 46,244            | 5.2                |
| Interprovincial.....  | 1                | 72                       | 250               | 0.1                | 1                | 150                      | 450               | 0.1                |
| Totals.....           | 156              | 34,812                   | 276,997           | 100.0              | 278              | 71,905                   | 886,393           | 100.0              |



Table 18 shows strikes and lockouts by industries during 1936 and 1937, the most important in 1936 occurring in manufacturing (mainly in textiles, clothing, etc.; fur, leather and other animal products; and leather boots and shoes), mining, fishing and trapping, and logging; and during 1937 in manufacturing (mainly in textiles, clothing, etc.; metal products; and miscellaneous wood products), mining, logging, and transportation and public utilities.

18.—Strikes and Lockouts, by Industries, 1936 and 1937.

| Industry.                                    | 1936.               |                   |                    |                   |                    | 1937.               |                   |                    |                   |                    |
|--|---------------------|-------------------|--------------------|-------------------|--------------------|---------------------|-------------------|--------------------|-------------------|--------------------|
|  | Number of Disputes. | Workers Involved. |                    | Time Loss.        |                    | Number of Disputes. | Workers Involved. |                    | Time Loss.        |                    |
|  |                     | Num-ber.          | Per Cent of Total. | Man-Working Days. | Per Cent of Total. |                     | Num-ber.          | Per Cent of Total. | Man-Working Days. | Per Cent of Total. |
| Agriculture.....                             | 1                   | 1,106             | 3.1                | 4,000             | 1.4                | 2                   | 78                | 0.1                | 58                | 0.0                |
| Logging.....                                 | 6                   | 2,605             | 7.5                | 31,305            | 11.3               | 7                   | 3,010             | 4.2                | 26,575            | 3.0                |
| Fishing and Trapping.....                    | 2                   | 2,340             | 6.1                | 40,350            | 14.8               | 1                   | 390               | 1.1                | 1,000             | 0.2                |
| Mining, etc. <sup>1</sup> .....              | 22                  | 8,655             | 24.9               | 56,766            | 20.5               | 49                  | 17,337            | 24.4               | 139,346           | 15.7               |
| Manufacturing.....                           | 81                  | 15,061            | 43.3               | 125,666           | 45.4               | 145                 | 46,344            | 64.4               | 687,510           | 77.6               |
| Vegetable foods, etc.....                    | 8                   | 518               | 1.5                | 2,170             | 0.8                | 9                   | 509               | 0.7                | 1,629             | 0.2                |
| Tobacco and liquors.....                     | 2                   | —                 | —                  | —                 | —                  | 3                   | 257               | 0.3                | 1,554             | 0.2                |
| Rubber products.....                         | 2                   | —                 | —                  | —                 | —                  | 5                   | 1,370             | 1.9                | 27,880            | 3.1                |
| Animal foods.....                            | 2                   | 293               | 0.8                | 460               | 0.2                | 4                   | 950               | 1.3                | 27,800            | 3.1                |
| Boots and shoes (leather) <sup>2</sup> ..... | 4                   | 405               | 1.2                | 7,700             | 2.8                | 7                   | 1,505             | 2.1                | 10,350            | 1.2                |
| Fur, leather and other animal products.....  | 13                  | 1,472             | 4.2                | 24,595            | 8.9                | 9                   | 857               | 1.2                | 22,333            | 2.5                |
| Textiles, clothing, etc.....                 | 33                  | 10,166            | 29.2               | 80,907            | 29.2               | 49                  | 25,955            | 36.1               | 435,504           | 49.1               |
| Pulp and paper.....                          | 2                   | —                 | —                  | —                 | —                  | 3                   | 397               | 0.6                | 1,765             | 0.2                |
| Printing and publishing.....                 | 1                   | 14                | 0.1                | 50                | 0.0                | 3                   | 135               | 0.2                | 1,275             | 0.1                |
| Miscellaneous wood products.....             | 12                  | 1,102             | 3.2                | 3,238             | 1.2                | 20                  | 4,871             | 6.8                | 41,064            | 4.7                |
| Metal products.....                          | 4                   | 387               | 1.1                | 1,720             | 0.6                | 23                  | 8,522             | 11.8               | 105,905           | 12.0               |
| Non-metallic minerals, chemicals, etc.....   | 4                   | 704               | 2.0                | 4,320             | 1.7                | 6                   | 682               | 0.9                | 6,717             | 0.8                |
| Miscellaneous products.....                  | 10                  | 685               | 2.0                | 1,301             | 0.5                | 25                  | 1,286             | 1.8                | 7,376             | 0.8                |
| Construction.....                            | 5                   | 170               | 0.5                | 402               | 0.2                | 6                   | 330               | 0.5                | 2,087             | 0.2                |
| Buildings and structures.....                | 2                   | —                 | —                  | —                 | —                  | 1                   | 50                | 0.1                | 125               | 0.0                |
| Railway.....                                 | 2                   | —                 | —                  | —                 | —                  | 1                   | 62                | 0.1                | 310               | 0.1                |
| Shipbuilding.....                            | 2                   | —                 | —                  | —                 | —                  | 13                  | 831               | 1.1                | 4,769             | 0.5                |
| Bridge.....                                  | 3                   | 218               | 0.6                | 500               | 0.2                | 1                   | 13                | 0.0                | 85                | 0.0                |
| Highway.....                                 | 2                   | 297               | 0.9                | 399               | 0.1                | 1                   | 13                | 0.0                | 85                | 0.0                |
| Canal, harbour, waterway.....                | 2                   | 297               | 0.9                | 399               | 0.1                | 1                   | 13                | 0.0                | 85                | 0.0                |
| Miscellaneous.....                           | 2                   | 297               | 0.9                | 399               | 0.1                | 1                   | 13                | 0.0                | 85                | 0.0                |
| Transportation and Public Utilities.....     | 15                  | 3,291             | 9.4                | 12,052            | 4.3                | 16                  | 1,441             | 2.0                | 14,458            | 1.6                |
| Steam railways.....                          | 2                   | —                 | —                  | —                 | —                  | 2                   | —                 | —                  | —                 | —                  |
| Electric railways.....                       | 2                   | —                 | —                  | —                 | —                  | 1                   | 21                | 0.0                | 126               | 0.0                |
| Water transportation.....                    | 9                   | 1,085             | 3.1                | 5,095             | 1.8                | 13                  | 1,409             | 2.0                | 14,299            | 1.6                |
| Local transportation.....                    | 4                   | 2,149             | 6.2                | 6,435             | 2.3                | 2                   | 11                | 0.0                | 33                | 0.0                |
| Telegraphy and telephones.....               | 2                   | —                 | —                  | —                 | —                  | 1                   | —                 | —                  | —                 | —                  |
| Electricity and gas.....                     | 2                   | —                 | —                  | —                 | —                  | 1                   | —                 | —                  | —                 | —                  |
| Miscellaneous.....                           | 2                   | 57                | 0.1                | 522               | 0.2                | 2                   | —                 | —                  | —                 | —                  |
| Trade.....                                   | 1                   | 17                | 0.1                | 50                | 0.0                | 7                   | 188               | 0.3                | 4,156             | 0.5                |
| Finance.....                                 | 2                   | —                 | —                  | —                 | —                  | 2                   | —                 | —                  | —                 | —                  |
| Service.....                                 | 17                  | 658               | 1.6                | 4,907             | 1.8                | 26                  | 1,231             | 1.7                | 5,314             | 0.6                |
| Public administration <sup>2</sup> .....     | 2                   | —                 | —                  | —                 | —                  | 1                   | 12                | 0.0                | 75                | 0.0                |
| Recreational.....                            | 2                   | —                 | —                  | —                 | —                  | 9                   | 928               | 1.3                | 3,494             | 0.4                |
| Custom and repair.....                       | 3                   | 244               | 0.7                | 1,340             | 0.5                | 3                   | 53                | 0.1                | 310               | 0.0                |
| Business and personal.....                   | 14                  | 314               | 0.9                | 3,567             | 1.3                | 13                  | 228               | 0.3                | 1,435             | 0.2                |
| Miscellaneous.....                           | 2                   | —                 | —                  | —                 | —                  | 2                   | —                 | —                  | —                 | —                  |
| Totals.....                                  | 156                 | 34,812            | 100.0              | 276,997           | 100.0              | 278                 | 71,905            | 100.0              | 886,393           | 100.0              |

<sup>1</sup> Non-ferrous smelting is included with "Mining"; erection of all large bridges is under "Bridge" Construction; water service is under "Public administration".

<sup>2</sup> None reported.

**Causes and Results of Industrial Disputes.**—In each of the previous years since the record was begun in 1901, the most important cause of disputes has been changes in wages, but in 1936 and in 1937 union questions led to a great number of disputes and involved very large numbers of workers. Nearly one-half of the strikes were caused by wage demands, and one-third by union demands—chiefly for recognition of union or against discharge of workers for union membership or activity. Strikes for union recognition were responsible for more than half of the time loss in

1937, involving one-third of the workers. As in 1936, about one-half of the disputes were terminated by direct negotiation between the parties and approximately one-quarter by the return of workers or their replacement.

In 1935, 1936, and 1937 there was a marked gain in the proportion of strikes settled by conciliation and arbitration, such proportion being roughly one-quarter as compared with about one-eighth in previous years.

## Section 9.—Employment and Unemployment.

### Subsection 1.—Operations of the Employment Service of Canada.

**Employment Service of Canada.**—Under Sec. 3 of the Employment Offices Co-ordination Act (c. 57, R.S.C., 1927), an Act passed by the Dominion Parliament in May, 1918, the Minister of Labour is empowered:—

"(a) to aid and encourage the organization and co-ordination of employment offices and to promote uniformity of methods among them;

"(b) to establish one or more clearing houses for the interchange of information between employment offices concerning the transfer of labour and other matters;

"(c) to compile and distribute information received from employment offices and from other sources regarding prevailing conditions of employment."

The Act further provides that certain sums of money are to be appropriated annually and paid to the provinces on a basis proportionate to the amount that each expends on the maintenance of employment offices.

The desired uniformity and co-ordination of employment-office activities throughout the various provinces are obtained by having the Dominion's payments contingent upon an agreement ensuring that the provinces, in the conduct of their employment offices, shall endeavour to fill situations in all trades and occupations for both men and women, and that no charge shall be made to employers or employees for this service. Each province agrees to maintain a provincial clearance system in co-operation with the interprovincial clearance system established by the Dominion Government, in order to secure the necessary mobility of labour as between localities in the same province or in different provinces. For the fiscal year 1937-38, agreements were concluded with all of the provinces except Prince Edward Island. Thus is formed the Employment Service of Canada—a chain of employment offices reaching from Halifax to Vancouver. At the time the Act came into force only 12 provincial employment offices were operated in Canada. This number was steadily increased until, at the close of 1919, due to the impetus given by the Employment Offices Co-ordination Act together with the requirements of the demobilization period, offices were functioning at 84 different centres. Subsequent contractions have reduced the Service to offices permanently located at 68 centres (on Dec. 31, 1937), distributed by provinces as follows: Nova Scotia, 3; New Brunswick, 4; Quebec, 11; Ontario, 28; Manitoba, 2; Saskatchewan, 7; Alberta, 5; and British Columbia, 8.

**Employment Service Council of Canada.**—An Order in Council, issued in 1918 in pursuance of the Act, provided for the formation of a body to be advisory to the Minister of Labour in the administration of the Act. This body, known as the Employment Service Council of Canada, is composed of representatives of the Dominion Departments of Labour and of Pensions and National Health, the Provincial Governments, the Canadian Manufacturers' Association, the Canadian Construction Association, the Trades and Labour Congress of Canada, the Railway Association of Canada, the Railway Brotherhoods, the Canadian Lumbermen's Association, the Canadian Council of Agriculture, and the returned soldiers. At the eleven meetings of the Council, the most recent of which was held on Aug. 21-22, 1930, various recommendations and suggestions relative to employment office administration were brought forward and presented to the Minister.

**Operations of Employment Offices.**—Statistics covering the work of the local offices are collected and tabulated by the Employment Service Branch of the Department of Labour. Table 19 shows the positions available, applications for work and placements effected by the Service in each year since 1920 for the Dominion, and for the years 1936 and 1937 by provinces. During 1937 there were 712,223 applications for employment, 418,388 vacancies and 389,536 placements recorded, as compared with 680,053 applications, 355,376 vacancies and 331,450 placements in 1936. About 29 p.c. of the total placements were of a casual nature, many of these being the result of work given on a rotation basis by municipalities and Provincial Governments on various relief schemes throughout the year to persons who, otherwise, would have been unemployed.

**Reduced Railway Fares.**—In order to facilitate the movement of labour in cases where there were not enough workers in any one locality to fill the available vacancies, the Employment Service, by special arrangement with nearly all the members of the Canadian Passenger Association, has been granted the privilege of issuing certificates which entitle the bearers to purchase railway tickets at the reduced rate of 2.5 cents per mile. This rate is for a second-class ticket and is applicable only to fares of not less than \$4. During 1937, 14,158 certificates were issued, 11,961 to persons proceeding to points within the same province as the dispatching office and 2,197 to workers going to points in other provinces. During 1936, 9,045 certificates for special rates were granted, 8,254 to persons travelling to employment within the same province as the dispatching office and 791 to persons for whom employment had been secured in other provinces.

**19.—Applications for Employment, Positions Offered, and Placements Effected by the Employment Service of Canada, 1920-37, and by Provinces, 1936 and 1937.**

**NOTE.**—Figures by provinces for the years 1920-25 will be found at p. 708 of the 1926 Year Book, for 1926-29 at p. 721 of the 1930 Year Book, for 1929-30 at p. 773 of the 1931 Year Book, for 1931-32 at p. 708 of the 1933 Year Book, for 1933 at p. 826 of the 1934-35 Year Book, and for 1934-35 at p. 707 of the 1936 Year Book.

| Year and Province.        | Applications Registered. |         | Vacancies Notified. |         | Placements Effected. |         |
|---------------------------|--------------------------|---------|---------------------|---------|----------------------|---------|
|                           | Men.                     | Women.  | Men.                | Women.  | Men.                 | Women.  |
| Totals, 1920.....         | 480,735                  | 96,054  | 450,526             | 116,142 | 365,292              | 80,520  |
| Totals, 1921.....         | 438,836                  | 105,563 | 325,498             | 106,097 | 277,792              | 77,964  |
| Totals, 1922.....         | 443,875                  | 104,407 | 365,529             | 104,359 | 316,386              | 77,136  |
| Totals, 1923.....         | 473,483                  | 115,692 | 431,576             | 109,404 | 376,801              | 85,751  |
| Totals, 1924.....         | 402,593                  | 116,782 | 314,258             | 97,810  | 285,359              | 80,773  |
| Totals, 1925.....         | 439,022                  | 115,623 | 345,570             | 101,473 | 323,334              | 84,401  |
| Totals, 1926.....         | 417,965                  | 124,504 | 345,163             | 111,769 | 319,358              | 90,897  |
| Totals, 1927.....         | 422,022                  | 131,849 | 339,478             | 114,095 | 320,306              | 94,463  |
| Totals, 1928.....         | 454,325                  | 142,963 | 376,791             | 120,635 | 361,942              | 108,386 |
| Totals, 1929.....         | 397,527                  | 153,199 | 296,592             | 131,435 | 287,128              | 111,239 |
| Totals, 1930.....         | 463,103                  | 149,887 | 278,835             | 107,199 | 274,227              | 94,452  |
| Totals, 1931.....         | 685,460                  | 140,693 | 391,857             | 94,527  | 389,231              | 82,277  |
| Totals, 1932.....         | 512,695                  | 139,733 | 282,643             | 83,385  | 278,975              | 73,239  |
| Totals, 1933.....         | 531,041                  | 143,180 | 282,120             | 87,565  | 278,589              | 73,608  |
| Totals, 1934.....         | 569,301                  | 155,064 | 327,967             | 99,885  | 324,900              | 81,191  |
| Totals, 1935.....         | 498,466                  | 187,955 | 265,300             | 108,274 | 263,212              | 88,590  |
| Totals, 1936.....         | 515,920                  | 164,123 | 241,008             | 114,278 | 287,476              | 93,874  |
| Totals, 1937.....         | 543,343                  | 168,880 | 286,790             | 127,508 | 286,618              | 102,918 |
| Nova Scotia.....1936      | 7,494                    | 4,761   | 6,850               | 3,707   | 6,758                | 3,303   |
| .....1937                 | 9,581                    | 5,057   | 8,248               | 4,916   | 8,149                | 4,423   |
| New Brunswick.....1936    | 4,056                    | 5,146   | 3,491               | 5,103   | 3,438                | 5,063   |
| .....1937                 | 4,903                    | 5,636   | 4,386               | 5,601   | 4,344                | 5,589   |
| Quebec.....1936           | 69,581                   | 46,486  | 34,950              | 26,448  | 34,792               | 25,527  |
| .....1937                 | 104,349                  | 45,867  | 45,268              | 43,670  | 45,826               | 28,513  |
| Ontario.....1936          | 247,581                  | 60,234  | 93,765              | 39,401  | 91,885               | 32,640  |
| .....1937                 | 230,539                  | 68,836  | 115,290             | 43,000  | 110,090              | 36,379  |
| Manitoba.....1936         | 46,572                   | 10,389  | 24,291              | 8,203   | 24,569               | 7,942   |
| .....1937                 | 47,348                   | 10,295  | 28,040              | 8,424   | 30,037               | 8,055   |
| Saskatchewan.....1936     | 30,271                   | 9,819   | 29,740              | 9,553   | 28,485               | 8,180   |
| .....1937                 | 22,060                   | 10,079  | 31,160              | 8,984   | 20,204               | 7,751   |
| Alberta.....1936          | 48,317                   | 8,508   | 22,007              | 21,705  | 21,633               | 5,203   |
| .....1937                 | 47,703                   | 9,409   | 22,422              | 5,486   | 22,073               | 4,727   |
| British Columbia.....1936 | 62,058                   | 10,279  | 26,004              | 6,168   | 25,910               | 6,101   |
| .....1937                 | 66,200                   | 13,101  | 44,976              | 7,547   | 44,895               | 7,476   |

## Subsection 2.—Unemployment as Reported by Trade Unions.

Monthly statistics on unemployment are compiled and published by the Employment Service Branch of the Dominion Department of Labour, based on returns received from 1,800 local trade unions having an aggregate membership of nearly 202,000 workers. "Unemployment" as here used means involuntary idleness, due to economic causes. Persons engaged in work other than their own trades, or idle because of illness, are not considered as unemployed, while unions involved in industrial disputes are excluded from the tabulations. As the number of unions making returns varies from month to month, with consequent variation in the membership upon which the percentages of unemployment are based, it should be understood that the figures for each month have reference only to the reporting organizations. Table 20 is a record of unemployment in trade unions, for the past 12 years, by provinces. The maximum of unemployment in 1937 was in January, when the percentage stood at 14.5; the 1937 low was 7.6 p.c. recorded in August. In 1936 the April figure of 15.1 p.c. constituted the maximum, and the minimum of 10.8 p.c. was reached in August. Employment among organized workers, as indicated by these statistics, was more active on the average in 1937 than in 1936, the average of the monthly figures of unemployment for 1937 being 10.7 p.c., while for 1936 the corresponding figure was 13.2 p.c.

## 20.—Percentages of Unemployment in Trade Unions, by Provinces, half-yearly, 1926-36, and by months, 1937.

NOTE.—For percentages of unemployment at June 30 and Dec. 31 from December, 1915, to December 1925, see p. 827 of the 1934-35 edition of the Year Book. For data by months from 1921, see successive issues of the Year Book commencing with the 1922-23 edition.

| Month.         | Year. | Nova<br>Scotia<br>and<br>P.E.I. | New<br>Brun-<br>swick. | Quebec. | Ontario. | Mani-<br>toba. | Saskat-<br>chewan. | Al-<br>berta. | British<br>Colum-<br>bia. | Total. |
|----------------|-------|---------------------------------|------------------------|---------|----------|----------------|--------------------|---------------|---------------------------|--------|
| June.....      | 1926  | 3.8                             | 1.6                    | 8.9     | 1.9      | 2.6            | 0.8                | 4.9           | 2.6                       | 4.1    |
| December.....  | 1926  | 3.2                             | 2.2                    | 7.6     | 5.6      | 4.3            | 2.1                | 6.7           | 7.5                       | 5.9    |
| June.....      | 1927  | 1.8                             | 2.3                    | 4.0     | 3.1      | 2.6            | 1.1                | 4.6           | 2.7                       | 3.2    |
| December.....  | 1927  | 4.3                             | 1.5                    | 9.3     | 5.1      | 5.4            | 5.6                | 3.7           | 10.5                      | 6.6    |
| June.....      | 1928  | 0.5                             | 0.8                    | 5.6     | 2.4      | 2.1            | 1.1                | 3.3           | 3.6                       | 3.2    |
| December.....  | 1928  | 3.9                             | 0.9                    | 10.7    | 4.0      | 8.1            | 4.4                | 6.9           | 6.9                       | 6.6    |
| June.....      | 1929  | 3.3                             | 1.0                    | 2.9     | 2.5      | 3.1            | 2.8                | 4.3           | 2.6                       | 2.9    |
| December.....  | 1929  | 5.2                             | 2.4                    | 14.5    | 9.7      | 12.8           | 13.0               | 13.9          | 11.5                      | 11.4   |
| June.....      | 1930  | 3.3                             | 2.8                    | 17.5    | 7.4      | 9.2            | 8.9                | 14.3          | 8.4                       | 10.6   |
| December.....  | 1930  | 7.5                             | 8.7                    | 22.8    | 17.3     | 14.2           | 15.9               | 13.8          | 16.8                      | 17.0   |
| June.....      | 1931  | 7.2                             | 6.5                    | 20.0    | 16.2     | 14.1           | 13.5               | 21.7          | 15.6                      | 16.3   |
| December.....  | 1931  | 13.8                            | 9.6                    | 29.0    | 20.3     | 16.5           | 19.5               | 16.9          | 21.2                      | 21.1   |
| June.....      | 1932  | 9.6                             | 12.0                   | 27.1    | 23.4     | 18.1           | 14.4               | 23.4          | 22.3                      | 21.9   |
| December.....  | 1932  | 8.4                             | 16.5                   | 30.9    | 28.5     | 20.9           | 20.8               | 22.8          | 26.0                      | 25.5   |
| June.....      | 1933  | 13.8                            | 13.0                   | 26.2    | 23.3     | 19.4           | 14.9               | 24.5          | 18.6                      | 21.8   |
| December.....  | 1933  | 11.2                            | 11.5                   | 23.2    | 24.9     | 20.3           | 17.2               | 17.6          | 19.8                      | 21.0   |
| June.....      | 1934  | 11.4                            | 7.3                    | 22.9    | 15.9     | 17.0           | 12.1               | 24.8          | 17.2                      | 18.0   |
| December.....  | 1934  | 4.7                             | 7.2                    | 24.5    | 18.7     | 16.1           | 13.1               | 9.0           | 24.6                      | 18.0   |
| June.....      | 1935  | 12.2                            | 8.1                    | 21.9    | 12.0     | 13.7           | 9.4                | 20.1          | 13.2                      | 15.4   |
| December.....  | 1935  | 7.6                             | 7.5                    | 20.6    | 13.4     | 13.1           | 11.6               | 9.6           | 18.9                      | 14.6   |
| June.....      | 1936  | 6.7                             | 7.8                    | 19.0    | 13.3     | 8.4            | 6.4                | 17.2          | 10.5                      | 13.9   |
| December.....  | 1936  | 6.8                             | 6.2                    | 20.9    | 13.8     | 10.9           | 12.8               | 6.4           | 12.7                      | 14.3   |
| January.....   | 1937  | 8.2                             | 6.3                    | 22.9    | 11.9     | 8.4            | 11.4               | 9.1           | 16.4                      | 14.5   |
| February.....  | 1937  | 7.9                             | 5.0                    | 21.3    | 11.4     | 9.4            | 11.5               | 9.5           | 14.1                      | 13.7   |
| March.....     | 1937  | 7.9                             | 4.2                    | 18.9    | 10.9     | 9.6            | 11.8               | 14.8          | 9.4                       | 12.9   |
| April.....     | 1937  | 8.2                             | 5.5                    | 15.6    | 8.6      | 8.6            | 10.0               | 16.9          | 7.4                       | 11.1   |
| May.....       | 1937  | 8.4                             | 5.0                    | 14.1    | 6.2      | 7.0            | 8.0                | 15.8          | 5.8                       | 9.5    |
| June.....      | 1937  | 5.9                             | 4.7                    | 15.3    | 7.6      | 5.7            | 7.2                | 16.6          | 8.0                       | 10.4   |
| July.....      | 1937  | 4.4                             | 5.8                    | 13.2    | 5.3      | 7.1            | 7.4                | 18.0          | 6.9                       | 8.9    |
| August.....    | 1937  | 5.9                             | 8.5                    | 11.1    | 4.3      | 6.5            | 7.2                | 12.5          | 6.2                       | 7.6    |
| September..... | 1937  | 3.1                             | 6.1                    | 12.4    | 4.2      | 7.4            | 6.0                | 19.4          | 8.4                       | 7.7    |
| October.....   | 1937  | 2.8                             | 5.0                    | 13.0    | 6.7      | 9.6            | 6.6                | 7.4           | 12.3                      | 8.9    |
| November.....  | 1937  | 2.9                             | 5.0                    | 14.9    | 9.9      | 11.2           | 10.5               | 6.5           | 15.4                      | 11.2   |
| December.....  | 1937  | 3.3                             | 4.6                    | 16.5    | 12.9     | 16.8           | 10.6               | 6.7           | 15.8                      | 13.0   |

### Subsection 3.—Employment as Reported by Employers.

The Dominion Bureau of Statistics tabulates monthly reports of the numbers employed by firms having 15 or more persons on their staffs; the returns are representative of practically every industry except agriculture and the more specialized business and professional callings. During 1937, about 10,200 of these employers reported an average working force of 1,085,831 persons, varying from 975,862 at Mar. 1, to 1,197,647 at the beginning of October.

These employment statistics have been shown in a special study\* which correlates the distribution of workers covered in 1931 with the distribution of workers enumerated at the 1931 census, to be representative, as far as several major industrial groupings are concerned, of the census classification.

The census of occupations showed 2,570,097 wage-earners in the Dominion, of whom 2,100,139 or 81.7 p.c. were at work on the census date (June 1, 1931). Obviously it is with those at work that the monthly employment figures for the same date must be compared. The 7,865 firms making returns for June 1, 1931, reported 940,875 employees, being 36.6 p.c. of the total number of persons reporting themselves as actual or potential wage-earners, and 44.8 p.c. of those at work in all industries at the census date. When the classes of workers not covered in the employment surveys are deducted from the census figures, there remains a total of 1,318,954 persons at work at the census date in the industries sampled in the monthly record, or a total of 1,369,351 if a due proportion of the unspecified workers is included. The employment survey for June 1, 1931, constituted 71.3 p.c. of this adjusted figure, i.e., of the census total for the comparable industries without the unspecified workers, and 68.7 p.c. if a proportion of the unspecified workers is regarded as belonging in the census statistics adjusted industrially for this comparison. This sample may be considered quite adequate, but it would be rather larger if comparison could be made with a similar census taken at the present time, since the number of co-operating firms is constantly growing, having risen from 7,905 at June 1, 1931 to 10,178 at June 1, 1937, or 9,690 at June 1, 1936; the June 1 comparison is used so that the seasonal factor may not enter into the case. The increase in the co-operating employers is accompanied by a growth in the ratio of wage-earners sampled, though the latter increase is not in proportion to the gain in the number of reports tabulated, owing to the fact that the firms now being added to the mailing list tend to employ staffs below the average.

Representation in "Manufacturing" when correlated, is shown to be 82.8 p.c. of the workers enumerated at the census in the same industrial group; in mining it was 96.9 p.c.; in communications 80.4 p.c.; and in transportation 64.2 p.c. It follows that the figures of employment collected monthly may be used as a good index of the movement of the wage-earning population in intercensal years. (See also p. 741).

Employment as reported by leading employers in Canada was unusually active in 1937, reaching a level only surpassed by that of the boom year, 1929. The index, (based on the 1926 average as 100) averaged 114.1 in the twelve months; as compared with the 1936 mean of 103.7, this was an increase of 10 p.c., which was decidedly larger than the gain recorded between any other consecutive years, with the exception of that reported in 1934 over 1933. In the seventeen years of the record, the 1937 average index was only exceeded by that of 119.0 in 1929.

\*See the report "Comparison of the Geographical and the Industrial Distribution of the Workers included in the Monthly Employment Surveys, with the Geographical and Industrial Distribution of the Workers enumerated at the Census of 1931", by M. E. K. Roughsedge, obtainable from the Dominion statistician, Ottawa.

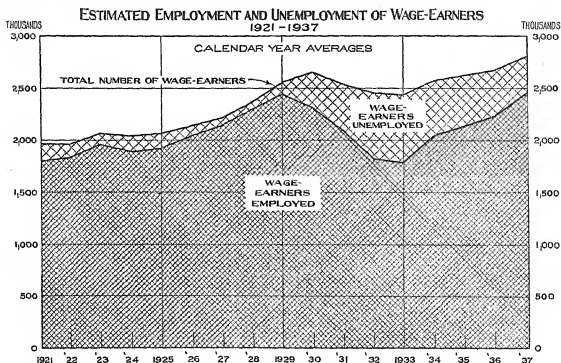
The fluctuations in general industrial employment in the past 12 years are illustrated in the following chart. This shows, to September, 1937, the generally upward movement that has characterized industrial activity since the low point of employment in the depression was reached at April, 1933.



The generally high level of industrial activity in 1937 was accompanied by a diminution in unemployment, though this was not commensurate with the advance in employment. The Census Analysis Branch of the Dominion Bureau of Statistics in a comprehensive study\* of the known facts regarding employment, unemployment, and population in Canada, has evolved very significant estimates of the total number of wage-earners, of those in employment and those unemployed; the estimates cover workers in all industries, including agriculture and other important classes necessarily excluded from the monthly employment surveys. During 1937, the average number of wage-earners was estimated at 2,802,000, of whom 2,452,000 were employed and 349,000 were unemployed. In 1936, the estimated number of wage-earners was 2,671,000, of whom 2,225,000 were employed and 447,000 were unemployed. Based on these estimates, the unemployed in 1937 constituted some 12.5 p.c. of the total wage-earners, as compared with 16.7 p.c. in 1936. In 1928, when unemployment was at the minimum in the years since 1921, this proportion had been estimated at 2.5 p.c., and in 1929, at 4.2 p.c. The low point of the depression was reached in 1933, when it was estimated that, on the average, there were 265 unemployed men and women in each thousand wage-earners.

In the chart on p. 770 are depicted the fluctuations since 1921 in the estimated number of wage-earners, of those in employment and those unemployed, showing that in 1937 the potential and actual wage-earners reached their maxima while the estimated number of unemployed, though still abnormally large, was smaller than in any other year since 1930.

\*See monograph "Unemployment" by M. C. McLean, M.A., which may be obtained from the Dominion Statistician.



**Employment by Economic Areas.**—The employment reported by leading industrial establishments was in considerably greater volume in 1937 than in 1936 in the Maritime Provinces, Quebec, Ontario, and British Columbia, but in the Prairie Provinces the situation was generally unchanged. In the Maritime Provinces and Quebec, industrial activity was higher than in any other year of the record, while in Ontario the 1929 index only was higher than that for 1937. In each of the economic areas, general improvement was noted in manufacturing, logging, mining, services, and trade, although the rate of increase varied in the different divisions of the country. A higher level of employment was indicated in transportation, except in the Prairies, where there was a slight decline, due to the crop failures in many sections. Construction in the western areas was also slacker than in 1936.

**21.—Index Numbers of Employment as Reported by Employers in Economic Areas, as at the First of each Month, January, 1936, to December, 1937, with Yearly Averages since 1921.**

*Note.*—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of employees reported in the indicated economic area to the total reported by all employers making returns in Canada at Dec. 1, 1937.

| Year.               | Maritime Provinces. | Quebec. | Ontario. | Prairie Provinces. | British Columbia. | Canada. |
|---------------------|---------------------|---------|----------|--------------------|-------------------|---------|
| Averages, 1921..... | 102.4               | 82.2    | 90.6     | 94.0               | 81.1              | 88.8    |
| Averages, 1922..... | 97.3                | 81.4    | 92.8     | 92.6               | 82.8              | 89.0    |
| Averages, 1923..... | 105.7               | 90.7    | 99.6     | 94.8               | 87.4              | 95.8    |
| Averages, 1924..... | 96.6                | 91.3    | 95.5     | 92.1               | 89.4              | 93.4    |
| Averages, 1925..... | 97.0                | 91.7    | 95.8     | 92.0               | 93.7              | 95.6    |
| Averages, 1926..... | 99.4                | 99.4    | 99.6     | 99.5               | 100.2             | 99.6    |
| Averages, 1927..... | 103.7               | 104.0   | 105.6    | 105.3              | 101.1             | 104.6   |
| Averages, 1928..... | 106.6               | 108.3   | 113.8    | 117.9              | 106.4             | 111.6   |
| Averages, 1929..... | 114.6               | 113.4   | 123.1    | 126.3              | 111.5             | 119.0   |
| Averages, 1930..... | 118.3               | 116.3   | 130.3    | 114.6              | 107.9             | 113.4   |
| Averages, 1931..... | 108.1               | 100.9   | 101.2    | 111.5              | 95.5              | 102.5   |
| Averages, 1932..... | 92.2                | 85.5    | 88.7     | 90.0               | 80.5              | 87.5    |
| Averages, 1933..... | 85.3                | 82.0    | 84.2     | 86.2               | 78.0              | 83.4    |
| Averages, 1934..... | 101.0               | 91.7    | 101.3    | 90.0               | 90.4              | 96.0    |
| Averages, 1935..... | 103.7               | 95.4    | 103.3    | 95.2               | 97.7              | 99.4    |

For footnote, see end of table on p. 771.

21.—Index Numbers of Employment as Reported by Employers in Economic Areas, as at the First of each Month, January, 1936, to December, 1937, with Yearly Averages since 1921—concluded.

| Year and Month.   | Maritime<br>Provinces. | Quebec.      | Ontario.     | Prairie<br>Provinces. | British<br>Columbia. | Canada.      |
|---|------------------------|--------------|--------------|-----------------------|----------------------|--------------|
| <b>1936.</b>  |                        |              |              |                       |                      |              |
| January 1.....  | 108.1                  | 95.5         | 102.7        | 95.1                  | 92.4                 | 99.1         |
| February 1.....   | 102.2                  | 95.2         | 102.4        | 93.7                  | 91.1                 | 98.4         |
| March 1.....  | 101.7                  | 95.1         | 103.8        | 95.1                  | 92.4                 | 98.9         |
| April 1.....  | 101.8                  | 91.4         | 103.4        | 90.5                  | 95.9                 | 97.4         |
| May 1.....  | 103.4                  | 96.4         | 103.4        | 92.7                  | 99.0                 | 99.5         |
| June 1.....   | 103.4                  | 99.8         | 104.7        | 97.7                  | 102.2                | 102.0        |
| July 1.....   | 111.7                  | 101.6        | 106.2        | 101.9                 | 104.8                | 104.6        |
| August 1.....   | 113.9                  | 101.3        | 107.1        | 103.9                 | 107.9                | 105.6        |
| September 1.....  | 114.4                  | 103.0        | 108.1        | 107.4                 | 109.3                | 107.1        |
| October 1.....  | 117.0                  | 106.0        | 112.6        | 108.6                 | 108.1                | 110.1        |
| November 1.....   | 119.4                  | 110.3        | 112.8        | 106.0                 | 105.4                | 111.0        |
| December 1.....   | 115.3                  | 112.6        | 112.9        | 98.6                  | 101.5                | 110.1        |
| <b>Averages, 1936.....</b>  | <b>109.4</b>           | <b>100.7</b> | <b>106.7</b> | <b>99.3</b>           | <b>101.1</b>         | <b>103.7</b> |
| <b>1937.</b>  |                        |              |              |                       |                      |              |
| January 1.....  | 109.5                  | 104.0        | 107.5        | 94.2                  | 95.4                 | 103.8        |
| February 1.....   | 107.5                  | 106.7        | 108.4        | 91.4                  | 91.3                 | 104.4        |
| March 1.....  | 106.6                  | 102.5        | 108.9        | 91.3                  | 89.2                 | 102.3        |
| April 1.....  | 105.4                  | 102.2        | 108.8        | 89.4                  | 97.5                 | 103.0        |
| May 1.....  | 110.7                  | 105.2        | 111.2        | 93.2                  | 103.4                | 106.3        |
| June 1.....   | 122.0                  | 113.6        | 118.8        | 99.3                  | 112.2                | 114.3        |
| July 1.....   | 135.8                  | 118.0        | 122.2        | 104.0                 | 117.1                | 119.1        |
| August 1.....   | 134.3                  | 120.8        | 122.2        | 105.6                 | 116.9                | 120.0        |
| September 1.....  | 135.4                  | 124.5        | 125.0        | 109.4                 | 121.2                | 123.2        |
| October 1.....  | 134.9                  | 127.3        | 130.4        | 107.6                 | 117.9                | 125.7        |
| November 1.....   | 127.3                  | 130.5        | 130.4        | 106.2                 | 111.5                | 125.2        |
| December 1.....   | 122.5                  | 129.6        | 125.8        | 100.5                 | 107.5                | 121.6        |
| <b>Averages, 1937.....</b>  | <b>121.0</b>           | <b>115.4</b> | <b>118.3</b> | <b>99.3</b>           | <b>106.8</b>         | <b>114.1</b> |
| Relative weights of employment in economic areas, as at Dec. 1, 1937 <sup>2</sup> ..... | 7.6                    | 31.1         | 42.3         | 11.1                  | 7.9                  | 100.0        |

<sup>1</sup>Since the average for the calendar year 1926, including figures up to Dec. 31, 1926, is the base used in computing these indexes, the average index here given for the 12 months Jan. 1-Dec. 1, 1926, generally shows a slight variation from 100.

<sup>2</sup>Percentages of Dominion total.

**Employment by Cities.**—Improvement was reported in each of the eight centres for which statistics are segregated, firms in Montreal, Quebec city, Toronto, Ottawa, Hamilton, Windsor, Winnipeg, and Vancouver affording more employment than in 1936. The greatest gains, proportionately, were in Hamilton and Windsor, where marked activity in the iron and steel industries brought employment to an unusually high level, only exceeded in the former by that of 1928 and 1929, and in the latter by that of 1929. The indexes in these two centres were higher than in any other of the eight, while the lowest indexes were in Winnipeg, Quebec city, and Montreal.

Despite the generally upward movement indicated in the year under review, industrial activity in the leading cities, taken as a unit, continued to lag behind that in the Dominion as a whole, their 1937 indexes averaging 105.8, as compared with the Canada index of 114.1. In the four years of general industrial revival from the low point of the depression, indeed, the improvement in these cities has not kept pace with that in the Dominion as a whole.

Employment in manufacturing, communications, trade, and construction in the larger cities generally, does not yet appear to have reached a level equal to that in other parts of Canada. The most outstanding difference in this comparison is, of course, in construction, in which the index for the cities averaged 62.7 during 1937,



compared with the Canada figure of 99.5; in the building division, the indexes were 50.9 and 60.1, respectively. On the other hand, transportation in the cities appears relatively more active, their index at 91.9, being 7.8 p.c. higher than the figure for the Dominion as a whole. In the service division, the level of employment in the larger cities was similar to that elsewhere recorded.

**22.—Index Numbers of Employment as Reported by Employers in Leading Cities, as at the First of each Month, January, 1936, to December, 1937, with Yearly Averages since 1922.**

NOTE.—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of employees reported in the indicated city to the total reported by all employers making returns in Canada at Dec. 1, 1937.

| Year and Month.   | Montreal. | Quebec. | Toronto. | Ottawa. | Hamilton. | Windsor. | Winnipeg. | Vancouver. |
|---|-----------|---------|----------|---------|-----------|----------|-----------|------------|
| Averages, 1922....  | 86.0      | 1       | 96.1     | 1       | 1         | 1        | 93.9      | 81.5       |
| Averages, 1923....  | 92.7      | 1       | 98.0     | 107.2   | 94.6      | 1        | 90.6      | 82.5       |
| Averages, 1924....  | 93.0      | 99.6    | 94.3     | 102.3   | 86.0      | 1        | 86.5      | 86.2       |
| Averages, 1925....  | 94.2      | 97.9    | 95.7     | 100.1   | 88.0      | 85.1     | 85.5      | 92.6       |
| Averages, 1926 <sup>1</sup> ....  | 99.7      | 99.1    | 99.6     | 100.0   | 99.3      | 99.9     | 99.2      | 99.9       |
| Averages, 1927....  | 103.0     | 111.3   | 105.7    | 107.7   | 103.1     | 86.2     | 104.1     | 100.7      |
| Averages, 1928....  | 108.2     | 119.9   | 113.1    | 115.8   | 108.2     | 127.3    | 110.1     | 104.3      |
| Averages, 1929....  | 115.3     | 124.2   | 121.3    | 120.7   | 128.4     | 153.2    | 112.3     | 109.2      |
| Averages, 1930....  | 111.8     | 125.3   | 116.3    | 123.1   | 113.9     | 128.6    | 107.6     | 109.8      |
| Averages, 1931....  | 102.5     | 123.2   | 107.7    | 119.5   | 101.3     | 88.3     | 97.1      | 104.5      |
| Averages, 1932....  | 88.1      | 101.8   | 95.2     | 99.3    | 83.7      | 78.4     | 86.6      | 85.5       |
| Averages, 1933....  | 81.0      | 95.1    | 87.5     | 90.2    | 74.6      | 75.9     | 80.2      | 83.0       |
| Averages, 1934....  | 84.5      | 95.1    | 93.5     | 99.5    | 84.1      | 93.1     | 82.9      | 87.4       |
| Averages, 1935....  | 87.3      | 96.9    | 97.5     | 102.2   | 92.6      | 115.0    | 87.8      | 96.6       |
| 1936.   |           |         |          |         |           |          |           |            |
| January 1.....  | 86.4      | 93.5    | 100.0    | 103.2   | 95.7      | 116.4    | 91.9      | 97.2       |
| February 1.....   | 87.6      | 92.0    | 96.4     | 99.5    | 90.8      | 120.0    | 91.2      | 97.8       |
| March 1.....  | 87.5      | 93.3    | 97.8     | 101.4   | 97.1      | 117.7    | 94.1      | 96.0       |
| April 1.....  | 88.3      | 91.7    | 98.7     | 103.1   | 96.8      | 131.2    | 85.1      | 100.1      |
| May 1.....  | 92.7      | 95.8    | 100.2    | 107.7   | 98.1      | 136.1    | 87.3      | 101.9      |
| June 1.....   | 93.7      | 96.8    | 101.1    | 108.2   | 97.6      | 123.2    | 90.9      | 103.8      |
| July 1.....   | 93.5      | 94.5    | 101.4    | 110.0   | 99.4      | 113.0    | 92.7      | 106.0      |
| August 1.....   | 92.2      | 96.5    | 101.3    | 107.4   | 99.8      | 115.1    | 93.8      | 109.2      |
| September 1.....  | 94.3      | 97.9    | 103.4    | 111.2   | 97.7      | 106.9    | 92.9      | 110.0      |
| October 1.....  | 95.6      | 98.1    | 105.5    | 110.9   | 98.0      | 120.3    | 95.3      | 109.1      |
| November 1.....   | 94.6      | 97.1    | 105.9    | 108.8   | 100.4     | 125.1    | 94.9      | 107.0      |
| December 1.....   | 98.3      | 95.2    | 105.7    | 104.3   | 101.7     | 129.4    | 94.7      | 106.0      |
| Averages, 1936....  | 92.1      | 95.2    | 101.5    | 106.3   | 98.3      | 121.3    | 92.3      | 103.7      |
| 1937.   |           |         |          |         |           |          |           |            |
| January 1.....  | 90.4      | 92.0    | 103.4    | 102.8   | 99.0      | 137.1    | 92.4      | 105.3      |
| February 1.....   | 91.8      | 91.7    | 101.9    | 98.8    | 101.7     | 145.2    | 89.4      | 104.7      |
| March 1.....  | 92.6      | 92.7    | 103.2    | 99.8    | 103.7     | 146.8    | 90.8      | 103.8      |
| April 1.....  | 96.8      | 93.3    | 105.8    | 101.9   | 108.2     | 151.4    | 91.6      | 104.4      |
| May 1.....  | 101.1     | 97.6    | 107.4    | 106.6   | 111.9     | 152.9    | 93.5      | 105.6      |
| June 1.....   | 105.2     | 101.6   | 108.7    | 111.8   | 114.2     | 153.1    | 96.5      | 110.8      |
| July 1.....   | 105.5     | 106.4   | 109.5    | 114.9   | 116.3     | 149.8    | 99.2      | 114.8      |
| August 1.....   | 105.2     | 108.5   | 107.8    | 112.7   | 117.7     | 155.0    | 97.6      | 117.3      |
| September 1.....  | 107.9     | 110.9   | 110.0    | 113.7   | 119.4     | 159.2    | 95.8      | 119.5      |
| October 1.....  | 107.4     | 107.2   | 112.6    | 114.4   | 117.3     | 146.2    | 97.6      | 117.9      |
| November 1.....   | 106.4     | 103.8   | 112.7    | 111.7   | 119.4     | 154.1    | 98.0      | 115.0      |
| December 1.....   | 104.3     | 99.3    | 111.9    | 105.2   | 116.2     | 153.1    | 95.4      | 109.5      |
| Averages, 1937....  | 101.2     | 100.3   | 107.9    | 107.9   | 112.1     | 146.4    | 95.1      | 110.7      |
| Relative weights,<br>by cities, as at<br>Dec. 1, 1937 <sup>2</sup> .... | 13.5      | 1.1     | 12.0     | 1.2     | 3.2       | 1.8      | 3.5       | 3.1        |

<sup>1</sup> Not available.

<sup>2</sup> Since the average for the calendar year 1926, including figures up to Dec. 31, 1926, is the base used in computing these indexes, the average index here shown for the 13 months Jan. 1-Dec. 1, 1926, generally shows a slight variation from 100.

<sup>3</sup> Percentages of Dominion total.

**Employment by Industries.**—An analysis of the data furnished by employers shows that practically all industries shared in the improvement reported in 1937 over 1936, while in many cases, the situation was also more satisfactory than

in any other year since 1929. Manufacturing experienced during 1937 a lengthy period of uninterrupted expansion. All branches of factory employment contributed in greater or less degree to the recovery, which resulted in a higher level of industrial activity than in any other year since 1929.

Mining, particularly of metallic ores, advanced during many months of the year just passed, with the result that employment in the group as a whole was at its maximum for the seventeen years of this record. Logging showed exceptionally pronounced increases, and in that industry also, activity during 1937 reached the highest point yet recorded.

The volume of employment afforded in trade was greater than in any other year for which data are available, while in services (mainly hotels and restaurants, and laundries and dry-cleaning establishments), the 1937 annual index was only exceeded by that for 1929. Improvement in general business conditions in the Dominion, together with an excellent tourist season, resulted in the favourable situation in these industries during 1937. Communications provided employment for a greater number of persons than in any other year since 1932, but the index number in this industry was lower than in preceding years since 1921. Transportation showed little general change; although it was slightly more active than in the period 1932-36, it was quieter than in earlier years of the record.

Construction generally, was brisker than in 1936 or 1935, and also afforded more employment than in 1933 or 1932; nevertheless, employment in this industry continued at a relatively low level. Railway construction provided work for a larger number of workers than in the period, 1932-35, but was quieter than in 1936, when many men had been transferred from the unemployment relief camps to the construction departments of the railways. The building contractors furnishing data reported, on the whole, a rather better situation than in any other year since 1931. Work on the highways was also more active than in 1936, approximating the 1935 volume. In the past few years, the unemployment relief programs of the various governments have been an important factor in the employment afforded in the construction industries.

**23.—Index Numbers of Employment as Reported by Employers, by Industrial Groups, as at the First of each Month, January, 1936, to December, 1937, with Yearly Averages since 1921.**

*NOTE.*—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of the employees reported in the indicated industry to the total reported by all employers making returns in Canada at Dec. 1, 1937.

| Year.               | Manu-<br>factur-<br>ing. | Log-<br>ging. | Mining. | Com-<br>muni-<br>cations. | Trans-<br>porta-<br>tion. | Con-<br>struc-<br>tion and<br>Main-<br>tenance. | Ser-<br>vices. | Trade. | All<br>Indus-<br>tries. <sup>1</sup> |
|---------------------|--------------------------|---------------|---------|---------------------------|---------------------------|---|----------------|--------|--------------------------------------|
| Averages, 1921..... | 87.7                     | 103.0         | 98.0    | 96.2                      | 94.1                      | 71.1  | 83.6           | 92.7   | 88.8                                 |
| Averages, 1922..... | 88.3                     | 85.1          | 99.5    | 86.4                      | 87.8                      | 76.7  | 81.9           | 90.8   | 89.0                                 |
| Averages, 1923..... | 96.6                     | 114.2         | 106.2   | 87.6                      | 100.3                     | 80.9  | 87.9           | 92.1   | 95.8                                 |
| Averages, 1924..... | 92.4                     | 116.7         | 105.3   | 93.7                      | 99.1                      | 80.3  | 83.8           | 92.5   | 93.4                                 |
| Averages, 1925..... | 93.0                     | 105.4         | 99.8    | 95.5                      | 96.6                      | 84.9  | 85.4           | 95.1   | 93.6                                 |
| Averages, 1926..... | 99.6                     | 99.5          | 99.7    | 99.6                      | 99.7                      | 99.2  | 99.5           | 99.2   | 99.6                                 |
| Averages, 1927..... | 103.4                    | 109.3         | 107.0   | 103.8                     | 102.5                     | 109.0   | 106.2          | 107.4  | 104.6                                |
| Averages, 1928..... | 110.1                    | 114.5         | 114.4   | 108.2                     | 105.9                     | 118.3   | 118.1          | 116.1  | 111.6                                |
| Averages, 1929..... | 117.1                    | 125.8         | 120.1   | 120.6                     | 109.7                     | 120.7   | 130.3          | 126.2  | 119.0                                |
| Averages, 1930..... | 109.0                    | 108.0         | 117.8   | 119.8                     | 104.6                     | 123.8   | 131.6          | 127.7  | 113.4                                |
| Averages, 1931..... | 95.3                     | 60.1          | 107.7   | 104.7                     | 95.8                      | 131.4   | 124.7          | 123.6  | 102.5                                |
| Averages, 1932..... | 84.4                     | 42.6          | 99.2    | 93.5                      | 84.7                      | 86.0  | 113.6          | 116.1  | 87.5                                 |
| Averages, 1933..... | 80.9                     | 66.5          | 97.5    | 83.9                      | 79.0                      | 74.6  | 106.7          | 112.1  | 83.4                                 |
| Averages, 1934..... | 90.2                     | 124.7         | 110.8   | 79.1                      | 80.3                      | 109.3   | 115.1          | 117.9  | 96.0                                 |
| Averages, 1935..... | 97.1                     | 126.9         | 123.3   | 79.8                      | 81.2                      | 97.8  | 118.2          | 122.1  | 99.4                                 |

For footnotes, see end of table, p. 774.

23.—Index Numbers of Employment as Reported by Employers, by Industrial Groups, as at the First of each Month, January, 1936, to December, 1937, with Yearly Averages since 1921—concluded.

| Year and Month.   | Manu-<br>factur-<br>ing. | Log-<br>ging. | Mining.      | Com-<br>muni-<br>cations. | Trans-<br>porta-<br>tion. | Con-<br>struc-<br>tion and<br>Main-<br>tenance. | Ser-<br>vices. | Trade.       | All<br>Indus-<br>tries. <sup>1</sup> |
|---|--------------------------|---------------|--------------|---------------------------|---------------------------|---|----------------|--------------|--------------------------------------|
| <b>1936.</b>  |                          |               |              |                           |                           |   |                |              |                                      |
| January 1.....  | 96.8                     | 133.4         | 129.9        | 79.3                      | 77.9                      | 74.8  | 118.0          | 135.9        | 99.1                                 |
| February 1.....   | 98.5                     | 173.1         | 129.4        | 77.2                      | 78.2                      | 74.4  | 118.4          | 121.6        | 98.4                                 |
| March 1.....  | 99.5                     | 147.0         | 129.1        | 77.7                      | 78.9                      | 75.2  | 117.5          | 123.1        | 98.9                                 |
| April 1.....  | 101.1                    | 102.6         | 128.2        | 77.7                      | 78.5                      | 71.8  | 118.5          | 121.0        | 97.4                                 |
| May 1.....  | 102.7                    | 88.6          | 127.4        | 78.4                      | 82.8                      | 79.4  | 120.4          | 123.3        | 99.5                                 |
| June 1.....   | 103.4                    | 94.1          | 132.1        | 80.0                      | 85.4                      | 87.0  | 123.0          | 127.1        | 102.0                                |
| July 1.....   | 104.7                    | 93.4          | 134.1        | 82.4                      | 87.1                      | 97.4  | 131.7          | 127.3        | 104.6                                |
| August 1.....   | 104.9                    | 85.0          | 137.9        | 84.1                      | 88.7                      | 102.9   | 135.8          | 126.3        | 105.6                                |
| September 1.....  | 105.9                    | 82.7          | 140.2        | 86.0                      | 89.4                      | 109.0   | 137.5          | 126.3        | 107.1                                |
| October 1.....  | 109.0                    | 141.7         | 147.9        | 84.6                      | 88.3                      | 103.9   | 127.4          | 129.0        | 110.1                                |
| November 1.....   | 107.7                    | 206.9         | 151.8        | 83.1                      | 87.1                      | 99.6  | 124.9          | 132.0        | 111.0                                |
| December 1.....   | 107.0                    | 265.7         | 150.3        | 81.7                      | 86.5                      | 80.1  | 122.4          | 136.0        | 110.1                                |
| <b>Averages, 1936.....</b>  | <b>103.4</b>             | <b>138.7</b>  | <b>136.5</b> | <b>81.0</b>               | <b>84.1</b>               | <b>88.2</b>                                     | <b>124.5</b>   | <b>127.5</b> | <b>103.7</b>                         |
| <b>1937.</b>  |                          |               |              |                           |                           |   |                |              |                                      |
| January 1.....  | 102.4                    | 242.1         | 145.6        | 80.7                      | 81.4                      | 61.2  | 124.8          | 136.0        | 103.8                                |
| February 1.....   | 105.3                    | 244.4         | 147.6        | 79.8                      | 80.7                      | 57.2  | 119.1          | 128.4        | 104.1                                |
| March 1.....  | 107.6                    | 193.3         | 145.8        | 80.8                      | 79.6                      | 52.8  | 118.6          | 128.1        | 102.8                                |
| April 1.....  | 110.8                    | 132.5         | 146.0        | 81.4                      | 79.5                      | 55.7  | 122.7          | 127.5        | 105.0                                |
| May 1.....  | 113.8                    | 86.7          | 147.4        | 82.9                      | 85.1                      | 71.4  | 125.2          | 128.4        | 106.3                                |
| June 1.....   | 117.9                    | 109.1         | 151.9        | 85.6                      | 86.7                      | 105.2   | 129.0          | 131.5        | 114.3                                |
| July 1.....   | 119.0                    | 125.0         | 153.6        | 88.0                      | 89.4                      | 128.5   | 137.5          | 133.4        | 119.1                                |
| August 1.....   | 118.1                    | 124.7         | 153.7        | 89.9                      | 89.1                      | 130.8   | 141.7          | 132.2        | 120.0                                |
| September 1.....  | 121.2                    | 143.4         | 159.1        | 90.9                      | 89.7                      | 144.5   | 146.6          | 130.9        | 123.2                                |
| October 1.....  | 121.7                    | 208.5         | 163.9        | 90.5                      | 90.4                      | 144.3   | 145.4          | 133.4        | 125.7                                |
| November 1.....   | 119.0                    | 306.3         | 161.1        | 88.9                      | 87.2                      | 131.7   | 131.0          | 137.0        | 125.2                                |
| December 1.....   | 116.3                    | 355.4         | 162.3        | 85.9                      | 84.1                      | 104.2   | 130.6          | 139.6        | 121.6                                |
| <b>Averages, 1937.....</b>  | <b>114.4</b>             | <b>189.3</b>  | <b>153.2</b> | <b>85.4</b>               | <b>85.2</b>               | <b>99.5</b>                                     | <b>130.2</b>   | <b>133.1</b> | <b>114.1</b>                         |
| Relative weights, by indus-<br>tries, as at Dec. 1, 1937 <sup>2</sup> . | 50.9                     | 8.8           | 6.5          | 2.0                       | 3.7                       | 10.7  | 2.5            | 9.9          | 100.0                                |

<sup>1</sup> Except agriculture (see p. 768).

<sup>2</sup> Since the average for the calendar year 1926, including figures up to Dec. 31, 1926, is the base used in computing these indexes, the average index here given for the 12 months Jan. 1-Dec. 1, 1926, generally shows a slight variation from 100.

<sup>3</sup> Percentages of Dominion total.

#### Subsection 4.—Employment and Unemployment Statistics of the Census.

In the 1933 edition of the Year Book, pp. 775-780 were devoted to an examination of the preliminary figures of unemployment as reported at June 1, 1931, for that date and for the preceding twelve months. The final results of this inquiry are available in Vol. VI of the Census Publications, which may be obtained from the King's Printer, Ottawa, at a price of 75 cents for the paper-bound volume.

Tables 24 and 25, on p. 836 of the 1934-35 Year Book, summarize, by industries, the statistics of those actually unemployed at the date of the Census, and of time lost during the twelve months preceding that date.

#### Subsection 5.—Unemployment Relief.

The assistance rendered by the Dominion Government under the Unemployment Relief Act, 1930, the Unemployment and Farm Relief Act, 1931, the Relief Act, 1932, the Relief Act, 1933, the Relief Act, 1934, the Relief Act, 1935, and the Unemployment Relief and Assistance Act, 1936, is set out in previous issues of the Canada Year Book. The recapitulation appearing at the end of this statement shows the Dominion's disbursements under those statutes as at Dec. 31, 1937.

The Unemployment and Agricultural Assistance Act, 1937.—At the second session of the Eighteenth Parliament the Unemployment and Agricultural Assistance Act, 1937, which received Royal Assent on Apr. 10, 1937, was enacted. This statute, the administration of which was vested in the Minister of Labour, provided that the Governor in Council might authorize the execution of works and undertakings determined to be in the general interests of Canada. It was further provided by the statute that agreements might be entered into by the Governor in Council with any of the provinces respecting the alleviation of unemployment conditions and of agricultural distress therein, and for the granting of financial assistance to any province by way of loan, advance or guarantee for the purpose of assisting the province to pay its share of the expenditure for such purposes.

*Grants-in-Aid.*—Under the provisions of the Unemployment and Agricultural Assistance Act, 1937, the Dominion continued throughout the fiscal year 1937-38 to assist the provinces in discharging their responsibilities in connection with the granting of aid to necessitous persons by way of a monthly grant-in-aid. The amounts of the monthly grants-in-aid paid to each of the provinces for the months of April to December, 1937, inclusive, are set forth in the following statement:—

| Province.                 | April, 1937, to<br>June, 1937,<br>inclusive. | July, 1937, to<br>September, 1937,<br>inclusive. | October, 1937, to<br>December, 1937,<br>inclusive. |
|---------------------------|--|--|--|
|                           | \$   | \$   | \$   |
| Prince Edward Island..... | 3,000 per month                              | 1,300 per month                                  | 1,750 per month                                    |
| Nova Scotia.....          | 30,000                                       | 20,000   | 17,500   |
| Quebec.....               | 500,000 "                                    | 410,000 "  | 400,000 "  |
| Ontario.....              | 600,000 "                                    | 480,000 "  | 465,000 "  |
| Manitoba.....             | 175,000 "                                    | 175,000 "  | 165,000 "  |
| Saskatchewan.....         | 230,000 "                                    | 230,000 "  | 230,000 "  |
| Alberta.....              | 130,000 "                                    | 130,000 "  | 125,000 "  |
| British Columbia.....     | 150,000 "                                    | 120,000 "  | 115,000 "  |
| Totals.....               | 1,817,000 per month                          | 1,566,300 per month                              | 1,519,250 per month                                |

As a result of representations made by the province of New Brunswick to the effect that the granting of material aid had been discontinued, and an enlarged works program substituted therefor, the monthly grant-in-aid to that province was replaced by Dominion contribution toward the cost of the province's relief works expenditures of an additional amount equal to that which would have been paid to the province by way of grant-in-aid had such been necessary.

*Relief Works.*—In addition to the payment of the aforementioned monthly grants-in-aid agreements with all the provinces were authorized under the provisions of the Unemployment and Agricultural Assistance Act, 1937, providing for Dominion contribution toward the cost of works consisting in the main of Trans-Canada Highway and provincial highway works, provincial works, and, in some provinces, municipal works. Dominion contribution to the province's works program was generally on a fifty-fifty basis.

*Farm Placement.*—The agreements entered into with the provinces of Prince Edward Island, New Brunswick, Quebec, Manitoba, Saskatchewan, Alberta and British Columbia, under the Unemployment Relief and Assistance Act, 1936, respecting the placement on farms of unemployed persons who would otherwise be in receipt of aid, necessarily expired on Mar. 31, 1937, together with the legislation under which they were executed. Under the provisions of the Unemployment and Agricultural Assistance Act, 1937, these agreements were, at the request of the provinces, extended to Apr. 30, 1937. Later in the year agreements effective from

Oct. 1, 1937, to Mar. 31, 1938, were entered into with the four western provinces providing for the continuance of the Farm Improvement and Employment Plan along the same lines as provided by the 1936 agreements, that is, payment of \$5 per month to the farmer, and payment to the individual placed on the farm at a rate equal at the end of the period to \$7.50 per month. Provision was also made for the purchase of suitable work clothing at a cost not in excess of \$3 for each individual placed, while the necessary cost of transportation of workers from the point of employment to the home of the employing farmer was also contributed to by the Dominion under the terms of the agreements. The basis of the Dominion's contribution to the provinces under the provisions of the Farm Improvement and Employment agreements was the same as under the 1936 agreements, namely, 50 p.c., the provinces bearing all necessary administration expenses. The largest number of placements during any one month under the 1936 agreements was effected during January, 1937, when 43,915 persons were placed.

*Drought Relief.*—As the serious drought conditions in the large agricultural areas of the Prairie Provinces prevalent during 1936 were still existent at Mar. 31, 1937, the date of the expiration of the agreements entered into under the Unemployment Relief and Assistance Act, 1936, for aid in these areas, provision was made for the extension of the agreements to Aug. 31, 1937. These agreements provided for Dominion contribution of 100 p.c. of the costs, exclusive of administration expenses, incurred by the three provinces in distributing food, fuel, clothing; and necessary shelter to all permanent residents of the defined areas in need of material aid, except those located in cities or towns within the areas. The latter were cared for by the provinces and municipalities with the assistance of the Dominion grants-in-aid. Provision was made in the agreements that the measure of aid granted pursuant to the arrangement should not exceed that given to similar needy in other rural sections of the provinces. Effective from Sept. 1, 1937, the administration of aid in the drought areas was, in conformity with the recommendations of the National Employment Commission, transferred to the Department of Agriculture in order that the different groups of relief recipients might be segregated, and that agricultural assistance might be distinguished as far as possible from unemployment aid.

*Youth Training.*—To help the situation caused by the volume of unemployment among young people which existed concurrently with an increasing measure of industrial recovery and with a growing demand for skilled workers, Parliament voted the sum of \$1,000,000 to the Department of Labour to be used during 1937-38 for training and development projects for "unemployed young people" between the ages of 18 and 30. This fund was established to provide for: (a) training projects of an occupational nature devised to increase the skill and employability of young people; (b) industrial learnership courses devised to provide theoretical training concurrent with employment; (c) work projects devised to conserve natural resources, as well as to train and recondition the young people participating; and (d) training projects of a physical nature to assist in the maintenance of health and morale. Agreements were entered into with the provinces covering training projects suitable to their individual conditions. Some of the projects undertaken were as follows: forestry work; training in hard rock and placer mining; industrial apprenticeship and learnership; practical and technical training in agriculture; women's courses in household work, handicraft and other specialized services; and various forms of urban occupational training. Provision was made in the execution of these projects for vocational guidance, recreation and instruction in physical education. It was hoped by these means to make available for the primary and secondary industries a more adequate supply of skilled workers, and also to give an opportunity of training

to those young people who, having been unemployed for some years, had lost the advantages of their education and had never had an opportunity to acquire industrial skill. The cost of these youth-training projects was shared by the Dominion and the provinces on an equal basis, the provinces bearing all expenses of administration.

**Relief Settlement.**—The Dominion continued to assist the provinces of Quebec, Manitoba, Saskatchewan and Alberta in placing selected families, who would otherwise be in receipt of material aid, on the land under the relief settlement plan outlined at p. 762 of the 1937 Canada Year Book. The number of settler families and individuals approved and settled under the various agreements entered into with the provinces respecting relief settlement since 1932 are set forth in Table 24.

**24.—Number of Settler Families and Individuals Approved and Settled under the Relief Acts Agreements, to Dec. 31, 1937.**

| Province.             | Settler Families. | Total Individuals. |
|-----------------------|-------------------|--------------------|
| Nova Scotia.....      | 343               | 2,154              |
| Quebec.....           | 1,778             | 11,081             |
| Ontario.....          | 606               | 2,090              |
| Manitoba.....         | 1,162             | 5,064              |
| Saskatchewan.....     | 939               | 4,604              |
| Alberta.....          | 727               | 3,403              |
| British Columbia..... | 52                | 285                |
| <b>Totals.....</b>    | <b>5,607</b>      | <b>30,191</b>      |

Table 25 sets forth the Dominion's disbursements to Dec. 31, 1937, for assistance provided under relief legislation since 1930.

The summary of loans to the western provinces and the C.P.R. outstanding as at the same date is: Manitoba, \$22,188,146; Saskatchewan, \$57,253,807 (inclusive of \$17,682,158 written down to non-active asset); Alberta, \$25,886,198; British Columbia, \$32,271,716; C.P.R., \$2,447,000; total \$140,046,867.

**25.—Disbursements by the Dominion for Assistance Provided Under Relief Legislation, 1930-37.**

| Item.   | 1930<br>Act.  | 1931<br>Act.  | 1932<br>Act.  | 1933<br>Act.  | 1934<br>Act.       | 1935<br>Act.       | 1936<br>Act.  | 1937<br>Act to<br>Dec.<br>31, 1937. | Total.         |
|---|---------------|---------------|---------------|---------------|--------------------|--------------------|---------------|-------------------------------------|----------------|
|   | \$'000        | \$'000        | \$'000        | \$'000        | \$'000             | \$'000             | \$'000        | \$'000                              | \$'000         |
| <b>Disbursements to Provinces—</b>                                |               |               |               |               |                    |                    |               |                                     |                |
| Prince Edward Island.....   | 95            | 120           | 25            | 90            | 147                | 287                | 291           | 13                                  | 1,086          |
| Nova Scotia.....  | 334           | 1,070         | 580           | 1,261         | 574                | 1,295              | 1,110         | 198                                 | 6,922          |
| New Brunswick.....  | 504           | 763           | 220           | 593           | 425                | 1,000              | 910           | Nil                                 | 4,475          |
| Quebec.....   | 3,292         | 5,437         | 4,253         | 8,297         | 6,346              | 7,503              | 10,791        | 3,549                               | 49,468         |
| Ontario.....  | 4,692         | 11,101        | 7,987         | 12,014        | 11,045             | 16,208             | 13,982        | 4,182                               | 82,111         |
| Manitoba.....   | 1,600         | 3,324         | 1,742         | 2,372         | 2,119              | 3,563              | 4,399         | 1,786                               | 20,906         |
| Saskatchewan.....   | 1,689         | 8,225         | 5,612         | 2,715         | 7,610 <sup>1</sup> | 7,087 <sup>2</sup> | 9,256         | 3,580                               | 46,054         |
| Alberta.....  | 1,281         | 3,038         | 1,300         | 1,372         | 1,468              | 1,731              | 2,610         | 1,410                               | 14,460         |
| British Columbia.....   | 1,376         | 3,940         | 3,228         | 3,448         | 2,301              | 2,283              | 3,497         | 1,396                               | 21,469         |
| Yukon and Northwest Territories.....                              | 20            | 10            | 3             | 5             | Nil                | 10                 | Nil           | Nil                                 | 48             |
| <b>Disbursements through Dominion Government Departments.....</b> | <b>57</b>     | <b>4,596</b>  | <b>1,063</b>  | <b>7,643</b>  | <b>8,393</b>       | <b>8,252</b>       | <b>100</b>    | <b>Nil</b>                          | <b>30,074</b>  |
| <b>Other Disbursements—</b>                                       |               |               |               |               |                    |                    |               |                                     |                |
| Board of Railway Commissioners.....                               | 500           | 500           | Nil           | Nil           | Nil                | Nil                | Nil           | Nil                                 | 1,000          |
| Canadian Pacific Railway.....                                     | 864           | 209           | Nil           | Nil           | Nil                | Nil                | Nil           | Nil                                 | 1,073          |
| Canadian National Railway.....                                    | 882           | Nil           | Nil           | Nil           | Nil                | Nil                | Nil           | Nil                                 | 882            |
| Administration expenses.....                                      | 43            | 85            | 68            | 87            | 89                 | 140                | 179           | 180                                 | 871            |
| National Employment Commission.....                               | Nil           | Nil           | Nil           | Nil           | Nil                | Nil                | 147           | 135                                 | 282            |
| Miscellaneous.....  | Nil           | Nil           | 3             | Nil           | 5                  | 21                 | 9             | 8                                   | 40             |
| <b>Totals.....</b>  | <b>17,729</b> | <b>42,427</b> | <b>26,054</b> | <b>41,066</b> | <b>40,522</b>      | <b>49,560</b>      | <b>47,281</b> | <b>16,707</b>                       | <b>281,226</b> |

<sup>1</sup> Includes \$5,000,000 advanced to the province for relief in the drought area.  
advanced to the province for relief in the drought area.

<sup>2</sup> Includes \$1,000,000

### Subsection 6.—National Employment Commission.\*

After the presentation of its final report to the Government on Jan. 26 the National Employment Commission was dissolved on Feb. 1, 1938. On July 31, 1937, the commission had presented an interim report covering its activities from June 1, 1936, to June 30, 1937, and containing a summary of the recommendations made up to the latter date. This interim report, of which approximately 7,000 copies were distributed, was subsequently made an appendix to the final report.

During the year 1937 the Commission continued its activities, including a national re-registration and classification of persons in receipt of unemployment aid and the promotion of the Dominion Government Home Improvement Plan. The former was improved and speeded up so that figures were available with a minimum of delay. Promotion of the Home Improvement Plan, including the establishment of local and provincial voluntary committees throughout Canada, produced very satisfactory results. Not only were direct loan totals of considerable size, but it is estimated that expenditures on home improvement stimulated by the Plan but not involving borrowing were much larger. It is probable that such improvement as has been evident in the building industry can be attributed, in appreciable measure, to the success of the Home Improvement Plan.

Starting with July, 1937, the Commission issued a monthly information bulletin (25,000 copies) which circulated widely throughout Canada. This publication was designed to cover various phases of the Commission's attack on relief and unemployment and to clarify obscure features of these problems. It also provided a medium for issuing the monthly statistical breakdown of relief figures and other pertinent data.

A report on phases of employment conditions in Canadian industry, based on 7,725 replies to a questionnaire circulated among employers with more than 15 employees each, was completed. A great deal of valuable statistical data on employment conditions has thus been made available in compact form and distributed.

The Farm Improvement and Employment Plan, which resulted in placing 46,961 single unemployed persons, of whom 38,606 were males and 8,355 females, on farms during the winter of 1936-37, was again put into operation by the Government in the winter of 1937-38 and over 40,000 persons were placed. Supplementary plans provided for 6,784 men in the winter of 1936-37 and for approximately 2,500 men in that of 1937-38.

The Commission co-operated with the Department of Labour in reviewing all provincial plans for youth training and reconditioning under the Dominion appropriation of \$1,000,000 for that purpose. Studies of women's employment problems were made by the Women's Employment Committee and certain suggestions based on them incorporated in the final report. The importance of the tourist industry as a factor in enlarging employment opportunities was fully realized by the Commission and prompted recommendations calculated to develop and stimulate this trade.

The final report crystallized the views of the Commission on 'long range' policies and dealt at some length with methods which might be utilized to avoid, or at least to mitigate, unemployment conditions similar to those through which Canada had been passing. Drawing attention to the fact that the Commission had so far functioned almost entirely in an advisory capacity, it expressed the view that such work was substantially completed. The translating of Commission

\* See 1937 Year Book, pp. 1052-1053.

recommendations into practical effect required a different type of activity, administrative as distinct from advisory. It recommended that the National Employment Commission be succeeded by a small administrative committee to be entrusted with the practical implementation of National Employment Commission recommendations as approved by the Dominion Government.

## Section 10.—Old Age Pensions and Pensions for Blind Persons.

**The Old Age Pensions Act, 1927.**—Legislation respecting Old Age Pensions (R.S.C., 1927, c. 156) was adopted by the Dominion Parliament in 1927. Under the provisions of this statute the Dominion Government reimbursed each province participating in the Dominion scheme to the extent of one-half of the provincial expenditure for old age pensions. An amendment passed at the 1931 session of Parliament (c. 42, Statutes of 1931) provided that the Dominion contribution to the provinces be increased from 50 p.c. to 75 p.c. of the provincial disbursements for old age pensions. The Dominion contribution of 75 p.c. of provincial disbursements was made effective from Nov. 1, 1931; the provinces have since been reimbursed on this basis.

Sec. 5 of the Act provides that before any agreement is made with a province the scheme for the administration of pensions proposed to be adopted by the province shall be approved by the Governor in Council, and that no change in such scheme shall be made without the consent of the Governor in Council.

The qualifications required of an applicant for pension are set forth in Sec. 8 of the Act which reads as follows:—

(1) Provision shall be made for the payment of a pension to every person who, at the date of the proposed commencement of the pension:—

- (a) is a British subject, or, being a widow, who is not a British subject, was such before her marriage;
- (b) has attained the age of seventy years;
- (c) has resided in Canada for the twenty years immediately preceding the date aforesaid;
- (d) has resided in the province in which the application for pension is made for the five years immediately preceding the said date;
- (e) is not an Indian as defined by the Indian Act;
- (f) is not in receipt of an income of as much as three hundred and sixty-five dollars (\$365) a year; and
- (g) has not made any voluntary assignment or transfer of property for the purpose of qualifying for a pension.

(2) The receipt of a pension shall not by itself constitute a disqualification from voting at any provincial or municipal election.

Sec. 9 provides that the maximum pension payable shall be \$240 yearly, subject to reduction by the amount of the income of the pensioner in excess of \$125 a year. The pension authority may accept a transfer of the pensioner's interest in a dwelling house in which he resides, in which case the value of the dwelling is not considered in calculating the amount of pension payable. Subject to certain conditions, the pension authority is entitled to recover out of the estate of any deceased pensioner the amount of pension payments with interest at 5 p.c. per annum, compounded annually.

Sec. 11 provides for the reduction of pension where a pensioner has resided for a portion of the 20 aforementioned years in a province with which no agreement has been made. Sec. 15 provides for the suspension of pension where a pensioner has transferred his residence to some place out of Canada. It is provided by Sec. 16 that a pension shall not be subject to alienation or transfer by the pensioner or to seizure in satisfaction of any claim against him.

The Governor in Council was empowered by Sec. 19 of the Act to make regulations pursuant to this section. Existing regulations were revised and approved by Orders in Council dated Dec. 9, 1937, and Feb. 3, 1938.



The Dominion Old Age Pensions Act is now operative in all provinces and in the Northwest Territories.

The Gold Commissioner of Yukon was given authority, by a Yukon Territorial Council Ordinance passed in 1927, to enter into an agreement with the Dominion Government for the purpose of obtaining the benefits of the Old Age Pensions Act for residents in the Territory. No proposed scheme of administration for adoption in Yukon has been submitted for the approval of the Governor in Council.

Table 26 is a financial summary of old age pensions in Canada as at the end of the calendar year 1937.

**26.—Financial Summary of Old Age Pensions in Canada, by Provinces, as at Dec. 31, 1937.**

| Item.  | Prince<br>Edward<br>Island.<br>—<br>Act<br>effective<br>July 1,<br>1933. | Nova<br>Scotia.<br>—<br>Act<br>effective<br>Mar. 1,<br>1934. | New<br>Brunswick.<br>—<br>Act<br>effective<br>July 1,<br>1936.     | Quebec.<br>—<br>Act<br>effective<br>Aug. 1,<br>1936.                                       | Ontario.<br>—<br>Act<br>effective<br>Nov. 1,<br>1929. | Manitoba.<br>—<br>Act<br>effective<br>Sept. 1,<br>1928. |
|--|--|--|--|--|---|---|
| Total numbers of pensioners as at Dec. 31, 1937.....   | 1,811  | 13,914   | 11,022   | 45,752   | 57,508  | 11,850  |
| Average monthly pensions, \$   | 10-53  | 14-64  | 13-00  | 17-79  | 18-39   | 18-68   |
| Percentages of pensioners to total estimated population, 1937 <sup>1</sup> .....                   | 1-97   | 2-59   | 2-53   | 1-48   | 1-56  | 1-67  |
| Percentages of persons over 70 years of age to total population <sup>1</sup> .....                 | 6-30   | 5-03   | 4-14   | 3-07   | 4-39  | 3-09  |
| Dominion Government's contributions, Jan. 1 to Dec. 31, 1937.....\$                                | 165,653  | 1,818,753  | 1,297,139  | 8,846,402*   | 9,405,691   | 1,985,967   |
| Dominion Government's contributions from inception of Old Age Pensions Act to Dec. 31, 1937.....\$ | 637,181  | 6,349,730  | 1,856,411  | 8,846,402  | 56,484,750  | 12,202,596  |
| Item.  | Saskat-<br>chewan.<br>—<br>Act<br>effective<br>May 1,<br>1928.           | Alberta.<br>—<br>Act<br>effective<br>Aug. 1,<br>1929.        | British<br>Columbia.<br>—<br>Act<br>effective<br>Sept. 1,<br>1927. | Northwest<br>Terra-<br>ries.<br>—<br>Order in<br>Council<br>effective<br>Jan. 25,<br>1929. | Total.  |   |
| Total numbers of pensioners as at Dec. 31, 1937.....   | 11,701   | 9,755  | 11,560   | 7  | 174,880   |   |
| Average monthly pensions.....\$  | 16-50  | 18-29  | 19-04  | 18-98  | —   |   |
| Percentages of pensioners to total estimated population, 1937 <sup>1</sup> .....                   | 1-26   | 1-26   | 1-54   | 0-07   | —   |   |
| Percentages of persons over 70 years of age to total population <sup>1</sup> .....                 | 2-36   | 2-33   | 3-60   | 1-00   | —   |   |
| Dominion Government's contributions, Jan. 1 to Dec. 31, 1937.....\$                                | 1,745,941  | 1,531,343  | 1,928,123  | 1,679  | 28,726,691  |   |
| Dominion Government's contributions from inception of Old Age Pensions Act to Dec. 31, 1937.....\$ | 10,998,298   | 7,655,262  | 11,416,151   | 12,543   | 116,459,324   |   |

<sup>1</sup> Estimates of population on which these figures are based are given at p. 155. <sup>2</sup> Includes pay-  
ment for pensions granted Aug. 1 to Dec. 31, 1936. These contributions were made during 1937.

**Pensions for Blind Persons.**—By an amendment to the Old Age Pensions Act in 1937, provision was made for the payment of a pension to every blind person who, at the date of the proposed commencement of pension:—

- (a) is, and continues to be, so blind as to be unable to perform any work for which eyesight is essential;
- (b) has attained the age of forty years;
- (c) is not in receipt of a pension in respect of blindness under the Pension Act, or an allowance in respect of blindness under the War Veterans' Allowance Act;
- (d) is:—
  - (i) unmarried, or a widower without a child or children, or a widow without a child or children, and is not in receipt of an income of as much as four hundred and forty dollars a year, or—
  - (ii) married, or a widower with a child or children, or a widow with a child or children and is not in receipt of an income of as much as six hundred and forty dollars a year; and—
- (e) fulfils the conditions laid down in paragraphs (a), (c), (d), (e) and (g) of Subsection 1 of Section 8 of the Act.

The maximum pension payable to a blind person is \$240 yearly except in the case of a blind person, who, after the coming into force of the amendment to the Act, marries a person so blind as to be unable to perform any work for which eyesight is essential. The maximum pension in such a case is \$120 yearly.

The amended Act provides that pensions payable to blind persons shall be subject to reduction as follows:—

- (a) in the case of an unmarried person or a widower without a child or children or a widow without a child or children, by the amount of the income of the pensioner in excess of two hundred dollars a year;
- (b) in the case of a married person or a widower with a child or children or a widow with a child or children, by the amount of the income of the pensioner in excess of four hundred dollars a year;
- (c) in the case of a person married to a blind person receiving a pension under the amended Act, by the amount of the income of the pensioner in excess of two hundred dollars a year.

It is also provided that no blind person who is married, or is a widower with a child or children, or a widow with a child or children, shall be entitled to any pension in excess of the pension to which an unmarried person is entitled unless such married person and his or her spouse or such widower or widow and one or more of his or her children are living together.

The Governor in Council is empowered to make regulations with regard to pensions for blind persons and to define the expression "is so blind as to be unable to perform any work for which eyesight is essential".

## 27.—Financial Summary of Pensions for Blind Persons in Canada, by Provinces, as at Dec. 31, 1937.

| Item.   | Nova Scotia.<br>—<br>Act effective Oct. 1, 1937. | New Brunswick.<br>—<br>Act effective Sept. 1, 1937. | Quebec.<br>—<br>Act effective Oct. 1, 1937. | Ontario.<br>—<br>Act effective Sept. 1, 1937. | Manitoba.<br>—<br>Act effective Sept. 1, 1937. | Total. |
|---|--|---|---|---|--|--------|
| Total numbers of pensioners.  | 20   | 18  | 201   | 315   | 13   | 567    |
| Average monthly pensions. \$  | 19-71  | 19-40   | 19-51                                       | 19-66   | 18-56  | —      |
| Dominion Government's contributions from inception of amendment to Old Age Pensions Act. . . . . \$ | 626  | 718   | 8,321                                       | 6,294   | 360  | 16,310 |

## Section 11.—The Co-operative Movement in Canada.

A general article on "The Co-operative Movement in Canada" appeared at pp. 704-720 of the 1925 edition of the Year Book under the three sub-headings of "Consumers' Co-operation", "Co-operative Credit", and "Producers' Co-operation".\* Because of the pressure upon space, this article is not reprinted here, but

\*The article referred to above was prepared for the Year Book by Miss Margaret Mackintosh, M.A., of the Department of Labour, Ottawa.

a digest of the latest available material on each of these three subdivisions of co-operation follows, the presentation of producers' co-operation being confined to that among agricultural producers.

The Co-operative Union of Canada was formed in 1909, with six affiliated societies and 1,595 members. In 1936, 59 societies reported to the Union, their membership being 152,633. The sales of the reporting societies totalled \$9,803,754 and the purchase dividends returned to their members amounted to \$208,239. The classes of co-operative activities covered included retailing, wholesale trading, marketing, dairying, transportation societies, and buying clubs.

Since October, 1909, the Union has published a monthly, *The Canadian Co-operator*, from which these statistics and those in Subsection 1 have been taken.\*

### Subsection 1.—Consumers' Co-operation.

The statistics in Table 28, which cover only those retail societies reporting to the Co-operative Union of Canada, cannot be considered as strictly comparable due to the fact that, should a large society fail to report in any one year (and this has frequently happened in the past), an apparent decrease in the activities of the societies, not in line with actual conditions, would result.

The following notes, covering membership only, will help the reader to judge the real trend of consumers' co-operative activity. The increase of 624 in 1932 was due, in part, to the failure of 2 existing societies to report in 1931, although 3 new societies reported a membership of 583. Of the total increase of 1,354, in 1933, 1,058 was due to the reporting, for the first time, of 4 societies which had been in existence from 2 to 5 years, while one new society reported 57 members. In 1934, the apparent increase of 418 is modified by the fact that it includes 210 members of a society not reported in 1933, while one new society, with 44 members, reported in 1934. In 1935 the situation was complicated, since 6 societies which reported in the previous year failed to do so in 1935, their 1934 membership having totalled 736—on the other hand, 2 previously-existing societies, which did not report in 1934, reported 177 members and 3 new societies reported 525 members; as these two factors almost balance, it would appear that the existing societies increased their membership by nearly 600. In 1936 three new societies reported a membership of 461, while those established societies which reported in both 1935 and 1936 showed an increase in membership of 1,022; in addition, six buying clubs in Quebec and Ontario reported a membership of 739.

\*For details regarding the Co-operative Union of Canada and its activities, see the 1925 Year Book, pp. 706-709.

28.—Statistics of Retail Co-operative Societies Affiliated with the Co-operative Union of Canada, 1931-36.

| Year.    | Societies. | Members. | Share<br>and<br>Loan<br>Capital. | Reserve<br>Funds. | Stock in<br>Trade. | Other<br>Assets. | Sales.    | Net<br>Profits. | Purchase<br>Divi-<br>dends<br>Paid. |
|----------|------------|----------|----------------------------------|-------------------|--------------------|------------------|-----------|-----------------|-------------------------------------|
|          | No.        | No.      | \$                               | \$                | \$                 | \$               | \$        | \$              | \$                                  |
| 1931.... | 23         | 8,122    | 574,450                          | 449,467           | 455,986            | 955,847          | 2,874,746 | 135,116         | 147,175                             |
| 1932.... | 27         | 8,746    | 530,245                          | 436,194           | 443,424            | 820,808          | 2,331,515 | 117,895         | 111,180                             |
| 1933.... | 31         | 10,190   | 504,623                          | 360,784           | 448,489            | 938,138          | 2,719,212 | 106,434         | 80,220                              |
| 1934.... | 33         | 10,518   | 515,360                          | 370,388           | 479,574            | 728,404          | 3,353,584 | 117,722         | 91,784                              |
| 1935.... | 34         | 11,116   | 573,957                          | 372,732           | 503,004            | 877,634          | 3,876,195 | 161,113         | 130,518                             |
| 1936.... | 41         | 13,696   | 637,012                          | 365,925           | 585,240            | 891,053          | 4,445,339 | 209,379         | 163,952                             |

## Subsection 2.—Co-operative Credit in Quebec.

A form of co-operation which has achieved great success is that which provides short-term credit for small farmers and industrial workers in the province of Quebec. In 1900, what are known as "Les Caisses Populaires", or People's Banks, were begun with the establishment, by the late Alphonse Desjardins, of La Caisse Populaire at Lévis. M. Desjardins adopted the following principles: of lending money only for approved purposes to carefully selected members in a restricted area; of limited liability; of withdrawable shares of small amount payable by instalments; and of distribution of profits. These banks are for the most part established in agricultural districts. Loans are made to purchase agricultural implements at cash prices, to increase farm live stock, to improve farm buildings, to tide over a period of depression, to pay off a merchant, and for various similar purposes. The loans, though comprised within the term 'short credit', are for longer periods than are usual in ordinary commercial transactions because agricultural operations necessarily extend over longer periods than those of trade. They may be for 12, 15, or even 24 months, because they must give time for the farmer to realize on his products.

Details of organization may be found in the Statistical Year Book of Quebec, in the 1936 edition of which may be found statistics of the system as a whole. Complete information of the working of each individual bank, including such details as number of members and depositors, rates of interest paid, loans made and profits realized, classification of size of loans, receipts and expenses and a résumé of chief operations from 1917 to 1936, are published in the report entitled "Co-operative People's Banks and Co-operative Agricultural Societies".

Table 29 shows the progress of these banks by quinquennial years from 1915 to 1930 and annually since then.

29.—Progress of Co-operative People's Banks in Quebec, 1915, 1920, 1925 and 1930-36.

| Year.                   | Banks Reporting. | Members. | Depositors. | Borrowers. | Loans Granted. | Value of Loans Granted. | Profits Realized. |
|-------------------------|------------------|----------|-------------|------------|----------------|-------------------------|-------------------|
|                         | No.              | No.      | No.         | No.        | No.            | \$                      | \$                |
| 1915.....               | 91               | 23,614   | 13,696      | 6,728      | 8,983          | 1,483,160               | 89,893            |
| 1920.....               | 113              | 31,752   | 26,238      | 9,213      | 15,390         | 4,341,544               | 311,323           |
| 1925.....               | 122              | 33,279   | 33,527      | 9,384      | 13,682         | 3,909,790               | 449,531           |
| 1930.....               | 179              | 45,767   | 44,940      | 14,278     | 18,857         | 3,724,537               | 645,096           |
| 1931.....               | 174              | 43,641   | 43,207      | 13,240     | 16,203         | 2,998,046               | 594,235           |
| 1932.....               | 168              | 40,933   | 40,201      | 12,363     | 13,283         | 2,157,886               | 531,765           |
| 1933.....               | 162              | 36,470   | 37,683      | 10,784     | 11,407         | 1,682,651               | 452,220           |
| 1934.....               | 190              | 38,811   | 39,723      | 11,230     | 11,265         | 2,141,762               | 441,876           |
| 1935 <sup>1</sup> ..... | 202              | 43,045   | 42,856      | 11,987     | 12,175         | 2,803,748               | 472,543           |
| 1936.....               | 234              | 49,890   | 49,796      | 13,453     | 13,974         | 3,370,821               | 459,601           |

All figures for 1935 have been revised since the publication of the 1937 Year Book.

### Subsection 3.—Agricultural Co-operation in Canada in 1936.\*

Farmers' co-operative business organizations occupy an important position in the marketing of Canadian agricultural products. The activities of the larger organizations such as the wheat pools, live stock, and fruit co-operatives have reached a high stage of development, and have received world-wide recognition. In addition to these, there are hundreds of comparatively small organizations working effectively to serve local areas.

Available statistics show 1024 co-operative associations actively engaged in business in 1936. The 1024 associations have 2,963 branches which, combined, make a total of 3,987 places of business engaged in the marketing of farm products and the purchase of supplies for farmers. The shareholders and members financially interested number 396,918 and patrons reported total 451,231. Combined assets total \$87,938,453 with plant and equipment valued at \$36,333,952. The members' equity amounts to \$51,252,828, consisting of paid-up share capital \$9,265,747 and reserves and surplus of \$41,987,081. Sales of farm products for the year under review amounted to \$157,031,405. The sales value of supplies handled totalled \$16,363,966 and other revenue \$531,746, which, combined, make a total business of \$173,927,117.

Available records indicate that the most important early activity of farmers in the field of co-operation in Canada was directed toward the marketing of farm products. In comparing the volume of business, marketing associations transact 12 times the business handled by purchasing agencies. Membership in the co-operative marketing associations is given as 357,798 persons compared with 38,167 members in purchasing organizations.

Within the marketing group the grain and seed co-operatives, which include the wheat pools of Western Canada, have the largest membership and investment, and exceed all other commodity groups in volume of business, which is estimated at \$110,826,433 for the year under review. A membership of 190,576 grain growers contributed to this business through 2,156 co-operative marketing agencies. Mainly through deductions from the selling price of their grain, these members have invested a sum of \$37,109,909 in their business and in addition have paid up \$3,467,754 in share capital. Combined assets total \$68,456,819.

One hundred and forty-six dairy co-operatives with 428 depots in Canada reported a membership of 49,796 with assets valued at \$5,077,441. Paid-up share capital amounted to \$1,962,202 with reserves of \$948,634. Sales of dairy products totalled \$16,328,900 for the year under review.

The records for 115 live-stock shipping and marketing associations showed a combined membership of 46,719. Financing of these associations is mainly by membership fees and commissions. Assets were comparatively low with value of plant and equipment amounting to \$560,053. This accommodated a business of \$15,713,236. The live-stock co-operatives undertake very little processing of their product. Their main activity is the assembling of live stock in cars at producing points for shipment to central markets.

\*Statistics contained in this review are based on records received by the Economics Branch, Department of Agriculture, in 1937, covering the business year of 1936.

A large part of the fruit and vegetable crop is marketed through 129 co-operative agencies with a combined membership of 12,170 fruit growers. Assets for all companies total \$3,904,030; reserves and surplus amount to \$896,538. Sales of fruits and vegetables during the year amounted to \$8,192,975 which, together with supplies and other revenue, gave a total business of \$9,709,738.

Poultry producers have organized in each of the provinces to sell their products co-operatively. There were 57 associations with 280 places of business which reported a membership of 34,868. Assets amounted to \$533,193 with reserves of \$209,241. Sales for the year amounted to \$3,282,693.

Practically all the wool marketed co-operatively in Canada is handled by the Canadian Co-operative Wool Growers Limited. The company operates in each province through the medium of 18 sheep-breeders' and wool-growers' associations. The co-operative stores, grades and markets the wool received from its 8,000 patrons. In addition, it carries on advertising and educational work and handles materials and supplies for its members. The quantity of wool handled by the co-operative during the year amounted to 4,000,000 pounds.

In Ontario and Quebec, the honey producers are organized co-operatively with a combined membership of approximately 1,800. Two tobacco co-operatives in Ontario, and three in the province of Quebec report a total membership of 1,382 and sales of approximately \$500,000 for 1936. The *Producteurs de Sucre et Sirop d'Erable de Québec*, with a membership of 1,988, is organized on a co-operative basis. During the year under review the sales value of maple products marketed by this association amounted to \$456,048.

For years the Canadian National Silver Fox Breeders' Association has been engaged in the inspection of silver foxes for registration and the marketing of silver fox pelts in all the provinces of Canada. Sales of silver fox and other furs by this Company amounted to about \$1,500,000 in 1936. Operating within the province of Nova Scotia, the Nova Scotia Silver Fox Breeders' Association grades, warehouses, and markets fox pelts for its members in addition to carrying on valuable educational and field service work. Sales for the year under review amounted to approximately \$250,000.

Available statistics show 515 associations are organized for the purpose of purchasing farm supplies and merchandise on the co-operative plan. These consumer associations, of which nearly one-half are established in the province of Saskatchewan, have a combined membership of 38,167. The sales value of supplies handled during the year, by associations organized exclusively for the handling of supplies, amounted to \$12,304,994. In five of the provinces co-operative wholesale buying societies purchase goods for their member associations.

Within the miscellaneous group is included the Consumers' Refineries Co-operative Association Limited, Regina, Saskatchewan, which was incorporated in 1935 for the purpose of manufacturing petroleum products and selling them on a wholesale basis to local co-operative organizations throughout Saskatchewan. The co-operative completed its second year of operation successfully with sales amounting to approximately \$500,000.

For further information see Table 30, p. 786.

39.—Farmers' Co-operative Business Organizations in Canada, 1936.<sup>1</sup>

| Province or Function.              |       | Share-<br>holders. |         | Patrons.   |            | Total<br>Assets. |           | Value<br>of<br>Plant. |             | General<br>Liabilities. |             | Paid-up<br>Share<br>Capital. |    | Reserves<br>and<br>Surplus. |    | Sales of<br>Farm<br>Products. |    | Sales<br>of<br>Supplies. |    | Total<br>Business,<br>including<br>Other<br>Revenue. |  |
|------------------------------------|-------|--------------------|---------|------------|------------|------------------|-----------|-----------------------|-------------|-------------------------|-------------|------------------------------|----|-----------------------------|----|-------------------------------|----|--------------------------|----|--|--|
| No.                                | No.   | No.                | No.     | No.        | No.        | \$               | \$        | \$                    | \$          | \$                      | \$          | \$                           | \$ | \$                          | \$ | \$                            | \$ | \$                       | \$ | \$   |  |
| PROVINCIAL GROUPING.               |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| Prince Edward Island.....          |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 10                                 | 61    | 8,760              | 9,245   | 71,688     | 38,949     | 19,825           | 14,710    | 37,153                | 1,320,138   | 169,438                 | 1,490,599   |                              |    |                             |    |                               |    |                          |    |  |  |
| Nova Scotia.....                   |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 54                                 | 86    | 5,997              | 10,172  | 1,680,763  | 602,877    | 967,756          | 407,074   | 305,938               | 1,819,542   | 1,544,958               | 2,688,761   |                              |    |                             |    |                               |    |                          |    |  |  |
| New Brunswick.....                 |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 23                                 | 69    | 3,966              | 9,780   | 4,061,137  | 1,236,136  | 2,825,001        | 93,310    | 35,490                | 882,410     | 4,065,971               | 2,341,363   |                              |    |                             |    |                               |    |                          |    |  |  |
| Quebec.....                        |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 346                                | 783   | 38,859             | 38,859  | 4,940,070  | 2,202,535  | 2,896,549        | 796,124   | 1,247,307             | 9,801,821   | 3,062,760               | 17,780,193  |                              |    |                             |    |                               |    |                          |    |  |  |
| Ontario.....                       |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 151                                | 179   | 29,432             | 40,234  | 3,389,592  | 1,298,134  | 1,903,560        | 1,446,973 | 439,097               | 11,173,857  | 608,498                 | 11,880,588  |                              |    |                             |    |                               |    |                          |    |  |  |
| Manitoba.....                      |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 42                                 | 339   | 45,691             | 48,984  | 3,965,904  | 2,282,238  | 3,241,165        | 1,137,453 | 25,739,277            | 61,570,777  | 3,392,046               | 68,069,792  |                              |    |                             |    |                               |    |                          |    |  |  |
| Saskatchewan.....                  |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 280                                | 1,384 | 153,757            | 133,594 | 39,717,411 | 16,016,958 | 19,510,393       | 3,893,158 | 10,083,212            | 26,793,471  | 960,072                 | 27,751,698  |                              |    |                             |    |                               |    |                          |    |  |  |
| Alberta.....                       |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 47                                 | 547   | 93,210             | 98,515  | 14,195,384 | 5,510,393  | 1,440,871        | 1,723,158 | 1,008,355             | 7,887,137   | 1,781,675               | 9,765,365   |                              |    |                             |    |                               |    |                          |    |  |  |
| British Columbia.....              |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 6                                  | 463   | 34,390             | 70,692  | 9,636,803  | 5,281,513  | 3,953,612        | 3,306,713 | 2,376,478             | 22,018,405  | 1,626,331               | 23,644,736  |                              |    |                             |    |                               |    |                          |    |  |  |
| Interprovincial.....               |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 1,024                              | 3,957 | 396,918            | 451,231 | 87,938,433 | 36,338,952 | 36,685,625       | 9,365,747 | 41,937,681            | 157,681,405 | 16,365,966              | 173,927,117 |                              |    |                             |    |                               |    |                          |    |  |  |
| Totals, Canada.....                |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| FUNCTIONAL AND COMMODITY GROUPING. |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| Marketing—                         |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| Dairy products.....                |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 146                                | 574   | 46,796             | 60,403  | 5,077,411  | 2,303,128  | 2,166,905        | 1,903,202 | 948,634               | 16,328,900  | 220,895                 | 16,621,012  |                              |    |                             |    |                               |    |                          |    |  |  |
| Fruits and vegetables.....         |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 98                                 | 129   | 12,170             | 15,157  | 3,904,090  | 1,807,693  | 2,116,228        | 891,964   | 366,008               | 109,334,890 | 1,421,932               | 9,709,783   |                              |    |                             |    |                               |    |                          |    |  |  |
| Grain and seed.....                |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 35                                 | 166   | 29,676             | 190,389 | 98,459,819 | 29,000,691 | 27,879,156       | 3,692,854 | 37,179,455            | 15,370,599  | 396,501                 | 15,767,100  |                              |    |                             |    |                               |    |                          |    |  |  |
| Live stock.....                    |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 115                                | 193   | 46,719             | 73,906  | 1,171,259  | 500,053    | 523,445          | 71,507    | 209,241               | 3,282,693   | 43,011                  | 3,325,704   |                              |    |                             |    |                               |    |                          |    |  |  |
| Poultry.....                       |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 27                                 | 20    | 34,668             | 18,608  | 1,121,259  | 115,117    | 253,445          | 71,507    | 209,241               | 3,282,693   | 43,011                  | 3,325,704   |                              |    |                             |    |                               |    |                          |    |  |  |
| Honey.....                         |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 3                                  | 2     | 1,988              | 645     | 129,068    | 4,183      | 89,116           | 30,081    | 10,771                | 272,492     | 24,000                  | 296,492     |                              |    |                             |    |                               |    |                          |    |  |  |
| Maple sugar.....                   |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 2                                  | 2     | 1,988              | 1,988   | 330,983    | 240,762    | 157,555          | 57,082    | 136,016               | 456,048     | —                       | 456,048     |                              |    |                             |    |                               |    |                          |    |  |  |
| Tobacco.....                       |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 5                                  | 5     | 1,382              | 1,127   | 407,765    | 122,901    | 41,302           | 76,702    | 289,761               | 539,658     | 53,963                  | 593,621     |                              |    |                             |    |                               |    |                          |    |  |  |
| Wool.....                          |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 2                                  | 20    | 2,139              | 8,058   | 319,456    | 72,113     | 41,902           | 116,240   | 41,902                | 1,122,644   | 21,129                  | 1,143,773   |                              |    |                             |    |                               |    |                          |    |  |  |
| Fur.....                           |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 2                                  | 20    | 2,139              | 8,058   | 319,456    | 72,113     | 41,902           | 116,240   | 41,902                | 1,122,644   | 21,129                  | 1,143,773   |                              |    |                             |    |                               |    |                          |    |  |  |
| Miscellaneous.....                 |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 8                                  | 20    | 15,412             | 15,429  | 3,574,982  | 1,087,190  | 2,489,032        | 644,502   | 471,498               | 1,122,644   | 21,129                  | 1,143,773   |                              |    |                             |    |                               |    |                          |    |  |  |
| Totals, Marketing.....             |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 478                                | 3,389 | 357,798            | 398,422 | 83,995,738 | 35,330,153 | 35,687,750       | 7,947,888 | 40,480,086            | 156,610,437 | 3,537,273               | 160,491,924 |                              |    |                             |    |                               |    |                          |    |  |  |
| Purchasing.....                    |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 515                                | 562   | 38,167             | 51,859  | 3,749,432  | 903,183    | 1,017,234        | 1,229,063 | 1,502,540             | 414,968     | 12,304,994              | 12,897,752  |                              |    |                             |    |                               |    |                          |    |  |  |
| Miscellaneous.....                 |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 36                                 | 36    | 935                | 950     | 193,268    | 105,616    | 80,632           | 88,201    | 24,455                | —           | 521,699                 | 537,411     |                              |    |                             |    |                               |    |                          |    |  |  |
| Totals, All Groups.....            |       |                    |         |            |            |                  |           |                       |             |                         |             |                              |    |                             |    |                               |    |                          |    |  |  |
| 1,024                              | 3,957 | 396,918            | 451,231 | 87,938,433 | 36,338,952 | 36,685,625       | 9,365,747 | 41,937,681            | 157,681,405 | 16,365,966              | 173,927,117 |                              |    |                             |    |                               |    |                          |    |  |  |

<sup>1</sup> Not including co-operative insurance companies, credit societies, telephone co-operatives and farmers' institutes.

Subject to revision.

## Section 12.—Labour Legislation in Canada.

Owing to the division of legislative powers in Canada between the Dominion and the provinces under the British North America Act, labour legislation has been enacted by both the Dominion Parliament and the provincial legislatures, but most laws for the protection of workers are provincial.

Laws for the health and safety of persons employed in mines, factories, shops, and other places of business, other than transportation and communication services extending beyond the bounds of any province, and laws concerning trade unions, hours of work, wages, and workmen's compensation fall, in the main, under the head of "property and civil rights" or that of "local works and undertakings" and thus have been enacted by the provinces.

**Dominion Legislation.**—The Dominion Parliament has passed legislation relating to its own employees, to persons employed on Dominion public works and on works subsidized by the Dominion and to workmen employed in connection with railways and shipping. There are Dominion laws concerning trade unions, protecting trade union labels, for the prevention and settlement of industrial disputes and regulating picketing. The Lord's Day Act passed in 1906 prohibits Sunday labour except in works "of necessity and mercy". Regulations have been made to protect workers engaged in handling imported hides and skins from anthrax and there are laws prohibiting the importation and manufacture of matches made of white phosphorus and safeguarding persons handling explosives. The Alien Labour Act prohibits the bringing into Canada under contract of labour from any country placing a similar restriction on labour from Canada.

The Trade Unions Act permits the registration of trade unions with the Dominion Government. The agreements and trusts of registered unions, with certain exceptions, are enforceable and such unions may sue and be sued with respect to property in their own names.

Under the Criminal Code, trade unions are not liable to prosecution on the ground of conspiracy in restraint of trade and no prosecution may be maintained against any person for refusing to work with or for any employer or workman or for doing any act or causing any act to be done for the purpose of a trade combination unless such act is an offence punishable by statute. As regards picketing, it is declared an offence to beset or watch a house or place of business, if done wrongfully and without lawful authority, in order to compel any person to abstain from doing anything which he has a lawful right to do or to do anything from which he has a lawful right to abstain, but by an amendment of 1934 it is stipulated that "attending at or near or approaching to such house or other place as aforesaid, in order merely to obtain or communicate information, shall not be deemed a watching or besetting within the meaning of this section".

Any person is liable to a fine not exceeding \$5,000 or to two years' imprisonment or to both, who violates any law by paying a wage less than the legal minimum, by falsifying an employment record or by putting the wages of more than one employee in the same envelope in order to evade any law or who employs a child or minor in violation of any law.

Under the Fair Wages and Hours of Labour Act, 1935, persons employed on Dominion public works, either directly by the Government or by a contractor, or on work subsidized by the Government, must be paid fair and reasonable wages and their hours of work limited to eight a day and 44 a week, except when otherwise provided by the Governor in Council. Except in the case of work which is inter-



mittent or where it is impracticable to apply the rule, the hours of work of Dominion Government employees may not exceed eight a day with a half-holiday on Saturday.

As regards industrial disputes, there are two Dominion statutes, the Conciliation and Labour Act, a consolidation of two statutes of 1900 and 1903, and the Industrial Disputes Investigation Act of 1907. The former statute provided for the establishment of a Department of Labour, for the compilation and publication of information on labour matters and for the appointment of conciliators in industrial disputes.

The Industrial Disputes Investigation Act requires disputes in mines and public utilities, including railways and shipping, electric, gas, power, and water works, to be submitted to a tripartite board of conciliation and investigation, and reported on before a stoppage of work may be brought about by either employer or employed. With the consent of both parties to a dispute, a board may be established in any industry. The compulsory provisions of the Act apply to such of the above industries as are within Dominion jurisdiction and may be applied to those within provincial jurisdiction on enactment of a provincial law to that effect. Under such provincial statutes, the Act is in force in all the provinces but Prince Edward Island and British Columbia.

The Employment Offices Co-ordination Act enables grants to be made to the provinces to encourage the maintenance of free public employment offices and provides for clearing-houses to facilitate the transfer of labour from one province to another and for the publication of information.

Technical education was assisted by subsidies from the Dominion under the Technical Education Act of 1919, which appropriated \$10,000,000 for that purpose over a period of 10 years. The Vocational Education Act, 1931, was designed to continue this policy by providing \$750,000 annually for 15 years but the Act has not been put in operation.

The Railways Act provides for the safety of persons employed on railways within Dominion jurisdiction, requires wages to be paid at least semi-monthly and gives power to the Board of Railway Commissioners to limit hours of labour.

The Canada Shipping Act contains health and safety provisions and insures the payment of seamen's wages. It gives effect to six Conventions of the International Labour Conference; Conventions fixing a minimum age for employment at sea, establishing a minimum age for employment as trimmer or stoker, providing for unemployment indemnity in case of loss of the ship, requiring a medical examination of children and young persons employed at sea, regulating seamen's articles of agreement and requiring the marking of the weight on heavy packages. Provision is made for regulations to implement two other Conventions for the protection of dock workers and for the repatriation of seamen. Regulations have been made giving effect, in a large measure, to the Repatriation of Seamen Convention.

**Provincial Legislation.**—Early legislation in all the provinces but Prince Edward Island, Nova Scotia and New Brunswick provided for the recovery of wages and there were statutes in all the provinces regulating apprenticeship. Little change has been made in the former Acts enabling a justice of the peace to whom a complaint has been made concerning the non-payment of wages to summon the employer and direct payment of wages found due. Apprenticeship Acts more in line with modern conditions and based on the co-operation of employers in the training of apprentices under provincial regulation and with provincial inspection were enacted in Ontario in 1928, in British Columbia in 1935, and in Nova Scotia in 1937. In the first instance they applied only to certain building trades but pro-

vision was made for their extension to other industries. At the present time the Ontario Act applies also to the repair of motor vehicles and the British Columbia Act to automobile maintenance, sign painting, ship and boat building and repairs, electrical repair work, jewellery manufacture and repairs, and the construction and repair of aircraft.

*Conciliation.*—Laws for conciliation in labour disputes which were passed about the turn of the century have been repealed in Ontario, Nova Scotia and British Columbia, while in Quebec the Trade Disputes Act enacted in 1901 is still in operation. Quebec has also a statute of 1921 providing for compulsory arbitration in disputes between certain classes of municipal employees and their employers where 25 or more workpeople are employed. The Ontario Municipal Board Act of 1906 enables mediation and arbitration in disputes in connection with railways or public utilities under its jurisdiction.

In Manitoba, the Strikes and Lockouts Prevention Act, 1937, and in British Columbia, the Industrial Conciliation and Arbitration Act, 1937, make provision for conciliation and for investigation and report by a board if conciliation fails. A somewhat similar statute has been enacted in Alberta in 1938. It repeals the Labour Disputes Act of 1926, providing for the appointment of boards of conciliation and investigation. The Manitoba, British Columbia and Alberta statutes prohibit strikes and lockouts after application has been made for the appointment of a board of conciliation and investigation in Manitoba, or of a conciliation commissioner in Alberta and British Columbia, and until a final report has been made in each province. In the methods of procedure laid down in these three statutes they are largely similar to the Dominion Industrial Disputes Investigation Act.

The New Brunswick Fair Wage Act, 1936, repealed in 1938, provided for a Fair Wage Officer to hear complaints, make inquiries, and effect adjustment of differences and for a Fair Wage Board to inquire into labour conditions and establish fair rates of wages and the maximum hours to which such rates should apply. The Labour and Industrial Relations Act, 1938, provides for a Fair Wage Officer with the same duties, and, like the three western provinces, for conciliation and investigation in disputes before a stoppage of work.

In each of the provinces except British Columbia and Prince Edward Island there is a statute declaring the Dominion Industrial Disputes Investigation Act applicable to disputes within its scope which are within provincial jurisdiction.

*Trade Unions.*—Until 1937, only British Columbia and Quebec had statutes relating expressly to trade unions. The British Columbia Trade Union Act of 1902 declared a trade union not liable for any wrongful act in connection with a strike or lockout unless through its officers it had authorized or concurred in the act. Persuasion without intimidation or the publication or communication of information concerning a dispute may not be enjoined or made a cause for damages.

The Quebec Professional Syndicates Act of 1924 enables the incorporation of trade unions of 20 or more persons, of whom two-thirds are British subjects, with the right to hold property, establish benefit funds and enter into enforceable agreements with other unions and with employers.

The Nova Scotia Trade Union Act, 1937, the Alberta and British Columbia Conciliation and Arbitration Acts, and the Saskatchewan Freedom of Trade Union Association Act, 1938, declare it lawful for employees to form a trade union and to bargain collectively through the union officers or, in Alberta and British Columbia, through representatives duly elected by a majority vote of the employees affected.

Penalties are provided for any employer who, by intimidation or threat of dismissal or by actual dismissal, prevents or tries to prevent any employee from joining an association of employees. In Nova Scotia, in Alberta (as the Act of the latter province was amended and re-enacted in the Industrial Conciliation and Arbitration Act, 1938) and in Saskatchewan (by the Act of 1938) every trade union is required to file its constitution and by-laws with the Government. In New Brunswick, this may be required and also financial returns. In Alberta and Saskatchewan, financial statements must be furnished if requested. In Nova Scotia, annual financial returns are required.

The Manitoba Strikes and Lockouts Prevention Act, 1937, declares any person liable to a fine who seeks, by intimidation or threat, to compel any person to join or refrain from joining a trade union.

The Quebec Workmen's Wages Act, 1937, rendered liable to a penalty of fine or imprisonment any employer who tried to prevent an employee by threats of dismissal or other threats from becoming a member of an association. Slightly different provision was made by the Fair Wage Act, 1937. Both statutes were changed in 1938 to apply the clause to any person instead of any employer.

The New Brunswick Act of 1938 declares the right of employees to organize and to bargain collectively through representatives elected by a majority vote. It provides a penalty for any person who by threat of dismissal or actual dismissal seeks to compel any person to join or refrain from joining any organization or to work or abstain from working.

*Collective Agreements.*—In Quebec, as stated above, collective agreements between "professional syndicates" and employers are legally enforceable under an Act of 1924. The Collective Labour Agreements Extension Act, 1934, as amended, gives the Lieutenant-Governor in Council power to declare binding on all employers and employees engaged in an industry the wages and hours and apprenticeship terms of a collective agreement arrived at by employers and trade unions in the industry, provided that the agreement covers a sufficient proportion of the industry. The Act, as amended in 1938, applies also to agreements with "groups of employees".

*Industrial Standards.*—The Industrial Standards Act, 1935, of Ontario enables the Minister of Labour, on petition of representatives of employers and employed in any industry, to call a conference of employers and workers in the industry for the purpose of arriving at an agreement as to wages and hours. If there is agreement between a proper and sufficient representation of employers and employees, the Lieutenant-Governor in Council may, on the recommendation of the Minister, declare the minimum wages and maximum hours agreed upon to be binding on all employers and employed in the industry within the area designated. Similar statutes have been passed in Alberta, Nova Scotia (applying only to building trades in Halifax and Dartmouth) and in Saskatchewan.

Under these statutes, schedules, as they are called, of wages and hours have been made binding in the following industries: in Ontario, in certain building trades in 12 cities or towns, in men's clothing, women's coats and suits, millinery, wood furniture, and in soft furniture in Toronto and vicinity, in brewing and in logging in three districts, in baking in Ottawa, and in barber shops in 31 cities and towns; in Alberta, in two building trades in Edmonton and Calgary, in brewing, in baking in two districts, and for creosote workers in Calgary, and taxi drivers in Edmonton; in Nova Scotia, in four building trades in Halifax and Dartmouth; and in Saskatche-

wan, in one or two building trades in three cities, for barbers and hairdressers in three cities, and in shoe repairing in Regina.

*Minimum Wages.*—Minimum wage laws applying to female workers have been enacted in all provinces except Prince Edward Island. The New Brunswick Minimum Wage Act, 1930, has not been proclaimed. In Alberta and British Columbia, there are also Minimum Wage Acts for male employees and the Acts of the other provinces, except New Brunswick and Nova Scotia, have been revised or amended to cover male workers. The New Brunswick Fair Wage Act, 1936, is, in part, a conciliation measure and relates to both sexes. All the minimum wage laws provide for an administrative body to fix the minimum rates. Only in Manitoba does the statute itself make any stipulation as to the rate of wages. The Manitoba Act provides that, where a minimum has been fixed for any class of employees, no person over 18 years of age may be employed in the industry for less than 25 cents an hour unless a different rate is fixed by the Minimum Wage Board.

In Alberta, British Columbia, New Brunswick, Nova Scotia, Ontario, and Quebec the Acts apply to all industries except agriculture and domestic service and in Manitoba the Act may be extended to such industries by Order in Council. In Saskatchewan the law is restricted to factories, mail-order houses and retail stores, beauty parlours, barber shops, hotels, and restaurants. The geographical scope of the minimum wage laws has also been extended so that at the present time all the Acts apply, or may be applied, to all parts of the provinces. In Saskatchewan existing minimum wage orders, however, apply only to cities and within a 10-mile radius thereof.

Under the first Acts in the four western provinces the Boards could limit hours of labour. In Ontario, Quebec, and Nova Scotia the Boards had merely power to specify the hours to which the rates were to apply and to fix overtime rates. In Alberta the Hours of Work Act, 1936, relating to all industries but agriculture and domestic service, repealed the section of the Minimum Wage Act relating to hours. In British Columbia hours of work may still be restricted under the Female Minimum Wage Act and in Manitoba and Saskatchewan under the Acts applying to both sexes, but in Saskatchewan the orders now in force omit the clauses which formerly limited hours of work. Only in British Columbia and Manitoba, therefore, are hours limited by Minimum Wage Orders. In the former province only female workers are affected by such restriction, but in Manitoba maximum hours are fixed for both sexes by the Minimum Wage Board.

Orders have been made under all the minimum wage laws in force, but in New Brunswick the only orders issued have applied to particular plants where the Fair Wage Board inquired into conditions after complaints had been made. In Ontario and Quebec the orders issued by the former Minimum Wage Boards, applying to women, remain in force until replaced by orders made under the new Acts of 1937 relating to both sexes.

Under special statutes minimum wages are fixed for motor vehicle drivers and lumber workers in some provinces.

In Manitoba the Fair Wage Act, applying to provincial public works, was extended in 1934 to cover private construction of more than \$100 value in cities and towns of over 2,000 population.

*Fair Wages.*—New Brunswick, Manitoba and Ontario have statutes requiring the payment of "fair wages" to persons employed on provincial public works. In the

other provinces a similar policy is based on a resolution of the legislature or departmental regulations. Fair wages are defined as those current for competent workmen in the district or those determined as fair by the Minister. The Ontario Government Contracts Hours and Wages Act, 1937, like the Dominion statute, also provides for an 8-hour day and 44-hour week for public works employees.

*Hours of Labour.*—In addition to the limitation of hours of work effected under the Quebec Workmen's Wages Act, the Industrial Standards Acts, and the Minimum Wage Acts, as indicated above, there is statutory regulation in all provinces but Prince Edward Island.

In Alberta and British Columbia Hours of Work Acts apply to both sexes. In British Columbia the Act provides an 8-hour day and 48-hour week for persons employed in mines, factories, construction, retail and wholesale stores, road transport, barber shops, and bakeries, and in catering or as hotel clerks or elevator operators. The Alberta statute fixes a maximum of 9 hours a day and 54 hours a week for male workers and 8 hours a day and 48 hours a week for females in any trade or occupation except agriculture or domestic service. Both Acts permit temporary and permanent exceptions to be made by regulation.

In Quebec and Nova Scotia there are statutes authorizing regulations to limit hours of work. In the former province hours have thus been restricted throughout the province in the building trades, except on small jobs, to 8 a day and 48 a week for all but the skilled workers in the Montreal Division, for whom the weekly maximum is 44. Maximum hours of work have been fixed for beauty parlours and shoe-repair shops on the island of Montreal at 55 and 64, respectively. The Nova Scotia Act may be applied to mining, manufacturing and construction of any kind but no action has been taken to apply it.

The only other legislation in Canada to limit hours of work is contained in statutes applying to certain kinds of undertakings, such as mines, factories, and shops, or certain classes of workers such as motor vehicle operators.

Coal miners below ground have a maximum 8-hour day in Alberta, British Columbia, New Brunswick, and Nova Scotia and in Saskatchewan unless it is agreed otherwise. Work above ground in coal mines is also limited to 8 hours a day in Alberta and, unless employer and employee make a contrary agreement, in Saskatchewan. Metal miners below ground have a maximum 8-hour day in British Columbia, New Brunswick, northern Ontario and Yukon. In Alberta there is a statutory 9-hour day and 54-hour week both above and below ground in metal mines. In British Columbia workers above ground, as below, have an 8-hour day and in Yukon also, unless a special overtime rate is paid.

In factories, hours of women and young persons are restricted by the factory laws of Manitoba, New Brunswick, Ontario, Quebec, and Saskatchewan. Maximum hours fixed by these statutes are: 48 a week in Saskatchewan, 9 a day and 54 a week in Manitoba, 10 a day and 55 a week in Quebec, and 10 a day and 60 a week in New Brunswick and Ontario. A new Act in New Brunswick would limit weekly hours to 50 but it has not been proclaimed. In Manitoba the factory law has been superseded in respect to weekly hours by an order of the Minimum Wage Board which fixes a maximum of 48 for women and for boys under 18 in factories. In all provinces provision is made for longer hours in cases of emergency. There is no limitation of hours in Nova Scotia factories and in Prince Edward Island there is no factory law.

In shops, hours of all workers are limited in Alberta and British Columbia by the Hours of Work Acts. In Ontario maximum hours for women and for boys under 16 are 10 a day and 60 a week. In Quebec this weekly maximum applies to women and to boys under 18 in cities of 10,000 or over. Provision for overtime is made in these four provinces. In Manitoba a minimum wage order fixes for all shop employees a basic 48-hour week, 9-hour day and 10½-hour Saturday with special rates for overtime. Overtime may not be worked by any person under 18 and it is limited for females to 36 days in the year.

In hotels and restaurants, hours of work are restricted in Alberta and British Columbia by the Hours of Work Acts. In British Columbia the Act limits to 8 a day and 48 a week the hours of work of hotel clerks and of persons employed in hotels, restaurants, dance-halls, ice-cream parlours or other places, in the preparation or serving of food or refreshments for which a charge is made, or in work incidental thereto. A minimum wage order for female workers in the hotel and catering industry gives a maximum 8-hour day and 48-hour week to all women and girls employed in hotels, lodging-houses, cafes, dance-halls, hospitals (except nurses), clubs, dining-rooms and kitchens connected with industrial or commercial establishments or with schools or office buildings or any other place where lodging or meals are provided at a charge. An order of the Manitoba Minimum Wage Board limits the hours of all persons employed in restaurants and of boys under 18, and girls and women in hotels to 10 a day and 48 a week. In Ontario boys under 16 and women and girls may not be employed more than 10 hours a day or 60 a week in restaurants. In Quebec working hours are limited by regulation in towns of 3,000 or more to 12 a day in hotels, restaurants or clubs where 5 or more workers are employed. In all provinces provision is made for longer hours in emergencies and in some cases for certain workers.

There is statutory provision for a weekly rest day for workers in hotels and restaurants in the cities of Manitoba, Ontario, and Saskatchewan. In Quebec provision is made by Order in Council relating to such hotels, restaurants or clubs as are indicated in the preceding paragraph.

The hours of office workers are governed in Alberta by the Hours of Work Act and in Manitoba by a minimum wage order fixing maximum hours in Winnipeg at 8 a day and 44 a week.

For street railway employees the only statutory limitation of hours is in Ontario, where it is stipulated that no employee may work more than 6 days of 10 hours each. In road transport hours are limited in Alberta and British Columbia by the Hours of Work Acts. Special regulations provide for overtime in British Columbia, and in Alberta the maximum hours of drivers of motor buses in Edmonton are 12 a day on 6 days a week and of passenger vehicles in the province 9 hours a day or, when permitted on certain routes, 10 hours a day. In Manitoba, New Brunswick, Ontario, Prince Edward Island, and Saskatchewan hours of work of drivers of motor vehicles for commercial use are limited by statute or regulation. In Prince Edward Island and Ontario maximum hours that may be spent in driving are 10 in any 24-hour period; in New Brunswick 10 in 16 hours, except in emergencies; and in Manitoba regulations restrict the hours of driving passenger vehicles to 9 in 24 and the hours of work in any capacity to 12 in 24 and the number of days to 6 in a week. In Winnipeg maximum hours for taxi drivers are 12 on 6 days in the week.

*Weekly Rest Day.*—As noted above, a weekly rest day is provided by law for hotel and restaurant employees in cities in Quebec, Ontario, Manitoba, and Saskatchewan. In the two latter provinces this law has a wider application. In Saskatchewan it covers any trade, industry or occupation and in Manitoba the establishments specified include factories, works of construction, and the operation of street railways. In both provinces the Act applies to cities but may be extended by Order in Council to other parts.

The Alberta Hours of Work Act, 1936, stipulates that every employee in any industry except agriculture and domestic service shall have a weekly day of rest and in Nova Scotia the Limitation of Hours Act, 1935, relating to mining, manufacturing, construction and the furnishing of electric power, and water or gas, makes similar provision.

The Lord's Day Act of the Dominion Parliament was noted above. There is also a Sunday Observance Act in Quebec.

*Child Labour.*—A minimum age for employment is established by Acts applying to mines, factories, shops, and street trades. Child labour is forbidden in most of the provinces in mines and factories. In other kinds of establishments its prohibition is less general.

In all the provinces where mining is carried on, except Manitoba, the employment of children below ground is prohibited, but the age-limit varies. Above ground there is no prohibition in New Brunswick or Quebec or about coal mines in Saskatchewan. For work in coal mines below ground the legal minimum is 14 years in Saskatchewan, 15 in British Columbia, 16 in New Brunswick and Nova Scotia, and 17 in Alberta. In metal mines and in mining for non-metallic minerals other than coal no boy may be employed below ground under 12 years of age in the Yukon Territory, under 15 in Quebec, 16 in New Brunswick, Nova Scotia, and Saskatchewan or 18 in British Columbia and Ontario. Boys may not be employed above ground about coal mines at less than 14 years of age in British Columbia, 16 in Nova Scotia and 17 in Alberta. For work above ground the minimum age in mines other than coal mines is 12 in Yukon, 14 in Saskatchewan, 15 in British Columbia and 16 in Nova Scotia and Ontario.

Factory employment is prohibited by law to children under specified ages in all the provinces but New Brunswick and Prince Edward Island. In New Brunswick the Factories Act, 1937, would forbid such employment for those under 15 but the Act has not been proclaimed. The minimum age for workers in factories is 14 in Nova Scotia (except in canneries from July to October), Quebec, and Ontario and for boys in Saskatchewan; and 15 in Alberta, Manitoba, and British Columbia and for girls in Saskatchewan.

Labour in shops is prohibited by children under 14 years of age in Ontario and Quebec, under 15 in Manitoba, and in cities of over 5,000 population in Alberta. Only in Ontario does the provincial law directly forbid children engaging in street trades, the age-limit being 12 for boys and 16 for girls during the day. Municipal by-laws may be made in practically all the provinces to regulate the work of children as messengers, vendors of newspapers and small articles.

Compulsory school attendance laws are in effect in all the provinces but New Brunswick and Quebec, and employment of children of school age during school hours is prohibited. In New Brunswick special legislation requires attendance up to 14 years in six cities and towns; in the remainder of the provinces attendance at school is compulsory only at local option. The school-leaving age is 12 in rural New Brunswick if a by-law requires attendance, 13 in Prince Edward Island, 14 in Nova Scotia and Manitoba and in Fredericton, Saint John, Newcastle, Chatham, Marysville, and Edmundston in New Brunswick, 15 in Alberta, British Columbia, and Saskatchewan, and 16 in Ontario, in the towns and cities of Nova Scotia and in such urban districts of New Brunswick as adopt a by-law to that effect. Higher ages may be fixed by the district in Manitoba and in rural Nova Scotia. In Manitoba a child who is not employed must attend school until 16 years of age. Exemption from school attendance for a certain period or after a certain age is permitted under all the provincial laws but that of British Columbia. In Ontario no child between 14 and 16 years of age may be employed between 8 a.m. and 5 p.m. and in Quebec no child under 16 may be employed unless he can read and write fluently or is attending night school.

*Mining and Factory Laws.*—In all the provinces but Prince Edward Island, provision is made for inspection with a view to the safety and health of those employed. The Factory Acts give general powers to the inspectors to order proper measures to be taken. Only in Quebec and Ontario have special regulations been made. In the former province regulations have been made concerning ventilation, temperature, humidity, sanitary conditions, dust, etc., and prohibiting the employment of women and young persons in certain hazardous trades. In Ontario, by regulation, occupational diseases are required to be notified, containers of lead and benzol labelled, medical examination of workers may be required and special precautions must be taken to control dust. All the Mining Acts, in addition to giving general authority to inspectors to direct dangerous conditions to be remedied, lay down detailed regulations to ensure safe conditions of work.

*Workmen's Compensation.*—Compensation is provided in all the provinces but Prince Edward Island for accidents occurring in the course of employment and for certain industrial diseases. In Prince Edward Island railway workers are taken care of in this respect by a Dominion statute and are eligible for compensation at the same rate as in New Brunswick. Each province except Prince Edward Island has set up a board to administer an accident fund made up of contributions from employers who are classified according to the hazard of the industry and assessed accordingly. Employers in each class are thus collectively liable for accidents in the industries within the class and assessments are based on their accident record. In Ontario and Quebec public authorities, railway and shipping companies, and telephone and telegraph companies are individually liable for compensation. The industries covered vary from one province to another but in all provinces the most hazardous industries are within the scope of the Act, including mining, lumbering, manufacturing, construction, and transportation by rail and water. In Alberta and Saskatchewan certain classes of railroad employees are within an earlier employer's liability law.



Free medical aid, including medical, surgical, hospital and nursing services, is provided for injured workmen in all provinces but Alberta and British Columbia. In British Columbia the workers contribute 1 cent a day for medical aid and in Alberta they contribute from  $\frac{1}{4}$  to 10 cents a day according to the industry.

Compensation is paid in all provinces for anthrax and for poisoning from arsenic, lead, mercury, and phosphorus. The other diseases compensated vary according to the industries of the different provinces.

The following statement shows the scale of compensation as at Jan. 1, 1938:—

| Item.   | N.S.  | N.B.  | Que.  | Ont.  | Man.  | Sask.   | Alta.   | B.C.   |
|---|---|---|---|---|---|---|---|--|
| Death—<br>Funeral.....  | \$100   | \$100   | \$125   | \$125   | \$150   | \$125   | \$125   | \$100  |
| Widow or invalid<br>widower per<br>month.                         | \$30  | \$30  | \$40 plus<br>lump sum<br>of \$100.  | \$40 plus<br>lump sum<br>of \$100.  | \$40  | \$40 plus<br>lump sum<br>of \$100.  | \$35  | \$35   |
| Each child under<br>16, per<br>month.                             | \$7-50  | \$7-50, up to<br>18 years<br>if a girl.                         | Under 18,<br>\$10.  | \$10 up to<br>\$40.   | \$12+\$10+<br>\$9+\$8<br>for each<br>additional<br>child<br>up to 18<br>yrs. for<br>educa-<br>tion. | \$10  | \$12+\$10+<br>\$9+\$8<br>for each<br>additional<br>child<br>up to 18<br>yrs. for<br>educa-<br>tion. | \$7-50   |
| Orphan child under<br>16, per<br>month.                           | \$15, Max.<br>\$60.   | \$15 and up<br>to 18 yrs.<br>if a girl.                         | Under 18,<br>\$15.  | \$15  | \$15  | \$15  | \$15  | \$15, Max.<br>\$60.  |
| Disability <sup>2</sup> —Per<br>cent of earnings<br>for duration. | 66 $\frac{2}{3}$ p.c.<br>Min. \$3<br>per wk.<br>or earn-<br>ings, if<br>less. | 55 p.c.<br>Min. \$0<br>per wk.<br>or earn-<br>ings, if<br>less. | 66 $\frac{2}{3}$ p.c.<br>Min.<br>\$12-50 per<br>wk. or<br>earnings,<br>if less. | 66 $\frac{2}{3}$ p.c.<br>Min.<br>\$12-50 per<br>wk. or<br>earnings,<br>if less. | 66 $\frac{2}{3}$ p.c.<br>Min. \$15<br>per wk.<br>or earn-<br>ings, if<br>less.                      | 66 $\frac{2}{3}$ p.c.<br>Min.<br>\$12-50 per<br>wk. or<br>earnings,<br>if less. | 66 $\frac{2}{3}$ p.c.<br>Min. \$10<br>per wk.<br>or earn-<br>ings, if<br>less.                      | 62 $\frac{1}{2}$ p.c.<br>Min. \$10<br>per wk.<br>or earn-<br>ings, if<br>less. |
| Maximum earnings<br>that may be<br>reckoned.                      | \$1,500   | \$1,500,<br>Max.<br>comp.<br>\$2,500.                           | \$2,000   | \$2,000   | \$2,000   | \$2,000   | \$2,000   | \$2,000  |

<sup>1</sup> Invalid child entitled to compensation for longer period. <sup>2</sup> Where disability is partial, the same rate is fixed but is calculated on difference between earnings prior to and subsequent to accident. In Quebec the rate for partial disability is 66 $\frac{2}{3}$  p.c. for the period of time fixed, basis being 4 weeks for each 1 p.c. of incapacity. In New Brunswick the Board may fix amount for permanent partial disability.

### Section 13.—Legislation Respecting Combinations in Restraint of Trade.

A general article on Canadian legislation concerning combinations and monopolies in restraint of trade was published in the 1927-28 Year Book under the heading "Legislation Respecting Combinations in Restraint of Trade". In subsequent issues of the Year Book an annual statement on proceedings under the Combines Investigation Act has been included.

The first Dominion legislation in this field was "An Act for the Prevention and Suppression of Combinations formed in Restraint of Trade", passed in 1889 and now in force in amended form as Sec. 498 of the Criminal Code. Legislation providing special facilities for the investigation of combines was first enacted in 1907 and was included in the Customs Tariff of 1907. In 1910 the Combines Investigation Act of that year was enacted. The latter Act was replaced by the Combines and Fair Prices Act, 1919, which in turn, after declaration of its constitutional invalidity by the Judicial Committee of the Privy Council, was replaced by the present Combines Investigation Act in 1923.

**The Combines Investigation Act.**—The Combines Investigation Act (R.S.C., 1927, c. 26) provides means for the investigation of trade combinations, mergers, trusts and monopolies alleged to have operated in restraint of trade and to the detriment of the public. The Act was passed in 1923 and amended in 1935 and 1937. In 1931 its constitutional validity was upheld by the Judicial Committee of the Privy Council following a reference of questions on this point by the Governor in Council to the Supreme Court of Canada. The Combines Investigation Act provides for publication of reports of investigations of alleged combines. Participation or knowing assistance in the formation or operation of combinations or monopolies which are detrimental to the public and come within the scope of the Act is an indictable offence. Provision also is made in the Act for the reduction or removal of customs duties at the instance of the Governor in Council in cases where it is found that with respect to any commodity there exists any combine to promote unduly the advantage of manufacturers or dealers at the expense of the public and that such disadvantage to the public is facilitated by existing customs duties.

**Legislation in 1937.**—The Combines Investigation Act Amendment Act, 1937, which came into effect on Apr. 10, 1937, provided for the administration of the Combines Investigation Act by a Commissioner reporting to the Minister of Labour. It also removed amendments added to the Act at the instance of the Senate in 1935 whereby documents required to be produced in investigations under the Act had been rendered inadmissible as evidence in possible subsequent prosecutions under the Act against the persons who had produced them. Provisions of the Combines Investigation Act respecting revocation of patents were repealed in view of a revision of related provisions of the Patent Act effected in 1935 and in view of the terms of an International Convention ratified by Canada with regard to patents. Certain further amendments, introduced for the purpose of strengthening the Combines Investigation Act in a number of respects, were included in the amending Bill of 1937 as passed by the House of Commons but were deleted in the Senate and not enacted.

**Investigations in 1937.**—An investigation under the Inquiries Act was made into the importation and distribution of anthracite coal, following the similar inquiry made under the Combines Investigation Act and the court actions which had been completed in 1935 in connection with that case. The report of the Commissioner appointed to conduct the inquiry, was made public in February, 1937. The Commissioner found no evidence as to price-fixing arrangements. He reported

that importers' gross margins, which had increased in the years preceding the first inquiry, had declined substantially since 1933. This change, he considered, was due in large measure to the proceedings under the Combines Investigation Act in 1933. His recommendations included maintenance of competitive conditions with respect to sources of supply and in the distribution of anthracite coal; with enforcement by municipalities of regulations to prevent fraudulent practices and inadequate descriptions of coal.

Other less extensive investigations were made during the year under the Combines Investigation Act with respect to complaints regarding conditions alleged to be existing to the detriment of the public in particular manufacturing and distributive trades. These included questions of alleged price agreements among manufacturers or distributors, exclusive dealing arrangements, resale price maintenance, price discrimination, the withholding of supplies for various reasons and other trade practices alleged in particular instances to be unfair to certain classes of persons and to be injurious to the general public.

### Section 14.—Mothers' Allowances.

Seven of the nine provinces of Canada provide for the payment of allowances to mothers who are widowed or without adequate means of support. The province of Manitoba was the first to make such provision in 1916, and the example has been followed by the other western provinces and by Ontario, Nova Scotia, and Quebec. The Mothers' Allowances Act, 1930, of New Brunswick has not been proclaimed in effect, and no action has been taken under the Quebec statute.

All the mothers' allowances Acts stipulate that the mother must be a resident of the province at the time of making application and a widow or, in all provinces but New Brunswick and Nova Scotia, a wife, whose husband is mentally incapacitated. Under all the laws, except those of New Brunswick, Nova Scotia, and Quebec, the wife of a physically disabled man is eligible but the section in the Alberta Act bringing such persons within its scope has not been proclaimed.

In Alberta, British Columbia, Ontario, and Saskatchewan, deserted wives are paid an allowance, and in British Columbia and Saskatchewan, the wives of inmates of penal institutions are eligible. Under all the statutes except those of Alberta and Saskatchewan, the mother must be a British subject, or the widow or wife of a British subject. Allowances may be paid to foster-mothers under certain conditions in all the provinces but Alberta, Nova Scotia, and New Brunswick.

In New Brunswick, Nova Scotia, and Quebec, allowances are payable in respect of two or more dependent children, but in New Brunswick and Nova Scotia an allowance is payable for one child under 16 if there is an invalid child over 16 years of age. In the other provinces, allowances are payable in respect of one or more dependent children, but in Manitoba, under the regulations, no allowance is payable in respect of an only child, or an only child under 15 years of age unless the mother is temporarily or permanently unable to care for the child. A dependent child is a child under 16 years of age in British Columbia, New Brunswick, Nova Scotia, Ontario, Quebec, and Saskatchewan. In Alberta, a boy under 15 or a girl under 16 is deemed to be

dependent. In Manitoba, only children under 15 are regarded as dependent unless they are invalids.

In Alberta, British Columbia, and Manitoba, the cost of the allowances is divided between the province and the municipalities concerned. In Saskatchewan, Ontario, Quebec, New Brunswick, and Nova Scotia, the whole cost is carried by the province.

**Rates of Allowances.**—In British Columbia, the Act provides for a maximum monthly allowance of \$42.50 for a mother with one dependent child, an additional \$7.50 for each other child under 16 years of age, and a further \$7.50 in cases where the husband of the mother is totally disabled and is living with her. In New Brunswick and Nova Scotia, a maximum allowance of \$60 per month is fixed by statute. In the other provinces, the provincial authority administering the Act has power to fix the rate of the allowance. In Ontario, the maximum for a mother and one child is \$35 per month in a city, \$30 in a town of over 5,000 population and \$25 in a rural district, with an additional \$5 for every child in each case. In Saskatchewan, under the terms of an Order in Council of January, 1936, maximum monthly payments range from \$8 to a mother with one child to \$44 to a mother with ten or more children.

In Manitoba, the maximum allowance for a mother and two children is \$50, excluding allowance for winter fuel, with a maximum of \$89 for a family of seven or more children. In Alberta, the allowance is determined by the special circumstances in each case, the maximum payment ranging from \$25 per month to a mother with one child, to \$50 per month where there are five children.

Tables 31 to 36 show, for six provinces, the numbers of families and of children assisted, the total benefits paid, and the division of the cost of the latter between provinces and municipalities, for as many years as comparable figures are available.

**Nova Scotia.**—The Mothers' Allowances Act (c. 4, 1930) was passed at the session of 1930 and came into force on Oct. 1, 1930. Table 31 shows the numbers of families assisted and the amounts paid under the Act from its inception to Nov. 30, 1936.

31.—Mothers' Allowances in Nova Scotia, fiscal years 1931-36.

| Fiscal Year.                         | Numbers Assisted. |           | Benefits Paid. |
|--------------------------------------|-------------------|-----------|----------------|
|                                      | Families.         | Children. |                |
|                                      |                   |           | \$             |
| 1931 (year ended Sept. 30) .....     | 1,030             | 3,179     | 310,002        |
| 1932     "     " .....               | 1,108             | 3,342     | 331,337        |
| 1933     "     " .....               | 1,158             | 3,487     | 341,929        |
| 1934     "     " .....               | 1,168             | 3,549     | 356,075        |
| 1935 (14 months ended Nov. 30) ..... | 1,239             | 3,720     | 413,997        |
| 1936 (year ended Nov. 30) .....      | 1,222             | 3,630     | 363,981        |

Ontario.—The Mothers' Allowances Act (R.S.O., 1927, c. 280) was originally passed at the session of 1920, as c. 89 of the Statutes of that year, and came into force on Oct. 1, 1920. Table 32 shows the operations under the Act from its inception.

32.—Mothers' Allowances in Ontario, fiscal years 1921-37.

| Fiscal Year.                               | Numbers Assisted. |           | Benefits Paid.          |                               |           |
|--|-------------------|-----------|-------------------------|-------------------------------|-----------|
|  | Families.         | Children. | Chargeable to Province. | Chargeable to Municipalities. | Total.    |
|  |                   |           | \$                      | \$                            | \$        |
| 1921 (year ended Oct. 31).....             | 2,660             | 8,271     | 416,152                 | 358,515                       | 774,667   |
| 1922 " " .....                             | 3,559             | 10,922    | 762,059                 | 620,079                       | 1,382,138 |
| 1923 " " .....                             | 3,870             | 11,791    | 839,252                 | 723,441                       | 1,562,693 |
| 1924 " " .....                             | 4,058             | 12,374    | 936,522                 | 768,372                       | 1,704,894 |
| 1925 " " .....                             | 5,007             | 14,577    | 974,174                 | 807,107                       | 1,781,281 |
| 1926 " " .....                             | 5,215             | 15,115    | 1,027,518               | 849,267                       | 1,876,785 |
| 1927 " " .....                             | 5,540             | 16,060    | 1,101,817               | 905,740                       | 2,007,557 |
| 1928 " " .....                             | 5,976             | 17,328    | 1,203,920               | 980,487                       | 2,190,407 |
| 1929 " " .....                             | 6,411             | 18,605    | 1,260,299               | 1,045,784                     | 2,306,083 |
| 1930 " " .....                             | 6,712             | 19,620    | 1,292,245               | 1,084,743                     | 2,376,988 |
| 1931 " " .....                             | 7,157             | 20,906    | 1,400,418               | 1,131,468                     | 2,531,886 |
| 1932 " " .....                             | 7,418             | 21,468    | 1,455,100               | 1,234,627                     | 2,689,727 |
| 1933 " " .....                             | 7,653             | 22,068    | 1,516,260               | 1,285,613                     | 2,801,873 |
| 1934 " " .....                             | 8,144             | 23,173    | 1,640,253               | 1,385,872                     | 3,026,125 |
| 1935 (Nov. 1, 1934, to Mar. 31, 1935)..... | 7,875             | 22,417    | 745,855                 | 634,050                       | 1,379,905 |
| 1936 (year ended Mar. 31).....             | 11,159            | 26,007    | 2,133,420               | 1,813,326                     | 3,946,746 |
| 1937 " " .....                             | 12,856            | 28,700    | 2,477,631               | 2,104,916                     | 4,582,547 |

Manitoba.—The Mothers' Allowances Act (1916, c. 69), the first of its kind in Canada, came into operation on Mar. 10, 1916. Allowances are now made under the authority of the Child Welfare Act (1936, c. 6). Table 33 shows the benefits paid since Dec. 1, 1918, together with statistics of families and children assisted, these latter figures are not available for all of the earlier years.

33.—Mothers' Allowances in Manitoba, fiscal years 1919-37.

| Fiscal Year.                                | Numbers Assisted.      |           | Benefits Paid.          |                               |         |
|---|------------------------|-----------|-------------------------|-------------------------------|---------|
|   | Families. <sup>1</sup> | Children. | Chargeable to Province. | Chargeable to Municipalities. | Total.  |
|   |                        |           | \$                      | \$                            | \$      |
| 1919 (year ended Nov. 30).....              | 413                    | "         | 107,651                 | 95,833                        | 203,484 |
| 1920 " " .....                              | 532                    | "         | 157,484                 | 193,360                       | 350,844 |
| 1921 <sup>1</sup> (year ended Aug. 31)..... | 648                    | "         | 212,237                 | 225,000                       | 437,237 |
| 1922 " " .....                              | 669                    | "         | 178,060                 | 150,199                       | 328,259 |
| 1923 " " .....                              | 722                    | 2,609     | 236,399                 | 225,749                       | 462,148 |
| 1924 " " .....                              | 728                    | "         | 185,061                 | 220,359                       | 405,420 |
| 1925 <sup>1</sup> (year ended Apr. 30)..... | 756                    | "         | 144,590                 | 150,937                       | 295,527 |
| 1926 " " .....                              | 825                    | 2,507     | 172,425                 | 229,795                       | 402,221 |
| 1927 " " .....                              | 855                    | 2,595     | 183,924                 | 230,000                       | 413,924 |
| 1928 " " .....                              | 967                    | 2,986     | 236,798                 | 244,559                       | 531,357 |
| 1929 " " .....                              | 1,062                  | 3,239     | 276,144                 | 281,477                       | 557,621 |
| 1930 " " .....                              | 1,055                  | 3,180     | 100,979                 | 384,081                       | 485,060 |
| 1931 " " .....                              | 1,042                  | 3,326     | 140,545                 | 325,194                       | 465,739 |
| 1932 " " .....                              | 1,070                  | 3,412     | 471,704                 | Nil                           | 471,704 |
| 1933 " " .....                              | 1,078                  | 3,374     | 432,615                 | Nil                           | 432,615 |
| 1934 " " .....                              | 1,082                  | 3,313     | 438,649                 | Nil                           | 438,649 |
| 1935 " " .....                              | 1,110                  | 3,302     | 440,769                 | Nil                           | 440,769 |
| 1936 " " .....                              | 1,140                  | 3,386     | 444,808                 | Nil                           | 444,808 |
| 1937 " " .....                              | 1,141                  | 3,271     | 445,549                 | Nil                           | 445,549 |

<sup>1</sup> Except where otherwise indicated, these figures show the total numbers of families assisted during the year. <sup>2</sup> Not available. <sup>3</sup> Dec. 1, 1920, to Aug. 31, 1921. <sup>4</sup> Sept. 1, 1924, to Apr. 30, 1925.

Saskatchewan.—Mothers' allowances are paid under the authority of Part VI of the Child Welfare Act (R.S.S., 1930, c. 231), originally enacted in 1917 as the Mothers' Pensions Act. Table 34 shows the numbers of families assisted and the amounts paid under the Act for the fiscal years ended Apr. 30, 1929-37.

34.—Mothers' Allowances in Saskatchewan, fiscal years ended April 30, 1929-37.

| Fiscal Year. | Number Assisted. |           | Benefits Paid. |
|--------------|------------------|-----------|----------------|
|              | Families.        | Children. |                |
|              |                  |           | \$             |
| 1929.....    | 1,214            | 4,657     | 521,880        |
| 1930.....    | 1,800            | 5,465     | 407,575        |
| 1931.....    | 2,183            | 6,590     | 544,250        |
| 1932.....    | 2,372            | 6,431     | 483,618        |
| 1933.....    | 2,511            | 6,733     | 403,915        |
| 1934.....    | 2,608            | 6,794     | 407,993        |
| 1935.....    | 2,826            | 7,368     | 440,580        |
| 1936.....    | 2,944            | 7,638     | 474,120        |
| 1937.....    | 2,958            | 7,487     | 482,411        |

Alberta.—The Mothers' Allowance Act (R.S.A., 1922, c. 215) was originally passed at the session of 1919, and came into force in that year. Table 35 shows the numbers of families assisted and the amounts paid under the Act from its inception to Mar. 31, 1937.

35.—Mothers' Allowances in Alberta, 1919-37.

| Year.                          | Number Assisted. |                    | Benefits Paid.          |                               |         |
|--------------------------------|------------------|--------------------|-------------------------|-------------------------------|---------|
|                                | Families.        | Children.          | Chargeable to Province. | Chargeable to Municipalities. | Total.  |
|                                |                  |                    | \$                      | \$                            | \$      |
| 1919 (calendar year).....      | 245              | 766                | 19,714                  | 19,714                        | 39,428  |
| 1920 ".....                    | 477              | 1,502              | 80,642                  | 76,787                        | 157,429 |
| 1921 ".....                    | 562              | 1,636              | 103,572                 | 98,302                        | 201,874 |
| 1922 ".....                    | 721              | 1,864              | 126,122                 | 120,629                       | 246,751 |
| 1923 ".....                    | 758              | 1,887              | 122,651                 | 120,035                       | 242,686 |
| 1924 ".....                    | 742              | 2,136              | 129,242                 | 128,169                       | 257,411 |
| 1925 ".....                    | 828              | 2,271              | 142,004                 | 141,582                       | 283,586 |
| 1926 ".....                    | 907              | 2,290              | 157,272                 | 157,013                       | 314,285 |
| 1927 ".....                    | 968              | 2,445              | 174,500                 | 174,440                       | 348,940 |
| 1928 ".....                    | 1,029            | 2,517              | 182,382                 | 182,222                       | 364,604 |
| 1929 ".....                    | 1,094            | 2,880              | 198,378                 | 198,377                       | 396,755 |
| 1930 ".....                    | 1,270            | 3,409              | 234,828                 | 231,708                       | 466,536 |
| 1932 (year ended Mar. 31)..... | 1,499            | 3,747              | 242,314                 | 237,293                       | 479,607 |
| 1933 ".....                    | 1,675            | 3,882              | 222,606                 | 216,590                       | 439,196 |
| 1934 ".....                    | 1,724            | 4,060              | 223,262                 | 216,721                       | 439,983 |
| 1935 ".....                    | 1,812            | 4,274              | 233,904                 | 228,489                       | 462,393 |
| 1936 ".....                    | 2,088            | 4,764 <sup>1</sup> | 257,327                 | 250,175                       | 507,502 |
| 1937 ".....                    | 2,319            | 5,172 <sup>1</sup> | 410,872                 | 194,636                       | 605,508 |

<sup>1</sup> Subject to revision.

British Columbia.—The Mother's Pensions Act (R.S.B.C., 1936, c. 194) was originally passed as c. 61 of the Acts of 1920, and came into force in July, 1920. Table 36 shows the numbers of families and the numbers of children assisted, together with the amounts expended in each of the fiscal years 1921-37.

Under the original Act, the full cost of pensions was borne by the province. In 1932 one-half of the costs of pensions paid to residents of a municipality was charged to the municipality to which they belonged and at the end of the fiscal year 1936-37 responsibility for all payments was again assumed by the province.

In 1937 there were 346 cases where mothers received extra allowances for incapacitated husbands.

### 36.—Mothers' Allowances in British Columbia, 1921-37.

| Fiscal Year. | Numbers Assisted. <sup>1</sup> |           | Benefits Paid. <sup>2</sup> |                               |         |
|--------------|--------------------------------|-----------|-----------------------------|-------------------------------|---------|
|              | Families.                      | Children. | Chargeable to Province.     | Chargeable to Municipalities. | Total.  |
|              |                                |           | \$                          | \$                            | \$      |
| 1921.....    |                                |           |                             |                               | 278,575 |
| 1922.....    | 771                            | 1,978     | 487,888                     | Nil                           | 487,888 |
| 1923.....    | 785                            | 1,990     | 414,227                     | Nil                           | 414,227 |
| 1924.....    | 847                            | 2,240     | 423,233                     | Nil                           | 423,233 |
| 1925.....    | 943                            | 2,544     | 403,669                     | Nil                           | 403,669 |
| 1926.....    | 986                            | 2,723     | 518,471                     | Nil                           | 518,471 |
| 1927.....    | 1,100                          | 3,050     | 612,645                     | Nil                           | 612,645 |
| 1928.....    | 1,233                          | 2,757     | 628,000                     | Nil                           | 628,000 |
| 1929.....    | 1,370                          | 3,028     | 677,510                     | Nil                           | 677,510 |
| 1930.....    | 1,468                          | 3,229     | 759,098                     | Nil                           | 759,098 |
| 1931.....    | 1,568                          | 3,295     | 816,272                     | Nil                           | 816,272 |
| 1932.....    | 1,547                          | 3,213     | 842,977                     | Nil                           | 842,977 |
| 1933.....    | 1,514                          | 3,274     | 468,511                     | 311,129                       | 779,640 |
| 1934.....    | 1,436                          | 3,147     | 469,916                     | 151,586                       | 621,502 |
| 1935.....    | 1,410                          | 2,922     | 365,288                     | 224,834                       | 590,122 |
| 1936.....    | 1,485                          | 3,026     | 403,558                     | 212,997                       | 616,555 |
| 1937.....    | 1,567                          | 3,191     | 442,803                     | 238,785                       | 682,588 |

<sup>1</sup> Years ended Sept. 30 for 1921-32, and fiscal years ended Mar. 31 from 1933.

Mar. 31 in all cases.

<sup>2</sup> Not available.

<sup>3</sup> Fiscal years ended

## PART II.—WAGES AND COST OF LIVING.

### Section 1.—Wage Rates.\*

Statistics of rates of wages and hours of labour have been collected for recent years by the Dominion Department of Labour, and are published in a series of bulletins supplementary to the *Labour Gazette*. Report No. 1 of this series was issued in March, 1921. The records upon which the statistics are based begin in most cases with the year 1901. Index numbers have been calculated to show the general movement of wage rates; the series covers six groups of occupations back to 1901, and common factory labour, miscellaneous factory trades and lumbering back to 1911. The index numbers are based upon wage rates in 1913 as 100. Average index numbers, weighted according to the average numbers of employees in each group, as shown in the Censuses of 1921 and 1931, are also given. Weighting has not been applied within groups. In groups by occupations or industries such

\* See pp. 774-783 of the 1927-28 Year Book for an article on the "Wages Statistics of the Census of 1921" and pp. 797-799 of the 1933 Year Book for "Earnings in the Census Year 1931".

as these, weighting makes comparatively little difference as rates of wages for the various classes of labour tend to rise and fall to the same extent even in different localities. In the three groups, common factory labour, miscellaneous factory trades, and logging and sawmilling, the index numbers being calculated from samples, the averages are automatically weighted by the numbers of samples which vary according to the numbers of workers in the various occupations and industries. The upward movement which appeared in the index numbers for some groups in 1934 became general in 1935 and continued in 1936 and in 1937. On steam railways wages were not changed in 1936 but were increased in 1937.

### 1.—Index Numbers of Rates of Wages for Various Classes of Labour in Canada, 1913-37.

NOTE.—Rates of wages in 1913=100. Index numbers for 1901-12 were given at p. 674 of the 1932 Year Book.

| Year.     | Building Trades. | Metal Trades. | Printing Trades. | Electric Railways. | Steam Railways. | Coal Mining. | Common Factory Labour. | Miscellaneous Factory Trades. | Logging and Sawmilling. | General Average, Weighted. <sup>1</sup> |
|-----------|------------------|---------------|------------------|--------------------|-----------------|--------------|------------------------|-------------------------------|-------------------------|---|
| 1913..... | 100.0            | 100.0         | 100.0            | 100.0              | 100.0           | 100.0        | 100.0                  | 100.0                         | 100.0                   | 100.0                                   |
| 1914..... | 100.8            | 100.5         | 102.4            | 101.0              | 101.4           | 101.9        | 101.0                  | 103.2                         | 94.7                    | 101.3                                   |
| 1915..... | 101.5            | 101.5         | 103.6            | 97.8               | 101.7           | 102.3        | 101.0                  | 103.2                         | 89.1                    | 102.2                                   |
| 1916..... | 102.4            | 106.9         | 105.8            | 102.2              | 105.9           | 111.7        | 110.4                  | 115.1                         | 109.5                   | 109.5                                   |
| 1917..... | 109.9            | 128.0         | 111.3            | 114.6              | 124.6           | 130.8        | 129.2                  | 128.0                         | 130.2                   | 125.6                                   |
| 1918..... | 125.9            | 155.2         | 123.7            | 142.9              | 158.0           | 157.8        | 152.3                  | 146.8                         | 150.5                   | 147.2                                   |
| 1919..... | 148.2            | 180.1         | 145.9            | 163.2              | 183.9           | 170.5        | 180.2                  | 180.2                         | 109.8                   | 173.4                                   |
| 1920..... | 180.9            | 209.4         | 184.0            | 194.2              | 221.0           | 197.7        | 215.3                  | 216.8                         | 202.7                   | 207.7                                   |
| 1921..... | 170.5            | 186.8         | 193.3            | 192.1              | 195.9           | 208.3        | 190.6                  | 202.0                         | 152.6                   | 189.0                                   |
| 1922..... | 162.5            | 173.7         | 192.3            | 184.4              | 184.4           | 197.8        | 183.0                  | 189.1                         | 158.7                   | 180.2                                   |
| 1923..... | 166.4            | 174.0         | 188.9            | 186.2              | 186.4           | 197.8        | 181.7                  | 196.1                         | 170.4                   | 184.2                                   |
| 1924..... | 169.7            | 175.5         | 191.9            | 186.4              | 186.4           | 192.4        | 183.2                  | 197.6                         | 183.1                   | 180.4                                   |
| 1925..... | 170.4            | 175.4         | 192.8            | 187.8              | 186.4           | 167.6        | 186.3                  | 195.5                         | 178.7                   | 185.1                                   |
| 1926..... | 172.1            | 177.4         | 193.3            | 188.4              | 186.4           | 167.4        | 187.3                  | 196.7                         | 180.8                   | 186.3                                   |
| 1927..... | 179.3            | 178.1         | 195.0            | 189.9              | 198.4           | 167.9        | 187.7                  | 199.4                         | 182.8                   | 190.4                                   |
| 1928..... | 188.6            | 180.1         | 198.3            | 194.1              | 198.4           | 168.9        | 187.1                  | 200.9                         | 184.3                   | 192.2                                   |
| 1929..... | 197.5            | 184.6         | 202.3            | 198.6              | 204.3           | 168.9        | 187.8                  | 202.1                         | 185.6                   | 190.0                                   |
| 1930..... | 203.2            | 189.6         | 203.3            | 199.4              | 204.3           | 166.4        | 188.2                  | 202.3                         | 183.9                   | 197.1                                   |
| 1931..... | 195.7            | 182.9         | 205.1            | 198.6              | 199.2           | 169.4        | 183.4                  | 197.3                         | 193.0                   | 189.1                                   |
| 1932..... | 178.2            | 174.7         | 194.2            | 191.1              | 183.9           | 164.0        | 173.6                  | 184.3                         | 141.3                   | 177.7                                   |
| 1933..... | 153.0            | 169.2         | 184.3            | 182.7              | 179.7           | 161.9        | 168.1                  | 175.7                         | 121.7                   | 168.3                                   |
| 1934..... | 154.8            | 168.0         | 183.5            | 182.4              | 173.7           | 162.9        | 170.8                  | 180.5                         | 145.1                   | 170.5                                   |
| 1935..... | 159.8            | 169.7         | 184.5            | 183.7              | 183.9           | 165.8        | 174.9                  | 184.7                         | 152.3                   | 175.4                                   |
| 1936..... | 160.8            | 170.1         | 185.2            | 185.5              | 183.9           | 165.9        | 179.7                  | 188.8                         | 165.9                   | 178.6                                   |
| 1937..... | 165.3            | 187.4         | 187.8            | 190.5              | 196.1           | 166.8        | 195.5                  | 203.7                         | 188.1                   | 191.7                                   |

<sup>1</sup> Weighted according to average numbers of workers in each group in 1921 and 1931.

Rates of wages and hours of labour in 1937 in various trades in the largest cities of the five economic areas of Canada will be found in Table 2. The attention of those specially interested in the subject of wages and hours is directed to the valuable detailed study, *Wages and Hours of Labour in Canada, 1929, 1936 and 1937*, published by the Department of Labour as a supplement to the *Labour Gazette*, January, 1938.



2.—Rates of Wages and Hours of Labour in Various Trades and for Unskilled Factory Labour in Certain Cities of Canada, 1937.<sup>1</sup>

| Occupation.                               | Halifax.        |                 | Montreal.       |                 | Toronto.        |                 | Winnipeg.       |                 | Vancouver.      |                 |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|   | Wages per Hour. | Hours per Week. | Wages per Hour. | Hours per Week. | Wages per Hour. | Hours per Week. | Wages per Hour. | Hours per Week. | Wages per Hour. | Hours per Week. |
| <b>1. Building Trades—</b>                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Bricklayers and masons....                | .97½            | 44              | .80-.90         | 44-48           | .90             | 40              | 1.10            | 44              | 1.10            | 40              |
| Carpenters.....                           | .60             | 44              | .70             | 44-48           | .85             | 40-44           | .85             | 44              | .90             | 40-44           |
| Electrical workers.....                   | .80             | 44              | .75             | 44-48           | 1.00            | 40              | .85             | 44              | .75-1.00        | 40-44           |
| Painters.....                             | .50-.55         | 44              | .60             | 44-48           | .75             | 40              | .70             | 44              | .62½-.80        | 40-44           |
| Plasterers.....                           | .70-.80         | 44              | .80             | 44-48           | .90             | 40              | 1.10            | 44              | 1.00            | 40              |
| Plumbers.....                             | .75             | 44              | .75             | 40-44           | .90             | 40              | .95             | 44              | 1.00            | 40-44           |
| Sheet-metal workers.....                  | .65-.70         | 44              | .65-.70         | 40-44           | .87½            | 40              | .70             | 44              | 1.00            | 40-44           |
| Stonecutters.....                         | .70             | 44              | .80             | 44              | .87½            | 40              | .90             | 44              | 1.00            | 40              |
| Labourers.....                            | .30-.40         | 44-48           | .40             | 44-48           | .35-.60         | 40-48           | .40-.45         | 44-48           | .45-.50         | 40-48           |
| <b>2. Metal Trades—</b>                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Blacksmiths...                            | .55-.90         | 40-44           | .40-.90         | 40-55           | .52½-.70        | 40-48           | .40-.72         | 44-58           | .70-.95         | 40-44           |
| Boilermakers....                          | .62-.90         | 40-44           | .50-.90         | 40-47           | .55-.70         | 44              | .57½-.70        | 44              | .70-1.00        | 40-44           |
| Machinists.....                           | .68-.90         | 40-55           | .50-.85         | 40-55           | .52-.80         | 40-50           | .50-.75         | 44-50           | .65-.95         | 40-44           |
| Moulders.....                             | .65-.70         | 40-48           | .55-.80         | 40-45           | .50-.80         | 40-48           | .52½-.78        | 44-50           | .70-.77         | 40-44           |
| <b>3. Printing Trades—</b>                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Compositors, machine and hand, news..     | 34.00           |                 | 48 36.00-       |                 | 42.50           | 40              | 40.00           | 40              | 43.20           | 45              |
| Compositors, machine and hand, job....    | 25.00-          |                 | 44-48 31.20-    |                 | 44-48 33.00-    |                 | 35.20           | 44-48           | 40.50           | 44-48           |
| Pressmen, news                            | 33.45           |                 | 48 32.00-       |                 | 48 40.00        |                 | 39.00           | 48              | 43.20           | 48              |
| Pressmen, job..                           | 24.20-          |                 | 44-48 31.20-    |                 | 44-48 33.00-    |                 | 35.20           | 44-48           | 40.50           | 44-48           |
| Bookbinders....                           | 27.00-          |                 | 44-48 31.20-    |                 | 48 33.00-       |                 | 44-48 33.00-    |                 | 44-48 38.00-    |                 |
| Bindery girls...                          | 11.00           |                 | 44-48 12.50-    |                 | 48 12.00-       |                 | 44-48 11.00-    |                 | 44-48 14.00-    |                 |
| <b>4. Electric Railways—</b>              |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Conductors and motormen <sup>2</sup> .... | .61             | 53              | .55             | 54              | .60             | 44-48           | .52             | 42              | .63             | 48              |
| Linemen.....                              | .55-.77         | 44              | .53-.57         | 40-48           | .72-.78         | 44              | .45-.80         | 44-48           | .68½-.97        | 40-48           |
| Shop and barn men.....                    | .51-.77         | 44-50           | .30-.62         | 40              | .54-.81         | 44-48           | .39½-.65        | 44-48           | .52-.75         | 44              |
| Electricians.....                         | .73-.82         | 44-50           | .55-.65         | 40              | .57½-.79        | 44-48           | .53-.65         | 44-48           | .70-.75         | 44              |
| Trackmen and labourers.....               | .35-.55         | 44              | .35             | 48              | .45-.60         | 48              | .38½-.39½       | 48              | .50-.54         | 44              |
| <b>5. Unskilled Factory Labour.</b>       | .34½-.39        | 44-55           | .25-.55         | 40-60           | .30-.64         | 25-84           | .31½-.55        | 44-50           | .40-.60         | 40-48           |

<sup>1</sup> For statistics of the wages and hours of employees of steam railways and wages of employees in and about coal mines in Canada, see pp. 751-752 of the 1930 Year Book, where the rates, etc., for the past seven or eight years to 1929, are given. Wages in coal mines of Nova Scotia were reduced 10 p.c. in 1932, and in Drumheller, Alta., in 1933; in 1935 in both districts 5 p.c. was restored. On steam railways deductions of 10 p.c. were in effect during 1932, 1933, 1935 and 1936; 15 p.c. in 1934; running trades 20 p.c. for six months in 1933. In 1937 the deduction was reduced gradually from 10 p.c. to 4 p.c. In editions of the Year Book prior to 1933 a table showing the wages and hours of common labour in factories for certain cities was given in this section. The information for 1937 can be found at p. 61 of *Wages and Hours of Labour in Canada*, published as a supplement to the *Labour Gazette* for January, 1938. For the five cities of Table 2 it is included under sub-heading 5 of the stub.

<sup>2</sup> Maximum rates based on length of service; Halifax rate for one-man cars; 5 cents extra for one-man car operators in Montreal, Toronto, and Winnipeg; Vancouver 6 cents extra.

## Section 2.—Wages and Hours of Labour Under Provincial Minimum Wage Legislation.

All of the provinces in Canada except Prince Edward Island have in effect legislation providing for the establishment of minimum wage rates for female employees in certain industries and occupations through boards which are authorized to establish and enforce these minimum rates. Such legislation was enacted between

1918 and 1920 in all of these provinces except New Brunswick. In Nova Scotia the legislation is applicable to female workers only, but in the other provinces it now applies both to male and female workers. There is also legislation for the restriction of hours of labour which are regulated in some of the provinces by the minimum wage boards but in the others only under the factory acts, etc. (See Section 12 of Part I on Labour Legislation in 1937.)

In British Columbia since 1925, and in Manitoba since 1931, separate orders have been effective for some classes of male workers and their scope was much extended in 1934 and subsequent years. In New Brunswick, under the Fair Wage Act, 1936, the establishment of wage rates was authorized but no orders of general application had been issued at the end of 1937. In Saskatchewan since 1936, and in Quebec from 1937, all minimum wage orders for females apply also to male workers. In Alberta, separate orders for male workers were issued in 1937 for the first time. In Ontario, under the Minimum Wage Act, 1937, the legislation was extended to male workers but no orders for males had been made effective at the end of 1937. In Quebec and New Brunswick, wages in logging are regulated under forestry regulation acts.

Beginning in Quebec in 1934, certain wage rates established through collective agreements were made binding under the Collective Labour Agreements Extension Act, 1934, and later under the Workmen's Wages Act, 1937. The Industrial Standards Acts of Ontario and Alberta in 1935, that of Nova Scotia in 1936 and of Saskatchewan in 1937 provided for the establishment of wage scales in various industries for all employees.

A supplement to the *Labour Gazette* for January, 1938, on wages and hours of labour in Canada in 1929, 1936, and 1937 contains an appendix giving, in some detail, information as to minimum wages for male and female workers.

Information as to minimum wage rates for work under Dominion Government contracts for the manufacture and supply of equipment, stores, clothing, etc., appears in the paragraphs on Fair Wages in the section on the Dominion Department of Labour at pp. 787-788.

### Subsection 1.—Minimum Wages for Females.

The table on pp. 806-807 gives information as to minimum rates of wages and as to hours for which these rates are payable under the orders of the various provincial boards and commissions in effect at the end of 1937.

The information here given is intended to afford merely a statistical summary of the minimum wages with hours of labour in the provinces and industries affected, and while some of the more significant details have been given in footnotes, it has been found impossible to include the information in such form as to indicate any more than the general conditions under these provisions.

For complete information it is necessary to refer to the orders as issued by the various provincial boards. These have been given in some detail in the *Labour Gazette* from time to time as issued, and in summary form, by provinces, in the Wages and Hours Supplement to the *Labour Gazette*, January, 1938. In some provinces these orders include regulations as to employment conditions, sanitary conditions, etc. The boards have power to issue licences for lower rates of pay for handicapped workers and to meet special conditions in the nature of emergencies.

## 3.—Minimum Wage Rates for Female Workers in Canada Under

Notes.—For further details regarding minimum wage rates for females, see pp. 123-134 of *Wages and*

| Industry.                            | Nova Scotia. <sup>1</sup> |                        |                 | Quebec. <sup>2</sup>              |                          |                 | Ontario. <sup>3</sup>     |                         |                 |
|--------------------------------------|---------------------------|------------------------|-----------------|-----------------------------------|--------------------------|-----------------|---------------------------|-------------------------|-----------------|
|                                      | Wages per Week.           |                        | Hours per Week. | Wages per Week.                   |                          | Hours per Week. | Wages per Week.           |                         | Hours per Week. |
|                                      | Adults, Experienced.      | Minors, Learners, etc. |                 | Adults, Experienced. <sup>4</sup> | Minors, Learners, etc.   |                 | Adults, Experienced.      | Minors, Learners, etc.  |                 |
|                                      | \$                        | \$                     |                 | \$                                | \$                       |                 | \$                        | \$                      |                 |
| 1 Manufacturing.....                 | 10-00-11-00               | 6-00-10-00             | 44-50           | 9-00-12-50 <sup>5</sup>           | 6-00-11-00 <sup>6</sup>  | 44-55           | 10-00-12-50               | 6-00-11-00 <sup>6</sup> | 48-54           |
| 2 Fruit and vegetable canning.....   | 14                        | 14                     | 14              | 12½c. per hr.                     | 14                       | 14              | 18-25c. per hr.           | 15-20c. per hr.         | 14              |
| 3 Laundering, dry cleaning, etc..... | 10-00-11-00               | 6-00-10-00             | 44-50           | 18-22c. per hr.                   | 13-20c. per hr.          | 14              | 11-00-12-50               | 8-00-11-00              | 48              |
| 4 Retail stores.....                 | 10-00-11-00               | 6-00-10-00             | 44-50           | 8-00-12-50 <sup>10</sup>          | 6-00-10-00 <sup>10</sup> | 40-60           | 8-00-12-50                | 6-00-11-00              | 48-54           |
| 5 Hotels, restaurants, etc.....      | 10-00-11-00               | 8-00-10-00             | 44-50           | 15-00-22-00 <sup>10</sup>         | 14                       | 14              | 20-26c. per hr.           | 14                      | 14              |
| 6 Hairdressing, etc.....             | 10-00-11-00               | 6-00-10-00             | 48              | 10-00-12-50                       | 6-00-11-00               | 48              | 10-00-12-50 <sup>10</sup> | 4-00-10-50              | 48-54           |
| 7 Theatres and amusement places..... | 14                        | 14                     | 14              | 14                                | 14                       | 14              | 11-00-12-50 <sup>10</sup> | 14                      | 48-54           |
| 8 Offices.....                       | 10-00-11-00               | 7-00-10-00             | 48              | 14                                | 14                       | 14              | 8-00-12-50 <sup>10</sup>  | 6-00-11-00              | 48-54           |
| 9 Telephone operators...             | 9-00-11-00                | 6-00-10-00             | 44-50           | 14                                | 14                       | 14              | 7-00-12-50                | 5-00-11-00              | 48              |

<sup>1</sup> Rates apply to cities and incorporated towns.

<sup>2</sup> Rates vary according to population and industry, the higher rates for Montreal and district; all rates apply to males as well as females.

<sup>3</sup> Rates vary according to locality and population.

<sup>4</sup> Rates apply generally throughout province, also to male workers in many cases and to boys under 18 in cities.

<sup>5</sup> Only in cities and within a radius of 5 miles; apply to males as well as females.

<sup>6</sup> Orders apply throughout the province except telephone exchange order which applies only in centres with population of 600 or over.

<sup>7</sup> Rates apply throughout the province. Provision made for washing, curing, packing, etc., (except canning) of fish as follows: experienced—\$15-50 per week (48 hours) or 32 ¼ cents per hour; minors, learners, etc.—\$12-75 to \$14-75 per week.

<sup>8</sup> In some industries, instead of a graduated scale according to experience, stipulated percentages of female workers in each establishment must receive the full minimum wage, while the remainder may work at lower minimum rates.

<sup>9</sup> Hourly rates are fixed for certain industries: adults, experienced—21 to 26 cents per hour; minors, learners, etc.—12 to 22 cents. Establishments with less than 10 workers not covered by another order in municipalities of less than 5,000: adults, experienced—18 cents per hour; minors, learners, etc.—12 and 15 cents per hour.

<sup>10</sup> Custom millinery trades not in factories: minors, learners, etc.—\$5-00 to \$10-00.

<sup>11</sup> 50 hours per week for tailoring, dressmaking, and millinery establishments.

<sup>12</sup> Factory order includes garages and automobile service stations.

<sup>13</sup> Millinery shops, \$4-00-\$10-00 per week.

<sup>14</sup> Not reported.

## Orders of Provincial Minimum Wage Boards, as at Dec. 31, 1937.

Hours of Labour, Report No. 21, issued as a supplement to the *Labour Gazette*, January, 1938.

| Manitoba. <sup>4</sup>       |                          |                  | Saskatchewan. <sup>5</sup> |                          |                 | Alberta. <sup>6</sup> |                          |                 | British Columbia. <sup>7</sup> |                           |                 |
|------------------------------|--------------------------|------------------|----------------------------|--------------------------|-----------------|-----------------------|--------------------------|-----------------|--------------------------------|---------------------------|-----------------|
| Wages per Week.              |                          | Hours per Week.  | Wages per Week.            |                          | Hours per Week. | Wages per Week.       |                          | Hours per Week. | Wages per Week.                |                           | Hours per Week. |
| Adults, Experienced.         | Minors, Learners, etc.   |                  | Adults, Experienced.       | Minors, Learners, etc.   |                 | Adults, Experienced.  | Minors, Learners, etc.   |                 | Adults, Experienced.           | Minors, Learners, etc.    |                 |
| \$                           | \$                       |                  | \$                         | \$                       |                 | \$                    | \$                       |                 | \$                             | \$                        |                 |
| 10-00-12-00                  | 6-00-11-00 <sup>18</sup> | 45 <sup>12</sup> | 12-00 <sup>12</sup>        | 7-00-11-00 <sup>12</sup> | 48              | 12-50                 | 6-00-11-00 <sup>12</sup> | 48              | 14-00                          | 7-00-13-00                | 48 1            |
| 14                           | 14                       | 14               | 14                         | 14                       | 14              | 14                    | 14                       | 14              | 30c. per hr.                   | 14                        | 14 2            |
| 10-00-12-00                  | 6-00-11-00               | 48               | 13-00 <sup>15</sup>        | 7-00-11-00 <sup>15</sup> | 48              | 12-50                 | 9-50-11-50               | 48              | 13-50                          | 8-00-12-00                | 48 3            |
| 10-00-12-00 <sup>17</sup>    | 6-00-11-00 <sup>17</sup> | 48               | 14-00 <sup>17</sup>        | 6-00-12-00 <sup>17</sup> | 48              | 12-50 <sup>19</sup>   | 7-50-11-00 <sup>19</sup> | 48              | 12-75                          | 7-50-12-00                | 48 4            |
| 9-60 and 12-00 <sup>21</sup> | 9-60                     | 48               | 10-00-12-00 <sup>22</sup>  | 8-00-10-00               | 48              | 12-50 <sup>23</sup>   | 9-00-11-00 <sup>23</sup> | 48              | 14-00 <sup>24</sup>            | 12-00 <sup>24</sup>       | 48 5            |
| 12-00                        | 8-00-11-00               | 48               | 13-00                      | 6-00-12-00               | 48              | 14-00                 | 6-00-12-00               | 48              | 14-25                          | 10-00-13-00               | 11 6            |
| 12-00 <sup>27</sup>          | 14                       | 48               | 14                         | 14                       | 14              | 14-00                 | 14                       | 48              | 14-25 <sup>28</sup>            | 14                        | 48 7            |
| 12-50 <sup>29</sup>          | 8-00-11-50 <sup>30</sup> | 44               | 14                         | 14                       | 14              | 14-00 <sup>31</sup>   | 7-50-12-00 <sup>31</sup> | 48              | 15-00                          | 11-00-14-00               | 48 8            |
| 10-00-12-00                  | 14                       | 48               | 14                         | 14                       | 14              | 14-00 <sup>32</sup>   | 7-50-12-00 <sup>32</sup> | 48              | 15-00 <sup>32</sup>            | 11-00-13-00 <sup>32</sup> | 48 9            |

<sup>12</sup> Order includes fur-sewing, dressmaking, and millinery establishments.<sup>15</sup> Apply also to departmental and chain stores and wholesale establishments.<sup>17</sup> For both male and female employees; apply also to departmental stores and mail-order houses (under separate order).<sup>19</sup> Apply also to wholesale and mail-order houses; delivery service provided for as follows: experienced—\$3-00; inexperienced—\$3-60 to \$3-90.<sup>21</sup> Apply also to wholesale and mail-order houses.<sup>23</sup> Hotels, per month with room and board. Restaurants, 17 and 15 cents per hour.<sup>25</sup> Higher rate applies to Winnipeg and district, and Brandon at any time; to Portage la Prairie, May to October, and to any summer resort, June to September.<sup>27</sup> Or 25 cents an hour; adults, inexperienced—10½ cents per hour, first six months; 21 cents second six months.<sup>29</sup> Restaurants only—any place where meals provided.<sup>31</sup> Apply also to chambermaids in lodging houses and to elevator operators; there is a separate order for janitresses in apartment houses.<sup>32</sup> Shoe shine parlours in Toronto only, all \$12-50 (under separate order).<sup>34</sup> Or 25 to 30 cents per hour.<sup>36</sup> No minors to be employed.<sup>38</sup> Applies also to attendants at garages and automobile service stations, drivers of motor cars and other vehicles.<sup>40</sup> Apply also to elevator operators including learners (under separate order).<sup>42</sup> Winnipeg, St. Boniface and St. James, only.<sup>44</sup> Apply also to attendants in physicians', dentists' and optometrists' offices.<sup>46</sup> Apply also to telegraph employees.

In the preceding table figures for adult learners and for minors and apprentices are shown in a range covering both classes. There is wide variation in the rates for such classes in the several industries and the time allowed for such periods varies in most cases from one year to 18 months. Probationary periods (usually 3 months) without pay are allowed in some cases—beauty parlours, millinery, dress-making in shops, etc. Where no rates for minors, learners, etc., are shown the rates for experienced adults apply.

#### Subsection 2.—Minimum Wages for Male Employees.

Provisions for minimum wage rates for male employees are outlined in the Wages and Hours Supplement to the *Labour Gazette*, January, 1938, pp. 135-143, a summary of which follows:—

In Prince Edward Island, the city of Charlottetown, as authorized by an amendment to its incorporating Act, has established by by-law a minimum wage rate of 35 cents per hour for labourers and workmen engaged by contractors.

In New Brunswick, the Fair Wage Act, 1936, amended in 1937, provides for the establishment of minimum rates of wages and maximum hours for both male and female workers. Orders were issued in 1937 for a number of individual establishments but none of general application in any trade or industry. Under the Forest Operations Act, the Commission during 1937 established for stream-driving a minimum average rate of \$3 per day and board net, or its equivalent in case of piece work. For booming and sorting a minimum rate of 28 cents an hour without board was set. For cutting, yarding, and hauling, a minimum rate of \$34 and a minimum average rate of \$40 per month and board, net, were fixed.

In Quebec, the Fair Wage Act, 1937, replacing the Women's Minimum Wage Act, applies to both male and female workers and orders under the new Act provided that all existing minimum wage orders should apply to male as well as female workers in all the industries so covered until replaced by new orders. Under the Act to Assure Reasonable Wages for Workmen engaged in Forest Operations, a minimum of \$45 per month with board, was established except for youths 18 to 20 years for whom the minimum is \$30 per month with board; regular hours are limited to 60 per week.

In Ontario, until repealed in 1937, the Minimum Wage Act had provided that wherever a male employee replaces a female employee in any class of industry, the male employee must be paid at least the minimum rate established. This Act was replaced by the Minimum Wage Act, 1937, applying to both male and female workers. At the end of the year 1937, no orders had been issued under the new Act and the old orders were still in effect.

In Manitoba, the Minimum Wage Act provides that when a minimum wage scale has been established for any industry, no person of the age of 18 years or over may be paid less than 25 cents per hour except where the Board has passed specific regulations providing for a different rate. As all industries except farming, market gardening, and domestic service are now under regulation, the above minimum rate of 25 cents per hour for male persons of 18 years of age or over applies to all except where special regulations have been made, as follows: The orders governing manufacturing and general occupations, departmental stores and mail-order houses, retail and wholesale stores, and general employees apply to male as well as female employees. For hotels, restaurants, etc., the minimum for male workers over 18 is \$12 per week of 48 hours or 25 cents per hour in Greater Winnipeg and Brandon at any time and in Portage la Prairie and summer resorts during summer months, and \$10 per week of

48 hours or 21 cents per hour in the rest of the province. All orders apply to boys under 18 in cities except that special orders for boys under 18 in cities provide for minimum rates of \$8 to \$10 in manufacturing establishments, hotels, garages, etc. For apprentices, the rates specified in the indenture must have the approval of the Board but may not be less than the rates established in the industry for persons under 18 years. The Taxicab Act establishes for Greater Winnipeg a minimum of \$17.50 per week or 40 cents per hour with a minimum of \$1.60 per day, hours not to exceed 12 per day, 6 days per week. The Highway Traffic Act sets minimum rates for drivers of public passenger vehicles at \$80 per month or \$20 per week, 9 hours per day for driving, 12 hours in any capacity, 6 days per week. The Fair Wage Act provides for minimum wages and maximum hours on public works under contract, and also on private construction work as defined in the Act, under schedules approved by the Minister of Public Works.

In Saskatchewan, minimum wage rates for female employees now extend to male employees. The Coal Mining Industry Act, 1935, and an amendment to the Public Services Vehicles Act in 1935 provide for the establishment of minimum wage rates but none had been set by the end of 1937.

In Alberta, under the Male Minimum Wage Act, a general order covers all workers except those engaged in farm work and domestic service, those working under schedules under the Industrial Standards Act and casual, seasonal or temporary workers for employers not engaged in the industry, and except woodworking, etc., in rural districts. The general order establishes a minimum of 33½ cents per hour for full-time employees over 21 years with at least one year's experience and 28 and 30 cents for such employees with less than one year's experience; for full-time employees under 21 years, the minimum rates are from 20 cents for beginners to 33½ cents after three years' experience. Corresponding minimum rates for part-time employees are from 30 to 40 cents for those over 21 and from 23 to 35 cents for those under 21. A special order for employees of sawmills, box factories, woodworking, logging, and tie-cutting in rural districts provided minimum rates of 25 and 28 cents per hour. Under the Public Service Vehicles Act, 1936, an order provides for a minimum rate of \$15 per week of 6 days for taxi drivers in the city of Calgary.

In British Columbia, under the Male Minimum Wage Act, 1934, applying to all occupations except farm labourers and domestic servants, orders have been issued as to the following: logging, sawmilling, shingle, furniture and woodworking industries, baking, fruit and vegetable canning, preserving, etc., construction, the carpentry trade in Victoria and vicinity, shipbuilding, transportation (other than rail, water, or air), wholesale and retail establishments, stationary steam engineers, barbering (excluding beauty parlours), elevator operators, first-aid attendants, and janitors. In many instances the minimum rates for unskilled labour are 40 cents per hour for males over 21 years of age, 25 to 35 cents for those between 18 and 21, with 20 to 25 cents per hour for those under 18. In addition, the Female Minimum Wage Act, 1934, provided that where a minimum wage rate has been set for female workers in any industry, male workers may not be employed at work usually done by female employees at less than the fixed minimum wage.

### Subsection 3.—Wages and Hours of Labour under Collective Agreements and Schedules of Wages and Hours Made Obligatory by Order in Council in Certain Provinces.

In Nova Scotia, under the Industrial Standards Act, 1936, minimum wage rates and standard hours have been fixed for bricklayers, carpenters, electrical workers, plumbers and steamfitters in Halifax and Dartmouth.

In Quebec, under the Collective Labour Agreements Extension Act, 1934, and the Workmen's Wages Act, 1937, which replaced it, wages and hours in agreements between representatives of employers and of workers have been extended and made compulsory for all employers in the trade or industry in the district affected, and were in effect at the end of 1937, as follows: for the whole province, in certain manufacturing industries, *viz.*, boots and shoes, gloves, men's and boys' clothing (except work clothing), children's clothing, women's coats and suits, dress cutting, furniture, also for granite, marble and stone quarrying; in practically all of the province, for building trades; in most of the cities and towns and in some villages for the barbering and hairdressing trades; in three districts, which include all cities of over 11,000 population, for job-printing trades; iron oxide mining and aluminium smelting in the only districts in which these industries are carried on; in the five largest cities and Sorel, for bakeries; in Sorel, for butchers; in the Montreal and Quebec districts, for ornamental iron and bronze work; in Montreal and district, for the fur industry and for women's and children's millinery; in Montreal, for longshoremen (inland navigation) and in Sorel, for all longshoremen; in Sorel, for taxi drivers; in four northern towns, for clerks and accountants; in four Eastern Township counties, for horseshoers and wheelwrights; in Montreal and Victoriaville, for shoe repairing.

In Ontario, under the Industrial Standards Act, 1935, wages and hours schedules have been made binding by Order in Council and were effective at the end of 1937, for the following industries: throughout the province, for breweries, furniture (wood and soft) factories, men's and boys' clothing factories, women's cloak and suit factories, and millinery shops; in four districts, for the logging industry; in Toronto and Ottawa, for the principal building trades; and in Kingston, Cornwall, Pembroke, Hamilton, Kitchener, London, Windsor, Sault Ste. Marie, Timmins, Port Arthur, and Fort William, for one or more of the building trades; and also in 31 cities and towns for barbers.

In Saskatchewan, under the Industrial Standards Act, 1937, schedules have been put into effect by Order in Council, as follows: one building trade in Moose Jaw and Saskatoon and two building trades in Regina; barbers and hairdressers in four districts; shoe repairing at Regina and sign painting at Moose Jaw.

In Alberta under the Industrial Standards Act, 1935, schedules have been put into effect by Order in Council and were effective at the end of 1937, as follows: throughout the province, for the brewing industry; in Calgary, Edmonton and the adjacent districts, for bakers; two building trades at Calgary and two at Edmonton and their surrounding districts; creosote workers at Calgary and taxi drivers at Edmonton.

### Section 3.—Cost of Living of Wage-Earners.

An index number of the cost of living in working-men's families has been computed by the Department of Labour since 1913, and is published monthly in the *Labour Gazette*. This index is specifically designed for the purpose of measuring the trends of the cost of living for certain wage-earning classes with a somewhat lower standard of living than that which is measured by the Bureau of Statistics index number of retail prices, shown on pp. 819-823 of the present volume. The former wage-earners index is used extensively in negotiations as to wage rates and in the settlement of industrial disputes. An abridgment of this index is presented in Table 4.

## 4.—Changes in the Cost of Living in Canada from 1914 to 1937.

(Average prices in 1913=100.)

| Year and Month.     | Food. | Fuel and Light. | Rent. | Clothing. | Sundries. | All Items. <sup>1</sup> |
|---------------------|-------|-----------------|-------|-----------|-----------|-------------------------|
| 1914, December..... | 108   | 98              | 97    | 103       | 100       | 103                     |
| 1915 ".....         | 111   | 96              | 94    | 115       | 110       | 107                     |
| 1916 ".....         | 138   | 109             | 95    | 136       | 122       | 124                     |
| 1917 ".....         | 167   | 125             | 102   | 158       | 134       | 143                     |
| 1918 ".....         | 186   | 146             | 111   | 185       | 151       | 162                     |
| 1919 ".....         | 201   | 148             | 122   | 210       | 164       | 176                     |
| 1920 ".....         | 202   | 200             | 142   | 232       | 173       | 190                     |
| 1921 ".....         | 150   | 172             | 150   | 177       | 173       | 161                     |
| 1922 ".....         | 142   | 177             | 155   | 162       | 174       | 157                     |
| 1923 ".....         | 146   | 172             | 158   | 164       | 171       | 156                     |
| 1924 ".....         | 144   | 162             | 158   | 159       | 169       | 156                     |
| 1925 ".....         | 157   | 166             | 158   | 159       | 166       | 160                     |
| 1926 ".....         | 152   | 162             | 156   | 157       | 166       | 157                     |
| 1927 ".....         | 152   | 158             | 156   | 155       | 166       | 157                     |
| 1928 ".....         | 154   | 157             | 157   | 157       | 166       | 158                     |
| 1929 ".....         | 161   | 157             | 158   | 156       | 166       | 160                     |
| 1930 ".....         | 138   | 156             | 160   | 148       | 165       | 151                     |
| 1931 ".....         | 107   | 152             | 158   | 127       | 163       | 135                     |
| 1932 ".....         | 96    | 145             | 141   | 114       | 161       | 125                     |
| 1933 ".....         | 100   | 142             | 139   | 113       | 157       | 123                     |
| 1934 ".....         | 103   | 144             | 139   | 115       | 154       | 123                     |
| 1935 ".....         | 111   | 141             | 132   | 115       | 154       | 127                     |
| 1936—               |       |                 |       |           |           |                         |
| March.....          | 111   | 142             | 132   | 114       | 154       | 126                     |
| June.....           | 106   | 140             | 133   | 114       | 154       | 125                     |
| September.....      | 113   | 140             | 133   | 114       | 153       | 127                     |
| December.....       | 114   | 142             | 135   | 115       | 154       | 128                     |
| 1937—               |       |                 |       |           |           |                         |
| January.....        | 115   | 141             | 135   | 115       | 154       | 129                     |
| February.....       | 118   | 141             | 135   | 115       | 154       | 129                     |
| March.....          | 116   | 141             | 135   | 117       | 154       | 129                     |
| April.....          | 116   | 141             | 135   | 117       | 154       | 130                     |
| May.....            | 117   | 139             | 140   | 117       | 154       | 131                     |
| June.....           | 116   | 138             | 140   | 117       | 154       | 130                     |
| July.....           | 117   | 138             | 140   | 118       | 155       | 131                     |
| August.....         | 120   | 138             | 140   | 118       | 155       | 132                     |
| September.....      | 119   | 138             | 140   | 118       | 155       | 131                     |
| October.....        | 119   | 139             | 142   | 118       | 157       | 132                     |
| November.....       | 120   | 140             | 142   | 118       | 157       | 132                     |
| December.....       | 120   | 140             | 142   | 118       | 157       | 133                     |

<sup>1</sup> The figures for "All Items" were calculated by giving the following weights to each group: Food, 35 p.c.; Fuel, 8 p.c.; Rent, 18½ p.c.; Clothing, 18½ p.c.; Sundries, 20 p.c.

## Section 4.—Earnings in the Census Year 1931.

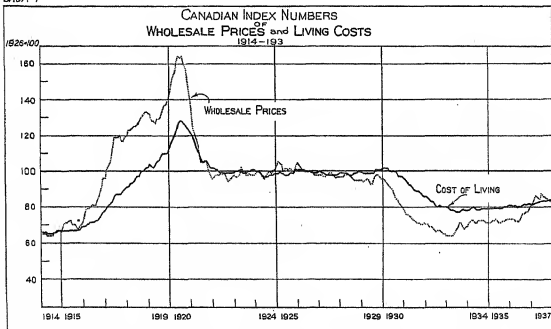
The total number of wage-earners in Canada reporting earnings for the census year ended June 1, 1931, was 2,476,414 or 96·35 p.c. of all wage-earners and the total amount of their earnings was \$2,100,552,700. A table at p. 789 of the 1937 Year Book showed statistics of wage-earners, by sex, and their earnings, for the census years 1911, 1921, and 1931.



## CHAPTER XX.—PRICES.\*

For purposes of statistical analysis, commodity prices are usually divided into two principal groups, wholesale prices and retail prices. The term 'wholesale' is not used literally, and included in this group primary producers', factory, and jobbers' quotations are often found, as well as actual wholesale prices. Markets in which this type of price is quoted are usually well organized, and frequently very sensitive. They are responsive to changing business and monetary conditions. Wholesale quotations are accordingly preferred, therefore, for sensitive index numbers of prices designed to reflect price reactions to business factors, and for more general index numbers to furnish a basis of measuring changes in the purchasing power of money. Although possessing admitted defects, general wholesale price index numbers are widely used for this latter purpose.

Chart 1



Retail prices represent more diffused markets, and are less sensitive. There is ordinarily a lag of several months between this type of quotation and its wholesale counterpart. Retail prices are important from a statistical point of view, however, because they indicate changes in living costs and, along with measurements of income, show fluctuations in the economic well-being of the community.

### Section 1.—Wholesale Prices of Commodities.

#### Subsection 1.—Historical Review of Canadian Prices.

Annual average index numbers for every year since Confederation are given in Table 1. In that table will be noted the high prices of 1867, following the close of the American Civil War and the Austro-Prussian War of 1866, and the tendency

\* Revised by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics. This Branch compiles and publishes statistics on: Prices (wholesale, retail, securities, bond yields, services, exchange, cost of living), Retail and Wholesale Trade, Foreign Capital Investments in Canada and Canadian Investments Abroad, Balance of International Payments, and other related subjects. For a complete list of the publications of this Branch, the reader is referred to Chapter XXIX, Section I, under "Internal Trade".

to declining prices in subsequent years. Prices went up again after the Franco-German War of 1871 and reached a high point in 1872 and 1873, but the crisis of the latter year resulted in a decline. A downward trend persisted fairly steadily throughout the 25 years from 1872 to 1897, when the gold supply of the world did not increase as rapidly as the supply of commodities. This gold shortage was accentuated by the demonetization of silver, which ceased to be legal tender and was reduced to the level of token money by most nations. Relief came through the discoveries of gold in the Rand mines and the application of the cyanide process to low-grade ores. The result was a rapidly increasing world production of gold from about 1890 to the outbreak of the Great War, with consequent rising prices as the volume of the new gold became an appreciable part of the total stock. Thus prices increased from the low point of 75.6 in 1897 to 100 in 1913 and 102.3 in 1914. Afterwards, the Great War, both through the scarcity of commodities which it occasioned and the inflation of the currency which it produced, drove prices rapidly upward to a maximum of 243.5 in 1920, followed by a rapid drop to 152.0 in 1922. This was succeeded by a slight increase to 160.3 in 1925. The tendency from 1925 to 1929 was gradually downward, although the period was one of increasing prosperity.

Commencing in the autumn of 1929, the severe economic depression was accompanied by a drastic decline in wholesale prices. Its extent may be gauged from the drop of the wholesale price index from 153.7 in August, 1929, to 99.2 in February, 1933. A subsequent irregular rise carried this index upward to 132.1 in 1937, although the trend of prices was downward in the latter half of that year.

### 1.—Annual Index Numbers of Wholesale Prices in Canada, 1867-1937.

(1913=100.)

| Year.     | Index No. | Year.     | Index No. | Year.     | Index No. | Year.     | Index No. |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1867..... | 133.0     | 1885..... | 92.7      | 1903..... | 86.9      | 1921..... | 171.8     |
| 1868..... | 128.7     | 1886..... | 90.7      | 1904..... | 87.0      | 1922..... | 152.0     |
| 1869..... | 126.6     | 1887..... | 91.9      | 1905..... | 87.8      | 1923..... | 153.0     |
| 1870..... | 123.5     | 1888..... | 93.5      | 1906..... | 92.6      | 1924..... | 155.2     |
| 1871..... | 124.5     | 1889..... | 92.6      | 1907..... | 96.2      | 1925..... | 160.3     |
| 1872..... | 135.7     | 1890..... | 93.0      | 1908..... | 90.9      | 1926..... | 156.2     |
| 1873..... | 138.8     | 1891..... | 91.4      | 1909..... | 91.4      | 1927..... | 152.6     |
| 1874..... | 129.0     | 1892..... | 86.2      | 1910..... | 94.3      | 1928..... | 150.6     |
| 1875..... | 120.7     | 1893..... | 85.2      | 1911..... | 95.0      | 1929..... | 149.3     |
| 1876..... | 116.6     | 1894..... | 80.6      | 1912..... | 99.5      | 1930..... | 135.3     |
| 1877..... | 115.1     | 1895..... | 79.6      | 1913..... | 100.0     | 1931..... | 112.6     |
| 1878..... | 104.3     | 1896..... | 76.0      | 1914..... | 102.3     | 1932..... | 104.2     |
| 1879..... | 101.0     | 1897..... | 75.6      | 1915..... | 109.9     | 1933..... | 104.8     |
| 1880..... | 112.9     | 1898..... | 77.8      | 1916..... | 131.6     | 1934..... | 111.8     |
| 1881..... | 109.9     | 1899..... | 81.4      | 1917..... | 178.5     | 1935..... | 112.6     |
| 1882..... | 112.1     | 1900..... | 85.8      | 1918..... | 199.0     | 1936..... | 116.5     |
| 1883..... | 106.0     | 1901..... | 84.5      | 1919..... | 209.2     | 1937..... | 132.1     |
| 1884..... | 100.6     | 1902..... | 86.2      | 1920..... | 243.5     |           |           |

### Subsection 2.—The Index Number on a Post-War Base (1926).

The official Canadian index numbers of wholesale prices, along with the other price indexes computed by the Dominion Bureau of Statistics, were revised in 1928, when the list of commodities included was increased from 236 to 502. The weighting system was extended to obtain a fairer distribution among sub-groups, and the base was shifted to the year 1926. By that time most of the leading countries of the world had completed the first phase of post-war currency reorganization, and a reasonable degree of price stability seemed to have been established. Commodities and weights were again revised at the beginning of 1934, bringing the total number of price series in the index up to 567.

From 1926 to the latter part of 1929 a moderate decline occurred, but its effect upon the price structure was not great. Subsequent dislocation, however, was extremely serious, as may be observed from the following percentage declines of group prices between August, 1929, and February, 1933: Canadian farm products, 60.7 p.c.; raw and partly manufactured materials, 50.5 p.c.; fully and chiefly manufactured goods, 29.3 p.c.; and the average of all commodities at wholesale, 35.5 p.c. From March, 1933, to July, 1937, the movement of commodity prices was irregularly upward, culminating in a sharp rise dating from June, 1936. The July, 1937, index of 87.5 was 36 p.c. above that for February, 1933, although this increase was partly cancelled by a decline of 2.9 points in the last five months of the year. The following index numbers show the relationship between the average of all commodities and specified commodity groups for December, 1937: all commodities, 100.0; Canadian farm products, 101.8; raw and partly manufactured materials, 97.7; and fully and chiefly manufactured materials, 97.0. This represents material improvement over conditions existing at the nadir of the depression, and points to a substantial restoration of equilibrium between the major price groups.

## 2.—Weighted General Wholesale Price Index Numbers, by Months, 1925-37.

(1926=100.)

| Month.           | 1928. | 1929. | 1930. | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. | 1937. |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| January.....     | 96.9  | 94.0  | 95.3  | 75.9  | 69.5  | 63.8  | 70.7  | 71.4  | 72.9  | 81.0  |
| February.....    | 96.8  | 95.0  | 93.9  | 75.5  | 68.9  | 63.5  | 72.1  | 71.8  | 72.5  | 82.9  |
| March.....       | 97.7  | 95.6  | 91.8  | 74.5  | 69.0  | 64.3  | 72.1  | 71.9  | 72.4  | 85.4  |
| April.....       | 98.3  | 94.5  | 91.2  | 73.9  | 68.2  | 65.3  | 71.3  | 72.5  | 72.2  | 86.2  |
| May.....         | 97.9  | 93.4  | 89.7  | 72.5  | 67.4  | 66.7  | 71.1  | 72.2  | 71.9  | 85.2  |
| June.....        | 96.9  | 93.4  | 87.7  | 71.8  | 66.4  | 67.5  | 72.0  | 71.4  | 72.3  | 84.6  |
| July.....        | 96.0  | 97.2  | 85.3  | 71.3  | 66.5  | 70.5  | 72.0  | 71.4  | 74.3  | 87.6  |
| August.....      | 95.3  | 98.4  | 83.7  | 70.5  | 66.7  | 69.5  | 72.2  | 71.7  | 76.1  | 85.6  |
| September.....   | 95.4  | 97.8  | 82.1  | 69.7  | 65.9  | 68.9  | 71.9  | 72.4  | 76.4  | 85.0  |
| October.....     | 95.2  | 96.8  | 81.0  | 69.9  | 65.0  | 67.9  | 71.3  | 73.1  | 77.1  | 84.7  |
| November.....    | 94.9  | 95.7  | 79.5  | 70.7  | 64.7  | 68.9  | 71.1  | 72.7  | 77.2  | 83.1  |
| December.....    | 94.6  | 96.0  | 77.7  | 70.4  | 64.0  | 69.0  | 71.1  | 72.7  | 79.6  | 82.7  |
| Yearly Averages. | 96.4  | 95.6  | 86.6  | 72.1  | 66.7  | 67.1  | 71.6  | 72.1  | 74.6  | 84.6  |

This irregular rise in Canadian price levels which dates from February, 1933, received its first major setback in the last half of 1937. The Bureau's index of wholesale prices for December was 82.7 on the base 1926=100; it compared with a December 1936 figure of 79.6, and indicated a net rise of 3.9 p.c. Year-end indexes alone, however, fail to give a true picture of price movements. The rapid advance which featured the latter half of 1936 continued at an accelerated pace until the final week of March when the Bureau's weekly index reached a peak of 86.9. Coincident with subsequent recession in world commodity markets, Canadian price levels reacted moderately carrying the index to 84.1 for the week ended June 11. Rapid deterioration of the grain crop on the Prairies then stimulated an advance in the Canadian farm products index of more than 12 p.c. in the next 5 weeks, while the general index rose 4 p.c. to 87.7. A second decline commenced in August, and subsequent monthly indexes fell steadily with many wholesale prices ending the year considerably below opening figures.

Movements of indexes for the various component materials showed less variation in 1937 than in 1936. In the preceding year the range of dispersion was marked by vegetable products which advanced 25.2 p.c. and by a rise of 0.6 p.c. for non-metallic mineral products. In 1937 the range was from +13.9 p.c. to -7.1 p.c., and the actual percentage changes were as follows: vegetable products +1.5, animal products +5.8, textiles -2.7, wood products +8.5, iron and its products +13.9, non-ferrous metals -7.1, non-metallic minerals +1.4, and chemicals +2.0.

### 3.—Annual Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), by Groups (Chief Component Material Classification), 1913-37, with Monthly Figures for 1936-37.

NOTE.—Monthly figures for 1932 and 1933 will be found at p. 863 of the 1934-35 Year Book, for 1934 at p. 807 of the 1936 Year Book, for 1935 at p. 793 of the 1937 Year Book, and those for certain earlier years in the corresponding table of previous editions.

| Year and Month.                         | Vegetable Products. | Animals and Their Products. | Fibres, Textiles and Textile Products. | Wood, Wood Products and Paper. | Iron and Its Products. | Non-Ferrous Metals and Their Products. | Non-Metallic Minerals and Their Products. | Chemicals and Allied Products. | All Commodities. |
|---|---------------------|-----------------------------|--|--------------------------------|------------------------|--|---|--------------------------------|------------------|
| Numbers of Commodity Price Series Used. |                     |                             |  |                                |                        |  |   |                                |                  |
| 1913-25.....                            | 67                  | 50                          | 28                                     | 21                             | 26                     | 15                                     | 16  | 13                             | 236              |
| 1926-33.....                            | 124                 | 74                          | 60                                     | 44                             | 39                     | 15                                     | 73  | 73                             | 562              |
| 1934-37.....                            | 135                 | 76                          | 85                                     | 49                             | 44                     | 18                                     | 83  | 77                             | 567              |
| Index Numbers.                          |                     |                             |  |                                |                        |  |   |                                |                  |
| 1913.....                               | 58.1                | 70.9                        | 58.2                                   | 63.9                           | 68.9                   | 98.4                                   | 56.8                                      | 63.4                           | 64.0             |
| 1914.....                               | 64.8                | 72.6                        | 56.9                                   | 60.3                           | 67.3                   | 94.7                                   | 53.7                                      | 65.3                           | 65.5             |
| 1915.....                               | 75.6                | 74.0                        | 58.3                                   | 56.5                           | 73.9                   | 106.9                                  | 52.7                                      | 68.1                           | 70.4             |
| 1916.....                               | 87.0                | 85.0                        | 77.6                                   | 69.9                           | 104.6                  | 135.1                                  | 58.0                                      | 78.0                           | 84.3             |
| 1917.....                               | 124.5               | 110.4                       | 114.6                                  | 70.8                           | 151.8                  | 143.9                                  | 71.6                                      | 98.1                           | 114.3            |
| 1918.....                               | 127.9               | 127.1                       | 157.1                                  | 89.1                           | 156.7                  | 141.9                                  | 82.3                                      | 118.7                          | 127.4            |
| 1919.....                               | 136.1               | 140.8                       | 163.8                                  | 109.6                          | 139.1                  | 133.5                                  | 93.0                                      | 117.5                          | 123.9            |
| 1920.....                               | 167.0               | 145.1                       | 176.6                                  | 154.4                          | 168.4                  | 135.5                                  | 112.2                                     | 141.5                          | 155.9            |
| 1921.....                               | 103.5               | 109.6                       | 96.0                                   | 129.4                          | 128.0                  | 97.0                                   | 116.6                                     | 117.0                          | 110.0            |
| 1922.....                               | 86.2                | 96.0                        | 101.7                                  | 106.3                          | 104.6                  | 97.3                                   | 107.0                                     | 105.4                          | 97.3             |
| 1923.....                               | 83.7                | 95.0                        | 116.9                                  | 113.0                          | 115.8                  | 95.3                                   | 104.4                                     | 104.4                          | 98.0             |
| 1924.....                               | 89.2                | 91.8                        | 117.9                                  | 105.9                          | 111.0                  | 94.8                                   | 104.1                                     | 102.5                          | 99.4             |
| 1925.....                               | 100.6               | 100.3                       | 112.5                                  | 101.6                          | 104.5                  | 103.9                                  | 100.3                                     | 99.6                           | 102.6            |
| 1926.....                               | 100.0               | 100.0                       | 100.0                                  | 100.0                          | 100.0                  | 100.0                                  | 100.0                                     | 100.0                          | 100.0            |
| 1927.....                               | 98.3                | 101.9                       | 93.7                                   | 98.5                           | 96.2                   | 61.5                                   | 96.5                                      | 98.3                           | 97.7             |
| 1928.....                               | 93.0                | 108.1                       | 94.5                                   | 98.7                           | 93.2                   | 92.0                                   | 92.5                                      | 95.3                           | 90.4             |
| 1929.....                               | 91.6                | 109.0                       | 91.3                                   | 93.9                           | 93.7                   | 92.2                                   | 92.9                                      | 95.4                           | 95.6             |
| 1930.....                               | 77.7                | 99.1                        | 81.8                                   | 88.7                           | 91.1                   | 80.7                                   | 91.3                                      | 92.8                           | 86.6             |
| 1931.....                               | 56.9                | 73.9                        | 73.4                                   | 79.1                           | 87.4                   | 64.6                                   | 86.5                                      | 86.7                           | 72.1             |
| 1932.....                               | 54.8                | 59.7                        | 69.7                                   | 69.1                           | 86.3                   | 59.0                                   | 85.5                                      | 83.9                           | 66.7             |
| 1933.....                               | 59.3                | 59.4                        | 69.7                                   | 62.8                           | 85.4                   | 64.3                                   | 84.4                                      | 81.3                           | 67.1             |
| 1934.....                               | 66.6                | 67.2                        | 72.9                                   | 65.4                           | 87.0                   | 64.3                                   | 86.0                                      | 81.2                           | 71.6             |
| 1935.....                               | 67.3                | 70.4                        | 70.2                                   | 64.6                           | 87.2                   | 69.1                                   | 85.5                                      | 79.1                           | 72.1             |
| 1936.....                               | 73.6                | 71.8                        | 69.6                                   | 68.5                           | 88.0                   | 70.0                                   | 85.5                                      | 78.0                           | 74.6             |
| 1937.....                               | 88.4                | 78.4                        | 72.7                                   | 76.7                           | 101.8                  | 83.8                                   | 80.6                                      | 81.4                           | 84.6             |
| 1936.                                   |                     |                             |  |                                |                        |  |   |                                |                  |
| January.....                            | 67.7                | 72.9                        | 69.9                                   | 67.4                           | 87.2                   | 68.3                                   | 85.3                                      | 77.3                           | 72.9             |
| February.....                           | 66.4                | 72.1                        | 69.4                                   | 67.8                           | 87.3                   | 68.4                                   | 85.9                                      | 77.2                           | 72.5             |
| March.....                              | 66.7                | 70.5                        | 69.6                                   | 67.8                           | 87.3                   | 69.2                                   | 85.9                                      | 77.2                           | 72.4             |
| April.....                              | 66.5                | 69.9                        | 69.5                                   | 68.0                           | 87.4                   | 69.1                                   | 85.5                                      | 77.4                           | 72.2             |
| May.....                                | 65.7                | 69.1                        | 69.1                                   | 68.2                           | 87.8                   | 69.3                                   | 85.4                                      | 77.2                           | 71.9             |
| June.....                               | 66.9                | 69.7                        | 69.1                                   | 68.1                           | 87.7                   | 67.7                                   | 85.7                                      | 77.2                           | 72.3             |
| July.....                               | 73.1                | 70.5                        | 69.5                                   | 68.2                           | 87.8                   | 68.1                                   | 85.1                                      | 78.3                           | 74.3             |
| August.....                             | 77.5                | 72.3                        | 69.8                                   | 68.6                           | 87.9                   | 69.1                                   | 85.2                                      | 78.4                           | 76.1             |
| September.....                          | 77.4                | 75.4                        | 69.6                                   | 68.8                           | 88.2                   | 70.2                                   | 85.4                                      | 78.5                           | 76.4             |
| October.....                            | 79.6                | 73.4                        | 69.5                                   | 69.3                           | 88.3                   | 70.4                                   | 85.0                                      | 78.7                           | 77.1             |
| November.....                           | 79.1                | 73.5                        | 69.6                                   | 69.4                           | 88.3                   | 74.0                                   | 85.0                                      | 78.8                           | 77.2             |
| December.....                           | 84.0                | 73.9                        | 70.9                                   | 69.6                           | 91.4                   | 77.8                                   | 85.9                                      | 79.1                           | 79.6             |
| 1937.                                   |                     |                             |  |                                |                        |  |   |                                |                  |
| January.....                            | 87.6                | 75.4                        | 72.1                                   | 73.0                           | 92.1                   | 82.5                                   | 85.6                                      | 79.2                           | 81.9             |
| February.....                           | 88.6                | 75.2                        | 73.2                                   | 74.2                           | 94.1                   | 86.2                                   | 86.0                                      | 80.0                           | 81.9             |
| March.....                              | 90.5                | 74.9                        | 73.8                                   | 77.3                           | 100.1                  | 97.6                                   | 85.5                                      | 81.6                           | 85.4             |
| April.....                              | 91.3                | 77.1                        | 75.2                                   | 78.5                           | 102.9                  | 99.6                                   | 85.6                                      | 82.7                           | 86.2             |
| May.....                                | 88.7                | 76.8                        | 75.1                                   | 78.9                           | 102.8                  | 85.9                                   | 86.6                                      | 82.2                           | 85.2             |
| June.....                               | 87.0                | 77.5                        | 74.9                                   | 77.8                           | 103.0                  | 84.3                                   | 86.8                                      | 81.6                           | 84.6             |
| July.....                               | 95.5                | 78.9                        | 74.4                                   | 78.0                           | 103.9                  | 85.9                                   | 87.0                                      | 81.7                           | 87.6             |
| August.....                             | 87.7                | 81.0                        | 73.6                                   | 77.9                           | 104.5                  | 86.3                                   | 87.2                                      | 81.8                           | 85.6             |
| September.....                          | 86.5                | 81.8                        | 71.7                                   | 77.2                           | 105.3                  | 83.4                                   | 87.4                                      | 81.7                           | 85.0             |
| October.....                            | 87.6                | 81.7                        | 70.8                                   | 76.2                           | 105.0                  | 77.4                                   | 87.3                                      | 81.9                           | 84.7             |
| November.....                           | 84.5                | 80.7                        | 69.2                                   | 75.7                           | 104.1                  | 73.7                                   | 87.4                                      | 81.3                           | 83.1             |
| December.....                           | 85.2                | 78.2                        | 69.0                                   | 75.5                           | 103.9                  | 72.5                                   | 87.2                                      | 80.7                           | 82.7             |

#### 4.—Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Purpose, Yearly Averages, 1914-37, and Individual Months, 1936-37.

NOTE.—Monthly figures for 1932 and 1933 will be found at p. 865 of the 1934-35 Year Book, and for 1934 at p. 808 of the 1936 Year Book, for 1935 at p. 794 of the 1937 Year Book and those for certain earlier years in the corresponding table of earlier editions.

| Year and Month.                         | Consumer Goods. |                               |        | Producer Goods. |                       |                       |                             |                  | All Commodities. |
|---|-----------------|-------------------------------|--------|-----------------|-----------------------|-----------------------|-----------------------------|------------------|------------------|
|   | All.            | Foods, Beverages and Tobacco. | Other. | All.            | Pro-ducer Equip-ment. | Producers' Materials. |                             |                  |                  |
|   |                 |                               |        |                 |                       | All.                  | Building and Con-struction. | Manu-fact-uring. |                  |
| Numbers of Commodity Price Series Used. |                 |                               |        |                 |                       |                       |                             |                  |                  |
| 1913-25.....                            | 98              | 74                            | 24     | 146             | 15                    | 131                   | 32                          | 99               | 236              |
| 1926-33.....                            | 204             | 116                           | 88     | 351             | 22                    | 329                   | 97                          | 232              | 502              |
| 1934-37.....                            | 236             | 126                           | 110    | 402             | 24                    | 378                   | 111                         | 267              | 567              |
| Index Numbers.                          |                 |                               |        |                 |                       |                       |                             |                  |                  |
| 1914.....                               | 62.7            | 65.2                          | 59.7   | 69.7            | 52.0                  | 72.1                  | 62.9                        | 74.3             | 65.5             |
| 1915.....                               | 65.6            | 68.6                          | 61.8   | 77.0            | 53.1                  | 80.2                  | 60.5                        | 84.8             | 70.4             |
| 1916.....                               | 74.7            | 81.7                          | 65.8   | 88.1            | 55.7                  | 92.5                  | 69.6                        | 97.9             | 84.3             |
| 1917.....                               | 95.4            | 109.4                         | 77.6   | 119.6           | 69.6                  | 126.3                 | 87.6                        | 135.5            | 114.3            |
| 1918.....                               | 107.0           | 119.4                         | 91.4   | 131.5           | 80.4                  | 138.3                 | 100.9                       | 147.2            | 127.4            |
| 1919.....                               | 118.7           | 128.2                         | 106.7  | 139.0           | 90.7                  | 145.5                 | 117.3                       | 152.2            | 133.9            |
| 1920.....                               | 140.0           | 151.0                         | 126.3  | 163.1           | 108.6                 | 170.4                 | 144.0                       | 176.6            | 155.9            |
| 1921.....                               | 108.0           | 105.4                         | 111.4  | 112.8           | 113.8                 | 112.6                 | 122.8                       | 110.2            | 110.0            |
| 1922.....                               | 95.1            | 90.2                          | 101.4  | 99.1            | 104.1                 | 98.2                  | 108.7                       | 95.8             | 97.3             |
| 1923.....                               | 93.7            | 91.2                          | 97.0   | 97.8            | 102.5                 | 97.1                  | 111.9                       | 93.7             | 98.0             |
| 1924.....                               | 93.2            | 90.4                          | 96.8   | 99.5            | 102.7                 | 99.0                  | 106.6                       | 97.5             | 99.4             |
| 1925.....                               | 97.2            | 97.7                          | 96.5   | 104.9           | 99.2                  | 105.5                 | 102.9                       | 106.2            | 102.6            |
| 1926.....                               | 100.0           | 100.0                         | 100.0  | 100.0           | 100.0                 | 100.0                 | 100.0                       | 100.0            | 100.0            |
| 1927.....                               | 95.7            | 99.4                          | 93.3   | 98.5            | 101.1                 | 98.2                  | 96.1                        | 93.6             | 97.7             |
| 1928.....                               | 95.6            | 99.6                          | 92.9   | 96.7            | 93.7                  | 97.0                  | 97.4                        | 96.9             | 96.4             |
| 1929.....                               | 94.7            | 100.0                         | 91.1   | 96.1            | 94.6                  | 96.3                  | 99.0                        | 95.9             | 95.6             |
| 1930.....                               | 89.3            | 93.1                          | 86.8   | 82.5            | 92.9                  | 81.7                  | 90.8                        | 79.7             | 86.6             |
| 1931.....                               | 76.2            | 70.4                          | 80.0   | 67.1            | 90.0                  | 64.6                  | 81.9                        | 61.7             | 72.1             |
| 1932.....                               | 71.3            | 61.5                          | 77.8   | 63.4            | 88.7                  | 59.5                  | 77.2                        | 56.5             | 66.7             |
| 1933.....                               | 71.1            | 63.8                          | 76.0   | 63.1            | 86.0                  | 60.5                  | 78.3                        | 57.5             | 67.1             |
| 1934.....                               | 74.1            | 69.7                          | 77.0   | 67.8            | 88.9                  | 65.5                  | 82.5                        | 62.6             | 71.6             |
| 1935.....                               | 73.6            | 70.4                          | 75.7   | 69.5            | 89.8                  | 67.2                  | 81.2                        | 64.8             | 72.1             |
| 1936.....                               | 74.7            | 73.4                          | 75.5   | 72.4            | 90.0                  | 70.4                  | 85.3                        | 67.9             | 74.6             |
| 1937.....                               | 79.5            | 81.2                          | 78.4   | 86.1            | 93.8                  | 85.2                  | 94.4                        | 83.6             | 84.6             |
| 1936.                                   |                 |                               |        |                 |                       |                       |                             |                  |                  |
| January.....                            | 74.2            | 72.4                          | 75.4   | 69.8            | 90.0                  | 67.5                  | 83.6                        | 64.8             | 72.9             |
| February.....                           | 73.9            | 71.3                          | 75.7   | 69.3            | 90.2                  | 67.0                  | 84.2                        | 64.1             | 72.5             |
| March.....                              | 73.8            | 70.8                          | 75.8   | 69.3            | 90.2                  | 67.0                  | 84.2                        | 64.1             | 72.4             |
| April.....                              | 73.3            | 70.3                          | 75.4   | 69.1            | 90.2                  | 66.7                  | 84.6                        | 63.7             | 72.2             |
| May.....                                | 73.2            | 70.1                          | 75.3   | 67.9            | 89.9                  | 65.5                  | 85.0                        | 63.2             | 71.9             |
| June.....                               | 73.7            | 71.2                          | 75.4   | 68.5            | 90.0                  | 66.1                  | 84.8                        | 62.9             | 72.3             |
| July.....                               | 74.3            | 73.3                          | 75.0   | 72.1            | 89.7                  | 70.1                  | 85.2                        | 67.5             | 74.3             |
| August.....                             | 75.5            | 75.6                          | 75.4   | 74.6            | 89.7                  | 72.9                  | 85.6                        | 70.8             | 76.1             |
| September.....                          | 75.5            | 75.6                          | 75.5   | 75.0            | 89.6                  | 73.4                  | 85.8                        | 71.3             | 76.4             |
| October.....                            | 75.8            | 76.4                          | 75.4   | 76.3            | 89.5                  | 74.8                  | 86.4                        | 72.8             | 77.1             |
| November.....                           | 76.0            | 76.2                          | 75.8   | 76.3            | 89.5                  | 74.8                  | 86.6                        | 72.8             | 77.2             |
| December.....                           | 76.9            | 77.5                          | 76.5   | 80.4            | 91.8                  | 79.1                  | 87.8                        | 77.6             | 79.6             |
| 1937.                                   |                 |                               |        |                 |                       |                       |                             |                  |                  |
| January.....                            | 78.0            | 79.4                          | 77.1   | 83.5            | 92.1                  | 82.5                  | 90.0                        | 81.2             | 81.9             |
| February.....                           | 78.6            | 79.7                          | 77.8   | 84.7            | 92.3                  | 83.8                  | 91.8                        | 82.5             | 82.9             |
| March.....                              | 78.3            | 79.4                          | 77.5   | 88.7            | 92.3                  | 88.3                  | 97.3                        | 86.8             | 85.4             |
| April.....                              | 79.1            | 80.7                          | 78.1   | 89.2            | 92.4                  | 88.8                  | 98.2                        | 87.2             | 86.2             |
| May.....                                | 79.2            | 80.0                          | 78.7   | 87.3            | 94.1                  | 86.5                  | 98.0                        | 84.6             | 85.2             |
| June.....                               | 79.5            | 80.3                          | 79.0   | 85.8            | 94.3                  | 84.9                  | 96.4                        | 83.0             | 84.6             |
| July.....                               | 81.2            | 84.4                          | 79.1   | 90.3            | 94.3                  | 89.8                  | 95.7                        | 88.8             | 87.6             |
| August.....                             | 80.6            | 82.8                          | 79.2   | 86.8            | 94.6                  | 85.9                  | 95.4                        | 84.3             | 85.6             |
| September.....                          | 80.5            | 82.1                          | 79.1   | 85.9            | 94.5                  | 84.9                  | 94.3                        | 83.3             | 85.0             |
| October.....                            | 80.6            | 83.0                          | 79.0   | 84.8            | 94.5                  | 83.7                  | 92.6                        | 82.2             | 84.7             |
| November.....                           | 79.7            | 81.6                          | 78.5   | 82.4            | 94.5                  | 81.0                  | 91.8                        | 79.2             | 83.1             |
| December.....                           | 79.1            | 80.2                          | 78.3   | 82.6            | 94.3                  | 81.3                  | 91.7                        | 79.5             | 82.7             |

**5.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Yearly Averages, 1931-37.**

NOTE.—Figures for the years 1918, 1919 and 1921-29 will be found at p. 866 of the 1934-35 Year Book, and those for 1930 at p. 795 of the 1937 Year Book.

| Item.  | Numbers of Commodities. |          |          | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. | 1937. |
|--|-------------------------|----------|----------|-------|-------|-------|-------|-------|-------|-------|
|  | 1913-25.                | 1926-33. | 1934-37. |       |       |       |       |       |       |       |
| Aggregate combined indexes, raw and partly manufactured.   | 107                     | 232      | 245      | 61.9  | 55.0  | 56.6  | 63.5  | 66.0  | 70.8  | 84.3  |
| Aggregate combined indexes, fully and chiefly manufactured | 129                     | 276      | 322      | 74.8  | 69.8  | 70.2  | 73.4  | 72.8  | 73.6  | 80.5  |
| Articles of Farm Origin—                                   |                         |          |          |       |       |       |       |       |       |       |
| 1. Field (grains, etc.)—                                   |                         |          |          |       |       |       |       |       |       |       |
| (a) Raw and partly manufactured.                           | 46                      | 98       | 98       | 44.0  | 41.0  | 45.3  | 54.2  | 56.2  | 63.8  | 82.8  |
| (b) Fully and chiefly manufactured.                        | 41                      | 69       | 91       | 69.5  | 67.1  | 71.2  | 73.9  | 72.8  | 73.8  | 82.4  |
| (c) Combined indexes.                                      | 87                      | 167      | 186      | 57.7  | 55.1  | 59.3  | 64.8  | 65.1  | 69.2  | 83.1  |
| 2. Animal—   |                         |          |          |       |       |       |       |       |       |       |
| (a) Raw and partly manufactured.                           | 25                      | 41       | 46       | 76.8  | 59.9  | 59.0  | 66.0  | 71.6  | 73.6  | 82.7  |
| (b) Fully and chiefly manufactured.                        | 28                      | 49       | 59       | 71.6  | 61.1  | 62.5  | 69.8  | 69.0  | 71.4  | 76.2  |
| (c) Combined indexes.                                      | 53                      | 90       | 105      | 73.9  | 60.6  | 61.0  | 68.2  | 70.6  | 72.4  | 79.0  |
| Canadian Farm Products—                                    |                         |          |          |       |       |       |       |       |       |       |
| 1. Field (grains, etc.)                                    | 20                      | 46       | 52       | 43.6  | 41.1  | 45.8  | 53.8  | 57.3  | 65.8  | 83.3  |
| 2. Animal.   | 16                      | 13       | 18       | 77.6  | 60.7  | 59.7  | 67.7  | 74.0  | 75.3  | 85.0  |
| 3. Combined indexes.                                       | 36                      | 59       | 70       | 56.3  | 48.4  | 51.0  | 60.3  | 63.5  | 69.4  | 87.1  |
| Articles of Marine Origin—                                 |                         |          |          |       |       |       |       |       |       |       |
| (a) Raw and partly manufactured.                           | 2                       | 5        | 5        | 70.3  | 56.2  | 56.2  | 60.3  | 61.8  | 67.1  | 72.1  |
| (b) Fully and chiefly manufactured.                        | 6                       | 11       | 11       | 77.6  | 66.6  | 65.4  | 75.1  | 79.0  | 70.1  | 71.7  |
| (c) Combined indexes.                                      | 8                       | 16       | 16       | 75.6  | 63.8  | 62.9  | 71.1  | 69.2  | 69.3  | 71.8  |
| Articles of Forest Origin—                                 |                         |          |          |       |       |       |       |       |       |       |
| (a) Raw and partly manufactured.                           | 16                      | 31       | 37       | 79.4  | 69.6  | 69.7  | 76.3  | 74.5  | 80.8  | 94.0  |
| (b) Fully and chiefly manufactured.                        | 5                       | 21       | 20       | 78.7  | 68.9  | 57.2  | 56.1  | 56.1  | 57.5  | 61.1  |
| (c) Combined indexes.                                      | 21                      | 52       | 57       | 79.0  | 69.2  | 63.0  | 65.5  | 64.7  | 68.4  | 76.4  |
| Articles of Mineral Origin—                                |                         |          |          |       |       |       |       |       |       |       |
| (a) Raw and partly manufactured.                           | 18                      | 57       | 62       | 77.9  | 77.0  | 75.6  | 77.5  | 79.6  | 79.9  | 85.3  |
| (b) Fully and chiefly manufactured.                        | 49                      | 126      | 141      | 85.1  | 84.9  | 84.6  | 83.0  | 85.3  | 85.2  | 91.6  |
| (c) Combined indexes.                                      | 67                      | 183      | 203      | 81.9  | 81.4  | 80.6  | 82.2  | 82.8  | 82.8  | 88.8  |

<sup>1</sup> Domestic and foreign.

**6.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Months, 1933-37.**

NOTE.—Comparable figures for the years 1926-29 will be found at pp. 807-809 of the 1933 Year Book, and for the years 1930-32 at pp. 867-869 of the 1934-35 Year Book.

| Origin and Year.                        | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|------|------|------|------|------|-------|-------|------|-------|------|------|------|
| Totals, Raw and Partly Manufactured—    |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....                               | 51.2 | 50.6 | 52.1 | 53.0 | 56.0 | 57.6  | 62.9  | 60.9 | 59.9  | 57.5 | 59.3 | 58.9 |
| 1934.....                               | 61.1 | 62.8 | 62.3 | 61.5 | 62.3 | 64.6  | 64.7  | 65.3 | 64.8  | 64.5 | 64.3 | 64.3 |
| 1935.....                               | 64.7 | 64.9 | 65.2 | 66.4 | 66.3 | 65.0  | 64.9  | 65.0 | 67.3  | 67.9 | 67.2 | 67.2 |
| 1936.....                               | 68.0 | 67.5 | 67.3 | 66.8 | 66.2 | 66.6  | 69.7  | 73.0 | 73.0  | 75.2 | 75.8 | 70.3 |
| 1937.....                               | 82.5 | 83.8 | 86.8 | 87.6 | 85.8 | 83.2  | 88.3  | 83.6 | 83.7  | 83.5 | 81.1 | 80.8 |
| Totals, Fully and Chiefly Manufactured— |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....                               | 67.2 | 66.8 | 67.8 | 69.6 | 70.4 | 70.2  | 72.4  | 71.7 | 71.5  | 71.2 | 71.7 | 72.0 |
| 1934.....                               | 73.1 | 74.6 | 75.1 | 74.0 | 73.0 | 73.0  | 73.1  | 73.4 | 73.5  | 72.8 | 73.4 | 72.5 |
| 1935.....                               | 72.6 | 73.4 | 73.3 | 72.3 | 72.3 | 71.5  | 71.8  | 72.4 | 72.4  | 73.3 | 72.9 | 72.0 |
| 1936.....                               | 72.7 | 72.2 | 72.1 | 72.3 | 71.7 | 71.9  | 73.3  | 74.3 | 74.9  | 75.3 | 75.4 | 77.3 |
| 1937.....                               | 78.5 | 78.7 | 79.6 | 80.6 | 80.1 | 80.3  | 82.3  | 81.9 | 81.3  | 81.4 | 80.7 | 80.3 |

6.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base),  
Classified According to Origin and Degree of Manufacture, by Months, 1933-37—  
continued.

| Origin and Year.  | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|------|------|------|------|------|-------|-------|------|-------|------|------|------|
| <b>I. Articles of Farm Origin (domestic and foreign)—</b> |      |      |      |      |      |       |       |      |       |      |      |      |
| <b>A. Field (grains, fruits, cotton, etc.)—</b>           |      |      |      |      |      |       |       |      |       |      |      |      |
| <b>Raw and Partly Manufactured—</b>                       |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....   | 35.1 | 35.8 | 38.3 | 40.7 | 46.5 | 48.8  | 58.6  | 53.5 | 49.4  | 44.4 | 46.3 | 45.3 |
| 1934.....   | 49.0 | 50.6 | 51.0 | 50.2 | 52.1 | 56.4  | 58.1  | 60.2 | 58.4  | 55.2 | 55.1 | 55.2 |
| 1935.....   | 55.4 | 55.4 | 55.7 | 58.4 | 57.0 | 54.9  | 55.2  | 54.0 | 57.3  | 57.9 | 56.4 | 56.2 |
| 1936.....   | 57.2 | 55.9 | 56.3 | 56.2 | 55.0 | 57.1  | 63.8  | 70.3 | 70.4  | 72.1 | 71.8 | 78.0 |
| 1937.....   | 82.7 | 83.9 | 87.4 | 88.1 | 83.8 | 81.1  | 91.0  | 80.4 | 79.8  | 80.8 | 76.4 | 77.6 |
| <b>Fully and Chiefly Manufactured—</b>                    |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....   | 64.6 | 64.2 | 64.7 | 70.2 | 73.2 | 72.5  | 77.3  | 75.0 | 74.1  | 72.7 | 73.3 | 73.2 |
| 1934.....   | 74.5 | 75.4 | 75.5 | 74.1 | 73.6 | 73.0  | 73.6  | 74.3 | 73.8  | 73.1 | 73.0 | 73.3 |
| 1935.....   | 73.4 | 73.7 | 73.7 | 74.5 | 73.7 | 72.5  | 72.0  | 72.1 | 71.7  | 72.6 | 71.8 | 71.8 |
| 1936.....   | 72.0 | 71.3 | 71.4 | 71.1 | 70.5 | 70.3  | 73.2  | 75.6 | 75.5  | 77.5 | 77.6 | 80.7 |
| 1937.....   | 81.7 | 82.0 | 83.2 | 84.4 | 83.8 | 83.3  | 87.3  | 84.6 | 83.0  | 83.3 | 82.3 | 82.5 |
| <b>Total—</b>   |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....   | 51.0 | 51.1 | 52.5 | 56.6 | 60.9 | 61.6  | 68.7  | 65.1 | 62.7  | 59.6 | 60.8 | 60.3 |
| 1934.....   | 62.7 | 64.0 | 64.2 | 63.1 | 63.7 | 65.3  | 66.4  | 67.8 | 66.7  | 64.8 | 64.7 | 64.9 |
| 1935.....   | 65.1 | 65.3 | 65.4 | 67.1 | 66.0 | 64.4  | 64.2  | 64.2 | 65.1  | 65.8 | 64.7 | 64.6 |
| 1936.....   | 65.2 | 64.2 | 64.4 | 64.2 | 63.3 | 64.2  | 68.9  | 73.1 | 73.1  | 75.0 | 74.9 | 79.5 |
| 1937.....   | 82.2 | 82.9 | 85.1 | 86.1 | 83.8 | 82.3  | 89.0  | 82.7 | 81.5  | 82.1 | 79.6 | 80.2 |
| <b>B. Animal—</b>   |      |      |      |      |      |       |       |      |       |      |      |      |
| <b>Raw and Partly Manufactured—</b>                       |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....   | 57.9 | 55.0 | 55.9 | 56.2 | 57.7 | 57.4  | 58.5  | 59.0 | 62.2  | 62.0 | 65.3 | 65.1 |
| 1934.....   | 66.1 | 69.6 | 67.1 | 65.8 | 65.1 | 65.8  | 63.3  | 61.7 | 63.4  | 67.0 | 67.9 | 67.8 |
| 1935.....   | 68.9 | 69.6 | 70.4 | 70.0 | 71.8 | 70.6  | 69.7  | 70.1 | 73.3  | 74.4 | 74.3 | 74.6 |
| 1936.....   | 75.8 | 75.8 | 73.9 | 72.4 | 72.6 | 70.3  | 70.1  | 70.5 | 72.9  | 74.3 | 70.8 | 78.0 |
| 1937.....   | 79.5 | 80.5 | 81.4 | 83.8 | 84.4 | 80.8  | 81.8  | 82.7 | 85.2  | 84.5 | 84.5 | 81.6 |
| <b>Fully and Chiefly Manufactured—</b>                    |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....   | 59.2 | 58.9 | 62.3 | 63.8 | 61.9 | 61.9  | 63.0  | 63.3 | 63.0  | 63.1 | 64.0 | 65.4 |
| 1934.....   | 67.0 | 72.0 | 73.9 | 71.7 | 68.8 | 69.6  | 69.3  | 69.5 | 70.7  | 68.9 | 67.7 | 67.6 |
| 1935.....   | 67.6 | 70.1 | 69.7 | 69.1 | 67.9 | 66.0  | 67.7  | 69.7 | 71.1  | 73.4 | 72.7 | 72.4 |
| 1936.....   | 71.5 | 70.0 | 69.5 | 70.3 | 68.9 | 69.9  | 71.1  | 73.1 | 73.9  | 72.3 | 72.6 | 73.5 |
| 1937.....   | 75.2 | 74.8 | 73.8 | 75.0 | 73.7 | 74.8  | 76.3  | 78.6 | 78.6  | 79.1 | 77.7 | 76.1 |
| <b>Total—</b>   |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....   | 58.6 | 57.2 | 59.5 | 60.5 | 60.1 | 59.9  | 61.0  | 61.8 | 62.7  | 62.6 | 64.6 | 65.3 |
| 1934.....   | 66.9 | 71.0 | 71.0 | 69.1 | 67.2 | 68.0  | 66.7  | 66.1 | 67.5  | 68.5 | 67.8 | 67.7 |
| 1935.....   | 68.2 | 69.9 | 70.0 | 69.5 | 69.6 | 68.5  | 68.6  | 69.9 | 72.1  | 73.8 | 73.4 | 73.4 |
| 1936.....   | 73.4 | 72.5 | 71.4 | 71.2 | 70.5 | 70.1  | 70.7  | 72.0 | 73.5  | 73.2 | 74.4 | 75.5 |
| 1937.....   | 77.1 | 77.3 | 77.1 | 78.8 | 78.3 | 77.4  | 78.7  | 80.4 | 81.5  | 81.4 | 80.6 | 78.5 |
| <b>C. Canadian Farm Products—</b>                         |      |      |      |      |      |       |       |      |       |      |      |      |
| <b>Field (grains, etc.)—</b>                              |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....   | 34.8 | 35.8 | 37.8 | 40.7 | 46.9 | 49.4  | 60.8  | 55.1 | 49.5  | 44.1 | 46.7 | 45.3 |
| 1934.....   | 45.0 | 49.4 | 49.8 | 48.8 | 51.1 | 55.7  | 57.7  | 60.7 | 59.0  | 55.3 | 55.7 | 56.1 |
| 1935.....   | 55.8 | 55.8 | 56.4 | 59.8 | 58.0 | 55.1  | 55.2  | 56.0 | 59.1  | 59.4 | 58.0 | 58.1 |
| 1936.....   | 59.0 | 58.9 | 59.2 | 59.8 | 59.9 | 60.8  | 63.2  | 74.1 | 74.2  | 76.4 | 75.6 | 83.4 |
| 1937.....   | 88.3 | 89.6 | 93.4 | 94.4 | 89.0 | 85.1  | 97.7  | 84.6 | 84.8  | 86.3 | 81.8 | 83.0 |
| <b>Animal—</b>  |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....   | 58.3 | 54.7 | 56.1 | 56.3 | 58.3 | 57.7  | 58.9  | 60.6 | 63.2  | 63.0 | 67.7 | 67.4 |
| 1934.....   | 68.4 | 72.2 | 68.8 | 67.4 | 66.8 | 66.0  | 63.7  | 62.9 | 65.0  | 70.3 | 70.4 | 70.8 |
| 1935.....   | 71.0 | 72.5 | 73.3 | 72.9 | 74.4 | 73.0  | 71.1  | 72.4 | 75.5  | 76.7 | 77.1 | 77.9 |
| 1936.....   | 77.5 | 77.8 | 76.0 | 73.8 | 73.0 | 70.4  | 71.6  | 71.9 | 74.7  | 76.2 | 79.5 | 80.8 |
| 1937.....   | 82.1 | 82.6 | 84.2 | 86.3 | 85.7 | 81.4  | 83.9  | 85.5 | 88.8  | 86.9 | 87.4 | 84.6 |
| <b>Total—</b>   |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....   | 43.6 | 42.9 | 44.6 | 46.5 | 51.2 | 52.5  | 60.1  | 57.2 | 54.6  | 51.2 | 54.6 | 53.6 |
| 1934.....   | 55.6 | 57.9 | 56.9 | 55.8 | 57.0 | 59.6  | 59.9  | 61.5 | 61.6  | 60.0 | 61.2 | 61.6 |
| 1935.....   | 61.5 | 62.0 | 62.7 | 64.7 | 64.1 | 61.4  | 61.1  | 62.1 | 65.2  | 65.9 | 65.1 | 65.5 |
| 1936.....   | 65.9 | 66.0 | 65.5 | 65.0 | 64.8 | 64.4  | 66.3  | 74.3 | 74.7  | 76.2 | 77.1 | 82.4 |
| 1937.....   | 86.0 | 87.0 | 90.0 | 91.4 | 87.8 | 83.7  | 92.5  | 84.9 | 80.3  | 80.5 | 83.9 | 84.2 |
| <b>II. Articles of Marine Origin—</b>                     |      |      |      |      |      |       |       |      |       |      |      |      |
| <b>Raw and Partly Manufactured—</b>                       |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....   | 54.5 | 44.6 | 49.6 | 46.6 | 48.1 | 54.8  | 56.5  | 59.2 | 63.3  | 67.5 | 71.0 | 58.9 |
| 1934.....   | 59.8 | 60.4 | 58.7 | 56.6 | 56.6 | 58.3  | 53.4  | 60.6 | 69.0  | 74.6 | 65.9 | 53.8 |
| 1935.....   | 63.2 | 61.9 | 61.7 | 58.7 | 54.1 | 61.4  | 54.6  | 61.1 | 68.6  | 69.4 | 64.4 | 61.9 |
| 1936.....   | 61.0 | 63.7 | 68.5 | 64.0 | 56.0 | 62.9  | 61.6  | 68.9 | 73.6  | 79.6 | 75.2 | 69.5 |
| 1937.....   | 68.7 | 69.1 | 57.2 | 60.9 | 62.1 | 70.5  | 68.5  | 83.0 | 84.7  | 85.6 | 82.1 | 72.8 |

6.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Months, 1933-37—concluded.

| Origin and Year.                                | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|------|------|------|------|------|-------|-------|------|-------|------|------|------|
| <b>II. Articles of Marine Origin—concluded.</b> |      |      |      |      |      |       |       |      |       |      |      |      |
| <b>Fully and Chiefly Manufactured—</b>          |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....                                       | 60.8 | 61.2 | 61.8 | 63.0 | 62.7 | 62.3  | 63.6  | 67.7 | 67.7  | 68.9 | 69.0 | 69.7 |
| 1934.....                                       | 71.9 | 72.6 | 72.2 | 72.7 | 72.7 | 73.2  | 74.2  | 74.5 | 77.7  | 78.1 | 77.7 | 76.7 |
| 1935.....                                       | 75.6 | 75.4 | 75.5 | 73.6 | 71.4 | 72.0  | 72.5  | 69.9 | 68.8  | 68.6 | 70.7 | 70.3 |
| 1936.....                                       | 69.4 | 70.0 | 69.6 | 69.3 | 68.7 | 69.7  | 70.6  | 72.0 | 71.2  | 70.5 | 69.9 | 69.6 |
| 1937.....                                       | 69.3 | 69.5 | 69.7 | 72.1 | 71.3 | 72.2  | 72.4  | 70.9 | 73.4  | 72.6 | 73.7 | 73.8 |
| <b>Total—</b>                                   |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....                                       | 59.1 | 56.7 | 58.5 | 58.6 | 58.7 | 60.3  | 61.7  | 65.4 | 66.5  | 68.5 | 69.5 | 66.8 |
| 1934.....                                       | 68.6 | 69.3 | 68.5 | 68.3 | 68.3 | 69.2  | 68.6  | 70.7 | 75.3  | 77.1 | 74.5 | 70.5 |
| 1935.....                                       | 72.2 | 71.7 | 71.8 | 69.6 | 66.7 | 69.1  | 67.7  | 67.5 | 68.7  | 68.8 | 69.0 | 68.0 |
| 1936.....                                       | 67.1 | 68.3 | 68.3 | 67.9 | 65.3 | 67.9  | 68.2  | 71.2 | 71.8  | 73.0 | 71.3 | 69.6 |
| 1937.....                                       | 69.1 | 69.4 | 66.3 | 69.1 | 68.8 | 71.7  | 71.3  | 74.2 | 76.4  | 76.1 | 76.0 | 73.5 |
| <b>III. Articles of Forest Origin—</b>          |      |      |      |      |      |       |       |      |       |      |      |      |
| <b>Raw and Partly Manufactured—</b>             |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....                                       | 66.0 | 65.2 | 65.2 | 64.4 | 64.8 | 69.7  | 71.5  | 72.8 | 74.0  | 74.7 | 74.4 | 74.4 |
| 1934.....                                       | 75.7 | 76.0 | 76.2 | 76.4 | 76.8 | 77.9  | 77.2  | 76.5 | 76.3  | 76.1 | 75.2 | 74.5 |
| 1935.....                                       | 74.7 | 74.9 | 74.2 | 73.2 | 73.2 | 73.1  | 74.0  | 73.8 | 75.6  | 74.8 | 75.4 | 70.8 |
| 1936.....                                       | 78.7 | 79.5 | 79.4 | 79.8 | 80.3 | 80.1  | 80.7  | 81.2 | 81.5  | 82.8 | 82.9 | 83.8 |
| 1937.....                                       | 86.8 | 89.3 | 95.8 | 98.0 | 98.5 | 96.1  | 96.6  | 96.3 | 94.0  | 92.8 | 91.7 | 91.8 |
| <b>Fully and Chiefly Manufactured—</b>          |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....                                       | 61.8 | 61.6 | 61.3 | 55.3 | 55.2 | 55.1  | 55.2  | 55.3 | 55.3  | 56.0 | 56.1 | 56.2 |
| 1934.....                                       | 56.2 | 56.2 | 56.2 | 56.3 | 56.4 | 56.4  | 56.0  | 56.0 | 55.9  | 55.9 | 55.9 | 55.9 |
| 1935.....                                       | 56.0 | 56.0 | 56.0 | 56.0 | 56.0 | 56.0  | 56.0  | 56.0 | 56.0  | 56.5 | 56.5 | 56.5 |
| 1936.....                                       | 57.5 | 57.6 | 57.5 | 57.6 | 57.5 | 57.4  | 57.4  | 57.4 | 57.3  | 57.4 | 57.4 | 57.5 |
| 1937.....                                       | 60.7 | 60.7 | 60.7 | 60.9 | 61.1 | 61.2  | 61.2  | 61.2 | 61.3  | 61.2 | 61.2 | 61.3 |
| <b>Total—</b>                                   |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....                                       | 63.8 | 63.3 | 63.1 | 59.5 | 59.7 | 61.9  | 62.8  | 63.5 | 64.0  | 64.7 | 64.6 | 64.7 |
| 1934.....                                       | 65.3 | 65.4 | 65.5 | 65.7 | 65.9 | 66.4  | 65.9  | 65.6 | 65.4  | 65.3 | 64.9 | 64.6 |
| 1935.....                                       | 64.7 | 64.8 | 64.5 | 64.0 | 64.0 | 64.0  | 64.4  | 64.3 | 65.1  | 65.0 | 65.3 | 65.0 |
| 1936.....                                       | 67.4 | 67.3 | 67.7 | 67.9 | 68.1 | 68.0  | 68.3  | 68.7 | 69.2  | 69.2 | 69.3 | 69.5 |
| 1937.....                                       | 72.9 | 74.0 | 77.1 | 78.2 | 78.5 | 77.5  | 77.7  | 77.0 | 77.0  | 75.9 | 75.4 | 75.3 |
| <b>IV. Articles of Mineral Origin—</b>          |      |      |      |      |      |       |       |      |       |      |      |      |
| <b>Raw and Partly Manufactured—</b>             |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....                                       | 75.8 | 75.6 | 75.9 | 74.9 | 74.1 | 74.4  | 75.7  | 75.0 | 76.5  | 75.9 | 76.2 | 77.3 |
| 1934.....                                       | 77.9 | 78.0 | 77.9 | 77.1 | 77.3 | 77.3  | 77.5  | 77.5 | 77.1  | 77.3 | 77.6 | 77.8 |
| 1935.....                                       | 78.0 | 78.0 | 78.1 | 79.2 | 79.6 | 79.2  | 79.2  | 79.8 | 80.5  | 81.5 | 81.4 | 80.8 |
| 1936.....                                       | 79.6 | 79.9 | 80.1 | 79.6 | 79.0 | 78.9  | 78.8  | 79.2 | 79.9  | 80.0 | 81.1 | 82.7 |
| 1937.....                                       | 84.0 | 85.7 | 88.8 | 86.3 | 86.5 | 85.4  | 86.1  | 86.2 | 85.7  | 84.0 | 82.7 | 82.3 |
| <b>Fully and Chiefly Manufactured—</b>          |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....                                       | 84.2 | 83.3 | 83.4 | 83.6 | 83.7 | 84.2  | 84.3  | 84.7 | 85.8  | 86.1 | 86.1 | 86.1 |
| 1934.....                                       | 86.4 | 86.5 | 86.5 | 86.5 | 86.0 | 86.0  | 85.7  | 85.6 | 85.6  | 85.6 | 85.6 | 85.6 |
| 1935.....                                       | 85.8 | 85.9 | 86.0 | 85.6 | 83.7 | 83.5  | 84.9  | 85.1 | 84.7  | 84.5 | 84.5 | 84.7 |
| 1936.....                                       | 84.3 | 84.8 | 84.8 | 85.0 | 85.0 | 85.2  | 85.1  | 85.2 | 85.3  | 84.9 | 85.1 | 87.2 |
| 1937.....                                       | 87.4 | 88.2 | 91.0 | 92.0 | 91.9 | 92.2  | 92.7  | 93.2 | 93.8  | 92.8 | 92.6 | 92.2 |
| <b>Total—</b>                                   |      |      |      |      |      |       |       |      |       |      |      |      |
| 1933.....                                       | 80.4 | 79.9 | 80.0 | 79.7 | 79.4 | 79.8  | 80.5  | 80.4 | 81.6  | 81.5 | 81.7 | 82.2 |
| 1934.....                                       | 82.6 | 82.7 | 82.7 | 82.3 | 82.1 | 82.1  | 83.1  | 83.0 | 81.8  | 81.9 | 82.0 | 82.1 |
| 1935.....                                       | 82.3 | 82.4 | 82.5 | 82.7 | 81.9 | 81.6  | 82.4  | 82.7 | 83.2  | 83.2 | 83.1 | 82.6 |
| 1936.....                                       | 82.2 | 82.6 | 82.7 | 82.5 | 82.3 | 82.4  | 82.3  | 82.5 | 82.9  | 82.7 | 83.3 | 85.1 |
| 1937.....                                       | 85.9 | 87.1 | 90.0 | 89.5 | 89.5 | 89.3  | 89.7  | 90.1 | 89.9  | 88.9 | 88.2 | 87.8 |

## Section 2.—Retail Prices of Commodities.

Collection of data and calculation of index numbers of retail prices and the cost of living are carried out in co-operation by the Dominion Bureau of Statistics (Department of Trade and Commerce) and the Department of Labour. Resultant series of index numbers are computed from different points of view. The computations of the Labour Department are designed to show changes in the cost of living for workmen in cities. They are constructed from family budgets, principally a weekly family budget of staple foods, fuel, and rent which has been published



monthly in the *Labour Gazette* since 1915 and annually since 1911; in addition, figures are included for clothing and sundry items and further data for fuel, light, and rent. The Labour Department aims, by this method, to have a basis for computation that can be readily applied to the data for any given locality or district at any time, or for any class of labour—for instance, coal miners, who usually do not live in cities. Index numbers of retail prices and costs of living issued by the Bureau are constructed from a more general point of view, having for their object the measurement of the general movement of such prices and costs in the Dominion as a whole, and being so calculated as to make comparisons possible with other general index numbers constructed on similar principles, for example, the index of wholesale prices. Calculated, as they are, on the aggregative principle, *i.e.*, the total consumption of each commodity, the Bureau's index numbers afford an excellent measurement of changes in the average cost of living in the Dominion as distinguished from that of any particular class or section.

In the Bureau's index, 1926 is taken as the base year and is represented by 100 to bring it into conformity with other series of index numbers shown in this chapter. A description of the system of weighting of individual items, sub-groups and groups, and of the method of construction of this index number was given at pp. 812-818 of the 1931 Year Book. The Labour Department uses 1913 as 100 for both cost of living and wages index numbers. As will be seen from Table 7, the general cost of living index moved up from 80.8 in 1936 to 83.1 in 1937, continuing the upward trend apparent after July 1933. Higher prices for foods, rentals, clothing and sundries were chiefly responsible for the advance. Fuel declined from 86.4 to 85.4. The monthly index for living costs fluctuated during 1937 between 81.8 and 84.3. January and December group indexes were as follows: foods, 75.2 and 79.1; fuel, 86.3 and 86.1; rent, 84.9 and 89.0; clothing, 71.6 and 73.3; sundries, 93.0 and 93.9.

**7.—Index Numbers of Retail Prices, Rents and Costs of Services (on the 1926 Base), 1913-37.**  
(1926=100.)

| Year.     | Food Index. | Fuel Index.       | Rent Index. | Clothing Index. | Sundries Index.   | Total Index.      |
|-----------|-------------|-------------------|-------------|-----------------|-------------------|-------------------|
| 1913..... | 66.2        | 65.8              | 64.1        | 63.3            | 66.2              | 65.4              |
| 1914..... | 68.9        | 64.5              | 62.2        | 63.9            | 66.2              | 66.0              |
| 1915..... | 69.5        | 63.2              | 60.3        | 69.6            | 66.9              | 67.3              |
| 1916..... | 77.5        | 64.5              | 60.9        | 79.7            | 70.2              | 72.5              |
| 1917..... | 100.0       | 71.7              | 65.4        | 93.7            | 76.8              | 85.6              |
| 1918..... | 114.6       | 78.9              | 69.2        | 109.5           | 86.1              | 97.4              |
| 1919..... | 123.5       | 86.2              | 75.6        | 125.9           | 95.4              | 107.2             |
| 1920..... | 141.1       | 102.6             | 86.5        | 153.2           | 104.0             | 124.2             |
| 1921..... | 107.9       | 109.2             | 94.2        | 124.7           | 106.0             | 109.2             |
| 1922..... | 91.4        | 104.6             | 98.1        | 105.7           | 106.0             | 100.0             |
| 1923..... | 92.1        | 104.6             | 100.6       | 104.4           | 105.3             | 100.0             |
| 1924..... | 90.7        | 102.0             | 101.3       | 101.9           | 103.3             | 98.0              |
| 1925..... | 94.7        | 100.0             | 101.3       | 101.9           | 101.3             | 99.3              |
| 1926..... | 100.0       | 100.0             | 100.0       | 100.0           | 100.0             | 100.0             |
| 1927..... | 98.0        | 97.9              | 98.8        | 97.5            | 99.1              | 98.4              |
| 1928..... | 98.6        | 96.9              | 101.2       | 97.4            | 98.8              | 98.9              |
| 1929..... | 101.0       | 96.4              | 103.3       | 96.9            | 99.0              | 99.9              |
| 1930..... | 98.6        | 95.7              | 105.9       | 93.9            | 99.4              | 99.2              |
| 1931..... | 77.3        | 94.2              | 103.0       | 82.2            | 97.4              | 89.6              |
| 1932..... | 64.3        | 91.4              | 94.7        | 72.3            | 94.6              | 81.4              |
| 1933..... | 63.7        | 87.7              | 85.1        | 67.1            | 92.6              | 77.5              |
| 1934..... | 69.4        | 87.7              | 80.1        | 66.7            | 92.1              | 76.6              |
| 1935..... | 70.4        | 86.8              | 81.3        | 69.9            | 92.2              | 79.1              |
| 1936..... | 73.4        | 86.4 <sup>2</sup> | 83.7        | 70.5            | 92.9 <sup>2</sup> | 80.8 <sup>2</sup> |
| 1937..... | 77.3        | 85.4              | 86.9        | 72.7            | 93.6              | 83.1              |

<sup>1</sup> Subject to revision.

<sup>2</sup> Revised since the publication of the 1937 Year Book.

## 8.—Index Numbers of Retail Prices, Rents and Costs of Services, by Months, 1933, 1936, 1937, and January-April, 1938.

(1926=100.)

| Year and Month.           | Food Index. | Fuel Index. | Rent Index. | Clothing Index. <sup>1</sup> | Sundries Index. | Total Index. <sup>1</sup> |
|---------------------------|-------------|-------------|-------------|------------------------------|-----------------|---------------------------|
| <b>1933.</b>              |             |             |             |                              |                 |                           |
| January.....              | 62.8        | 89.2        | 90.0        | 68.4                         | 92.9            | 78.7                      |
| February.....             | 60.6        | 89.1        | 90.0        | 68.4                         | 92.7            | 77.9                      |
| March.....                | 60.4        | 88.7        | 90.0        | 66.2                         | 92.5            | 77.4                      |
| April.....                | 61.3        | 88.7        | 90.0        | 66.2                         | 92.5            | 77.7                      |
| May.....                  | 61.9        | 88.4        | 84.0        | 66.2                         | 92.5            | 76.6                      |
| June.....                 | 62.2        | 87.7        | 84.0        | 65.8                         | 92.4            | 76.6                      |
| July.....                 | 63.2        | 86.0        | 84.0        | 65.8                         | 92.4            | 76.8                      |
| August.....               | 67.8        | 86.4        | 84.0        | 65.8                         | 92.4            | 78.2                      |
| September.....            | 65.9        | 86.3        | 84.0        | 67.9                         | 92.7            | 78.1                      |
| October.....              | 65.9        | 87.1        | 80.4        | 67.9                         | 92.7            | 77.3                      |
| November.....             | 65.8        | 87.2        | 80.4        | 67.9                         | 92.7            | 77.4                      |
| December.....             | 66.6        | 87.3        | 80.4        | 68.5                         | 92.8            | 77.8                      |
| <b>1933 Averages.....</b> | <b>63.7</b> | <b>87.7</b> | <b>85.1</b> | <b>67.1</b>                  | <b>92.6</b>     | <b>77.5</b>               |
| <b>1936.</b>              |             |             |             |                              |                 |                           |
| January.....              | 73.9        | 87.2        | 82.6        | 69.9                         | 91.9            | 80.4                      |
| February.....             | 72.9        | 87.2        | 82.6        | 69.9                         | 92.0            | 80.1                      |
| March.....                | 73.4        | 87.4        | 82.6        | 70.2                         | 92.1            | 80.4                      |
| April.....                | 71.0        | 87.3        | 82.6        | 70.2                         | 92.1            | 79.6                      |
| May.....                  | 71.3        | 87.2        | 83.8        | 70.2                         | 92.1            | 80.0                      |
| June.....                 | 71.3        | 85.8        | 83.8        | 70.7                         | 92.1            | 80.0                      |
| July.....                 | 72.6        | 85.8        | 83.8        | 70.7                         | 92.1            | 80.4                      |
| August.....               | 74.7        | 85.8        | 83.8        | 70.7                         | 92.1            | 81.0                      |
| September.....            | 75.1        | 86.1        | 83.8        | 70.6                         | 92.2            | 81.1                      |
| October.....              | 74.4        | 86.3        | 84.9        | 70.6                         | 92.1            | 81.1                      |
| November.....             | 75.0        | 86.7        | 84.9        | 70.6                         | 92.2            | 81.4                      |
| December.....             | 75.3        | 86.7        | 84.9        | 71.6                         | 92.3            | 81.7                      |
| <b>1936 Averages.....</b> | <b>73.4</b> | <b>86.6</b> | <b>83.7</b> | <b>70.5</b>                  | <b>92.1</b>     | <b>80.6</b>               |
| <b>1937.<sup>2</sup></b>  |             |             |             |                              |                 |                           |
| January.....              | 75.2        | 86.3        | 84.9        | 71.6                         | 93.0            | 81.8                      |
| February.....             | 75.6        | 86.4        | 84.9        | 71.6                         | 93.1            | 81.9                      |
| March.....                | 75.7        | 86.4        | 84.9        | 72.6                         | 93.3            | 82.2                      |
| April.....                | 76.3        | 86.4        | 84.9        | 72.6                         | 93.3            | 82.4                      |
| May.....                  | 76.6        | 85.9        | 87.3        | 72.6                         | 93.4            | 82.9                      |
| June.....                 | 76.4        | 84.0        | 87.3        | 72.9                         | 93.7            | 82.9                      |
| July.....                 | 77.2        | 83.8        | 87.3        | 72.9                         | 93.7            | 83.1                      |
| August.....               | 79.1        | 84.4        | 87.3        | 72.9                         | 93.7            | 83.7                      |
| September.....            | 78.3        | 84.5        | 87.3        | 73.3                         | 93.9            | 83.6                      |
| October.....              | 78.9        | 85.3        | 89.0        | 73.3                         | 93.9            | 84.2                      |
| November.....             | 78.8        | 85.7        | 89.0        | 73.3                         | 93.9            | 84.2                      |
| December.....             | 79.1        | 86.1        | 89.0        | 73.3                         | 93.9            | 84.3                      |
| <b>1937 Averages.....</b> | <b>77.3</b> | <b>85.4</b> | <b>86.9</b> | <b>72.7</b>                  | <b>93.6</b>     | <b>83.1</b>               |
| <b>1938.<sup>2</sup></b>  |             |             |             |                              |                 |                           |
| January.....              | 78.4        | 86.2        | 89.0        | 73.3                         | 93.9            | 84.1                      |
| February.....             | 77.9        | 86.0        | 89.0        | 73.3                         | 93.9            | 83.9                      |
| March.....                | 78.6        | 86.3        | 89.0        | 73.7                         | 93.9            | 84.2                      |
| April.....                | 78.8        | 86.2        | 89.0        | 73.7                         | 93.9            | 84.3                      |

<sup>1</sup> Revisions in the method of computing the clothing index are responsible for minor changes in the clothing group index, and in the total index.<sup>2</sup> Subject to revision.

Table 9 shows the average prices of items included in the family budget in 1920, 1926, and in each of the years from 1929-37. These prices are weighted by the quantities used by the Department of Labour in computing a weekly family budget each month. Table 10 gives the group indexes by provinces. An examination of the tables reveals the course of the budget, consisting of food, fuel and lighting, and rent, over the period shown.

9.—Prices of a Family Budget of Staple Foods, Fuel and Lighting, and Rent, for Sixty Cities in Canada, 1920, 1926, and 1929-37.

| Item.   | Unit.   | 1920. | 1926.  | 1929.  | 1930.  | 1931.  | 1932.  | 1933.  | 1934.  | 1935.  | 1936.  | 1937.  |
|---|---------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|   |         | \$    | \$     | \$     | \$     | \$     | \$     | \$     | \$     | \$     | \$     | \$     |
| <b>Staples Foods—</b>                               |         |       |        |        |        |        |        |        |        |        |        |        |
| Beef, sirloin steak...                              | 1 lb.   | 0.389 | 0.294  | 0.363  | 0.356  | 0.286  | 0.246  | 0.210  | 0.214  | 0.231  | 0.231  | 0.262  |
| Beef, chuck roast...                                | 1 "     | 0.251 | 0.160  | 0.227  | 0.221  | 0.158  | 0.129  | 0.112  | 0.115  | 0.126  | 0.125  | 0.142  |
| Veal, roast.....                                    | 1 "     | 0.274 | 0.193  | 0.245  | 0.239  | 0.183  | 0.138  | 0.119  | 0.121  | 0.129  | 0.137  | 0.145  |
| Mutton, roast.....                                  | 1 "     | 0.354 | 0.298  | 0.309  | 0.302  | 0.253  | 0.209  | 0.188  | 0.200  | 0.209  | 0.218  | 0.228  |
| Pork, fresh, roast...                               | 1 "     | 0.397 | 0.302  | 0.300  | 0.298  | 0.223  | 0.152  | 0.151  | 0.201  | 0.212  | 0.214  | 0.222  |
| Pork, salt mess.....                                | 1 "     | 0.362 | 0.278  | 0.273  | 0.271  | 0.226  | 0.155  | 0.148  | 0.184  | 0.198  | 0.201  | 0.203  |
| Bacon, breakfast...                                 | 1 "     | 0.559 | 0.431  | 0.393  | 0.399  | 0.301  | 0.184  | 0.198  | 0.304  | 0.311  | 0.295  | 0.301  |
| Lard, pure leaf.....                                | 1 "     | 0.380 | 0.246  | 0.219  | 0.212  | 0.157  | 0.121  | 0.126  | 0.135  | 0.161  | 0.161  | 0.168  |
| Eggs, fresh.....                                    | 1 doz.  | 0.709 | 0.466  | 0.475  | 0.457  | 0.337  | 0.294  | 0.281  | 0.319  | 0.312  | 0.338  | 0.334  |
| Eggs, storage.....                                  | 1 "     | 0.608 | 0.398  | 0.403  | 0.394  | 0.271  | 0.228  | 0.217  | 0.259  | 0.258  | 0.279  | 0.274  |
| Milk.....   | 1 qt.   | 0.151 | 0.118  | 0.123  | 0.123  | 0.111  | 0.098  | 0.093  | 0.098  | 0.102  | 0.103  | 0.108  |
| Butter, dairy.....                                  | 1 lb.   | 0.631 | 0.406  | 0.428  | 0.368  | 0.272  | 0.216  | 0.220  | 0.236  | 0.237  | 0.248  | 0.271  |
| Butter, creamery...                                 | 1 "     | 0.696 | 0.448  | 0.470  | 0.405  | 0.300  | 0.253  | 0.253  | 0.270  | 0.273  | 0.283  | 0.309  |
| Cheese, old.....                                    | 1 "     | 0.406 | 0.318  | 0.334  | 0.318  | 0.251  | 0.206  | 0.199  | 0.199  | 0.199  | 0.211  | 0.228  |
| Cheese, new.....                                    | 1 "     | 0.383 | 0.318  | 0.334  | 0.318  | 0.251  | 0.206  | 0.199  | 0.199  | 0.199  | 0.211  | 0.228  |
| Bread, plain white...                               | 1 "     | 0.093 | 0.076  | 0.078  | 0.075  | 0.062  | 0.059  | 0.057  | 0.059  | 0.059  | 0.063  | 0.070  |
| Flour, family.....                                  | 1 "     | 0.079 | 0.053  | 0.051  | 0.047  | 0.033  | 0.030  | 0.029  | 0.032  | 0.034  | 0.036  | 0.045  |
| Rolled oats.....                                    | 1 "     | 0.084 | 0.058  | 0.064  | 0.061  | 0.050  | 0.047  | 0.043  | 0.051  | 0.052  | 0.052  | 0.058  |
| Rice, good medium...                                | 1 "     | 0.104 | 0.110  | 0.104  | 0.101  | 0.092  | 0.085  | 0.080  | 0.081  | 0.078  | 0.079  | 0.081  |
| Beans, hand picked...                               | 1 "     | 0.117 | 0.079  | 0.115  | 0.094  | 0.061  | 0.043  | 0.041  | 0.046  | 0.052  | 0.055  | 0.072  |
| Apples evaporated...                                | 1 "     | 0.286 | 0.200  | 0.213  | 0.206  | 0.178  | 0.160  | 0.150  | 0.152  | 0.155  | 0.160  | 0.160  |
| Prunes, medium.....                                 | 1 "     | 0.270 | 0.158  | 0.141  | 0.155  | 0.121  | 0.111  | 0.113  | 0.127  | 0.122  | 0.111  | 0.117  |
| Sugar, granulated...                                | 1 "     | 0.197 | 0.079  | 0.073  | 0.068  | 0.062  | 0.059  | 0.073  | 0.072  | 0.064  | 0.061  | 0.064  |
| Sugar, yellow.....                                  | 1 "     | 0.185 | 0.075  | 0.069  | 0.065  | 0.060  | 0.057  | 0.071  | 0.070  | 0.062  | 0.060  | 0.063  |
| Tea, black.....                                     | 1 "     | 0.644 | 0.719  | 0.704  | 0.628  | 0.552  | 0.472  | 0.424  | 0.504  | 0.524  | 0.520  | 0.536  |
| Tea, green.....                                     | 1 "     | 0.672 | 0.719  | 0.704  | 0.628  | 0.552  | 0.472  | 0.424  | 0.504  | 0.524  | 0.520  | 0.536  |
| Coffee.....   | 1 "     | 0.608 | 0.612  | 0.604  | 0.572  | 0.492  | 0.428  | 0.400  | 0.392  | 0.376  | 0.380  | 0.358  |
| Potatoes.....                                       | 1 pk.   | 0.658 | 0.436  | 0.291  | 0.355  | 0.172  | 0.130  | 0.189  | 0.183  | 0.152  | 0.265  | 0.242  |
| Vinegar, white wine...                              | 1 pt.   | 0.080 | 0.080  | 0.080  | 0.080  | 0.080  | 0.072  | 0.072  | 0.072  | 0.072  | 0.072  | 0.072  |
| <b>All Foods, Weekly Budget<sup>1</sup>.....</b>    |         |       |        |        |        |        |        |        |        |        |        |        |
|   |         | 15.99 | 11.21  | 11.31  | 10.96  | 8.49   | 7.10   | 7.03   | 7.56   | 7.70   | 8.09   | 8.62   |
| Starch, laundry.....                                | 1 lb.   | 0.144 | 0.124  | 0.123  | 0.123  | 0.120  | 0.117  | 0.114  | 0.114  | 0.114  | 0.117  | 0.117  |
| <b>Fuel and Lighting—</b>                           |         |       |        |        |        |        |        |        |        |        |        |        |
| Coal, anthracite.....                               | 1 ton   | 17.04 | 17.392 | 16.192 | 16.112 | 16.064 | 15.616 | 15.056 | 15.056 | 14.704 | 14.688 | 14.384 |
| Coal, bituminous...                                 | 1 "     | 12.38 | 10.311 | 10.080 | 10.064 | 9.840  | 9.584  | 9.296  | 9.280  | 9.360  | 9.360  | 9.360  |
| Wood, hard, best.....                               | 1 cord  | 13.09 | 12.195 | 12.208 | 12.176 | 11.696 | 10.912 | 9.808  | 9.632  | 9.792  | 9.698  | 9.536  |
| Wood, soft.....                                     | 1 "     | 10.14 | 8.947  | 8.800  | 8.672  | 8.560  | 7.984  | 7.408  | 7.328  | 7.296  | 7.216  | 7.216  |
| Coal oil.....                                       | 1 gal.  | 0.365 | 0.308  | 0.311  | 0.309  | 0.291  | 0.274  | 0.271  | 0.275  | 0.272  | 0.270  | 0.268  |
| <b>Rent—</b>  |         |       |        |        |        |        |        |        |        |        |        |        |
| Rent.....   | 1 month | 24.80 | 27.43  | 27.92  | 28.16  | 27.80  | 25.76  | 23.04  | 22.10  | 23.32  | 22.76  | 23.40  |
| <b>Grand Totals, Weekly Budget<sup>1</sup>.....</b> |         |       |        |        |        |        |        |        |        |        |        |        |
|   |         | 25.91 | 21.47  | 21.61  | 21.29  | 18.66  | 16.60  | 15.70  | 16.02  | 16.16  | 16.65  | 17.31  |

<sup>1</sup> Totals for "All Foods" and "Grand Totals" are based upon the estimated weekly family consumption of the items specified.

## 10.—Index Numbers of a Family Budget of Staple Foods, Fuel and Lighting, and Rent in Canada, by Provinces, 1928-37.

(Dominion average for 1913=100.)

| Province.                 | 1928. | 1929. | 1930. | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. | 1937. |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| STAPLE FOODS.             |       |       |       |       |       |       |       |       |       |       |
| Prince Edward Island..... | 134.3 | 139.1 | 140.4 | 115.4 | 95.4  | 94.9  | 100.0 | 100.2 | 105.4 | 113.1 |
| Nova Scotia.....          | 149.3 | 153.5 | 151.6 | 121.7 | 102.9 | 99.5  | 106.6 | 107.0 | 110.5 | 116.9 |
| New Brunswick.....        | 149.0 | 151.4 | 149.1 | 119.9 | 102.1 | 99.9  | 105.6 | 107.5 | 112.7 | 118.2 |
| Quebec.....               | 139.2 | 142.8 | 138.8 | 107.4 | 89.4  | 87.9  | 95.4  | 96.4  | 102.8 | 107.8 |
| Ontario.....              | 151.0 | 153.8 | 148.7 | 114.5 | 95.7  | 95.5  | 104.1 | 105.4 | 111.1 | 117.5 |
| Manitoba.....             | 145.6 | 151.2 | 144.5 | 108.8 | 93.0  | 92.1  | 97.0  | 101.7 | 107.5 | 115.7 |
| Saskatchewan.....         | 152.3 | 158.3 | 149.1 | 110.4 | 93.4  | 92.4  | 99.5  | 101.4 | 104.7 | 114.9 |
| Alberta.....              | 151.1 | 158.9 | 150.9 | 111.8 | 93.0  | 92.1  | 99.4  | 102.5 | 106.0 | 116.4 |
| British Columbia.....     | 164.6 | 170.4 | 164.5 | 129.6 | 106.9 | 106.0 | 112.7 | 115.9 | 121.3 | 131.5 |
| FUEL AND LIGHTING.        |       |       |       |       |       |       |       |       |       |       |
| Prince Edward Island..... | 152.4 | 154.5 | 153.9 | 153.9 | 150.8 | 138.7 | 142.9 | 139.8 | 137.2 | 139.3 |
| Nova Scotia.....          | 153.4 | 151.8 | 150.3 | 149.2 | 139.3 | 131.4 | 133.0 | 130.4 | 129.8 | 127.7 |
| New Brunswick.....        | 161.8 | 160.2 | 160.7 | 156.0 | 147.6 | 140.3 | 139.3 | 139.8 | 137.2 | 135.6 |
| Quebec.....               | 174.9 | 174.9 | 173.3 | 167.0 | 157.1 | 149.2 | 149.7 | 148.7 | 147.1 | 147.6 |
| Ontario.....              | 177.0 | 177.0 | 175.9 | 173.3 | 164.9 | 156.5 | 155.5 | 155.5 | 154.5 | 151.8 |
| Manitoba.....             | 184.3 | 189.5 | 190.1 | 181.7 | 159.2 | 153.9 | 157.6 | 158.1 | 150.5 | 155.0 |
| Saskatchewan.....         | 183.3 | 181.2 | 174.9 | 160.7 | 112.6 | 102.6 | 102.1 | 103.7 | 101.6 | 102.1 |
| Alberta.....              | 108.4 | 100.5 | 100.5 | 97.4  | 94.2  | 90.6  | 87.4  | 85.9  | 85.3  | 85.3  |
| British Columbia.....     | 147.1 | 147.6 | 147.6 | 146.1 | 137.2 | 128.3 | 124.6 | 123.6 | 125.1 | 125.1 |
| RENT.                     |       |       |       |       |       |       |       |       |       |       |
| Prince Edward Island..... | 118.5 | 122.3 | 123.8 | 123.8 | 123.8 | 123.2 | 121.1 | 115.8 | 113.3 | 114.5 |
| Nova Scotia.....          | 117.9 | 117.9 | 121.1 | 126.9 | 126.9 | 117.5 | 111.8 | 112.6 | 113.3 | 112.6 |
| New Brunswick.....        | 142.1 | 142.1 | 139.4 | 135.6 | 132.4 | 124.2 | 120.2 | 117.5 | 117.5 | 120.4 |
| Quebec.....               | 122.7 | 123.2 | 125.9 | 124.4 | 118.1 | 110.1 | 105.3 | 104.4 | 105.3 | 108.2 |
| Ontario.....              | 153.1 | 154.3 | 155.8 | 153.3 | 139.6 | 123.2 | 120.4 | 122.9 | 126.7 | 131.8 |
| Manitoba.....             | 184.2 | 184.2 | 184.2 | 176.6 | 153.5 | 131.8 | 125.1 | 123.4 | 122.7 | 127.4 |
| Saskatchewan.....         | 184.2 | 184.2 | 185.7 | 176.8 | 156.0 | 133.1 | 129.3 | 123.8 | 125.7 | 129.2 |
| Alberta.....              | 151.8 | 157.9 | 161.7 | 160.4 | 143.6 | 125.5 | 116.6 | 116.3 | 117.9 | 120.2 |
| British Columbia.....     | 138.1 | 139.8 | 140.8 | 140.2 | 131.4 | 118.3 | 110.3 | 112.0 | 116.2 | 118.5 |
| GRAND TOTALS.             |       |       |       |       |       |       |       |       |       |       |
| Prince Edward Island..... | 131.2 | 135.3 | 136.3 | 123.1 | 112.4 | 110.2 | 112.8 | 110.7 | 112.5 | 117.2 |
| Nova Scotia.....          | 138.9 | 141.0 | 140.8 | 127.0 | 115.8 | 109.7 | 111.7 | 111.9 | 114.1 | 117.0 |
| New Brunswick.....        | 148.2 | 149.2 | 147.1 | 129.9 | 118.4 | 113.4 | 114.9 | 115.1 | 117.7 | 121.4 |
| Quebec.....               | 138.3 | 140.3 | 138.8 | 121.1 | 108.2 | 103.6 | 106.0 | 106.0 | 109.7 | 113.4 |
| Ontario.....              | 155.0 | 156.9 | 154.5 | 135.4 | 119.8 | 113.0 | 116.4 | 117.9 | 122.4 | 127.0 |
| Manitoba.....             | 163.8 | 167.4 | 163.9 | 141.5 | 122.3 | 113.8 | 114.6 | 116.5 | 119.6 | 125.1 |
| Saskatchewan.....         | 167.2 | 170.0 | 164.7 | 139.5 | 117.0 | 107.4 | 109.7 | 109.1 | 111.5 | 118.2 |
| Alberta.....              | 145.3 | 150.4 | 147.4 | 126.1 | 110.1 | 103.0 | 103.4 | 104.9 | 107.4 | 113.5 |
| British Columbia.....     | 153.0 | 156.7 | 153.9 | 135.2 | 119.1 | 113.0 | 113.3 | 115.4 | 120.2 | 126.3 |

## Section 3.—Index Numbers of Security Prices.

Security prices have long been utilized in statistical measurements related to economic phenomena. They are extremely sensitive to changing business conditions, although this valuable characteristic is sometimes overshadowed by the fact

that their movements may be greatly influenced by speculative interest very remotely associated with underlying economic conditions. Thus in 1928 and 1929, common stock prices advanced far beyond levels indicated by business profits and prospects.

The behaviour of Canadian common stock prices has been quite different from that of commodity prices since pre-war years. There was no advance in security markets during the Great War paralleling the pronounced inflation in commodity values. Between 1926 and 1929, however, when commodity prices were declining gradually, common stocks more than doubled in price. Both sets of prices recorded a sharp drop between 1929 and 1933, and both have shown recovery subsequently. This has been much more pronounced in the case of security prices.

**Investors Index Numbers of Common Stocks.**—Canadian security prices of all types suffered net losses during 1937. Amounts varied, ranging from an average of approximately 20 p.c. for common stocks down to 2 p.c. for Dominion long-term bonds. Year-end comparisons fail to reveal the extent of price reactions in 1937 which came between February and October, following a period of rapid appreciation dating from the summer of 1935. This recession wiped out gains of 1936 and part of those recorded for 1935, before signs of hesitant recovery appeared in November and December. Mining stocks showed considerable improvement at this time, although industrials and utilities made little progress.

Industrial common stocks reached a major turning point on Mar. 10 and thereafter moved definitely downward. This marked the termination of an irregular advance dating from February, 1933. Intervening reactions were all of a minor character and bore little semblance to the drastic decline of the past year. The first phase of this movement ended on Apr. 29 in a heavy wave of liquidation. The industrial index for that day was 205.0 as compared with the Mar. 10 peak of 247.3 and the opening level of 220.0 on Jan. 4. There followed a period of erratic recovery terminating on Aug. 14 with the index at 226.0. Most of the improvement occurred in July. The second phase of decline was much more drastic although it gathered momentum rather gradually. Termination came on Oct. 19 after a week which witnessed the sharpest break in prices since October, 1929, and after the index had reached 154.9. Subsequent recovery was equally pronounced at first, but markets soon settled down into a series of cyclical fluctuations, usually of about two weeks duration, and little headway resulted. The industrial price index for Dec. 31 was 165.6. The 1937 December average of 167.7 was 21.2 p.c. below the corresponding average for 1936. Percentage declines between monthly average levels for December, 1936 and 1937, for various industrial stock groups were as follows: machinery 26, pulp and paper 38, milling 26, oils 13, textiles 9, foods 15, beverages 21, building materials 28, industrial mines 29.

Utility stock prices followed the general market swings of the industrial section, but fluctuations were less pronounced. Opening at 66.1 on Jan. 4, a price index of 19 utility common stocks moved gradually upward to the year's high of 75.3 on Feb. 20, three weeks before industrials reached their crest. The subsequent decline halted at an intermediate low of 59.2 on Apr. 28. The second low in utilities of 48.0 came on Oct. 19 after an intervening rise to 67.3 on Aug. 9. Subsequent rallies showed little underlying strength and during the last two months the utility average twice dropped under the lowest October levels. It was 47.8 on Dec. 31. Sharp declines in the transportation section, and last quarter weakness in the power issues were responsible for the losses registered by the utility group.

## 11.—Investors Index Numbers of Common Stocks (on the 1926 Base), by Months, 1937.

NOTE.—Figures for 1933 and 1934 were published at pp. 874 and 875 of the 1934-35 Year Book, for 1935 at p. 816 of the 1936 Year Book and for 1936 at p. 803 of the 1937 Year Book; those for earlier years may be found in the corresponding table of earlier editions.

| Month.       | Grand<br>Total. | Types of Stocks. |                             |                                       |                       |               |       |                                     |   |                 |                                  |                            |
|--------------|-----------------|------------------|-----------------------------|---------------------------------------|-----------------------|---------------|-------|-------------------------------------|---|-----------------|----------------------------------|----------------------------|
|              |                 | Banks,<br>Total. | Industrials.                |                                       |                       |               |       |                                     |   |                 |                                  | In-dust-<br>rial<br>Mines. |
|              |                 |                  | Indus-<br>trials,<br>Total. | Mach-<br>inery and<br>Equip-<br>ment. | Pulp<br>and<br>Paper. | Mill-<br>ing. | Oils. | Tex-<br>tiles and<br>Cloth-<br>ing. | Food<br>and<br>Allied<br>Pro-<br>ducts. | Bever-<br>ages. | Build-<br>ing<br>Ma-<br>terials. |                            |
| January..... | 137.4           | 94.4             | 222.0                       | 156.3                                 | 37.2                  | 119.6         | 229.6 | 77.3                                | 184.2                                   | 141.0           | 197.0                            | 540.3                      |
| February.... | 142.4           | 96.7             | 228.8                       | 163.4                                 | 36.7                  | 120.7         | 235.2 | 78.5                                | 188.2                                   | 139.3           | 203.5                            | 586.7                      |
| March.....   | 147.2           | 95.9             | 241.7                       | 168.3                                 | 40.2                  | 127.0         | 247.7 | 80.2                                | 190.0                                   | 141.8           | 213.4                            | 618.2                      |
| April.....   | 136.2           | 94.0             | 224.1                       | 157.5                                 | 47.1                  | 117.4         | 230.4 | 79.9                                | 182.4                                   | 133.4           | 204.8                            | 538.9                      |
| May.....     | 132.2           | 92.7             | 216.4                       | 151.3                                 | 38.5                  | 109.4         | 229.6 | 77.5                                | 178.5                                   | 128.4           | 188.4                            | 525.5                      |
| June.....    | 129.4           | 92.3             | 210.1                       | 148.1                                 | 38.2                  | 103.7         | 220.2 | 77.7                                | 177.7                                   | 131.0           | 170.6                            | 510.8                      |
| July.....    | 133.0           | 90.2             | 217.8                       | 148.0                                 | 40.5                  | 102.0         | 222.6 | 79.7                                | 182.1                                   | 136.1           | 188.7                            | 547.4                      |
| August.....  | 135.2           | 89.9             | 221.6                       | 151.2                                 | 40.4                  | 95.2          | 223.6 | 79.5                                | 182.0                                   | 136.9           | 192.7                            | 564.2                      |
| September..  | 118.9           | 84.9             | 193.3                       | 123.8                                 | 29.3                  | 89.1          | 205.3 | 73.3                                | 167.9                                   | 118.3           | 159.4                            | 470.5                      |
| October..... | 105.8           | 81.4             | 170.3                       | 104.3                                 | 22.5                  | 69.9          | 192.0 | 68.0                                | 154.1                                   | 105.6           | 132.5                            | 395.0                      |
| November..   | 103.1           | 79.0             | 166.3                       | 104.7                                 | 20.4                  | 80.1          | 193.2 | 67.7                                | 154.1                                   | 115.7           | 129.5                            | 359.2                      |
| December..   | 103.7           | 81.6             | 167.7                       | 103.2                                 | 18.3                  | 82.9          | 188.0 | 67.1                                | 154.7                                   | 114.2           | 131.9                            | 382.7                      |

| Month.         | Types of Stocks.        |                   |                          |                      |
|----------------|-------------------------|-------------------|--------------------------|----------------------|
|                | Public Utilities.       |                   |                          |                      |
|                | Public Utilities Total. | Trans- portation. | Telephone and Telegraph. | Powers and Traction. |
| January.....   | 68.5                    | 38.7              | 122.0                    | 91.1                 |
| February.....  | 73.1                    | 41.8              | 125.8                    | 97.5                 |
| March.....     | 71.0                    | 39.6              | 124.2                    | 94.7                 |
| April.....     | 64.1                    | 35.0              | 122.0                    | 85.1                 |
| May.....       | 63.0                    | 32.8              | 124.7                    | 84.0                 |
| June.....      | 63.2                    | 32.3              | 127.3                    | 84.1                 |
| July.....      | 63.9                    | 29.7              | 128.0                    | 88.0                 |
| August.....    | 65.2                    | 29.9              | 128.7                    | 90.4                 |
| September..... | 57.4                    | 24.8              | 126.6                    | 78.6                 |
| October.....   | 51.7                    | 20.9              | 122.9                    | 70.7                 |
| November.....  | 49.6                    | 19.9              | 122.2                    | 66.9                 |
| December.....  | 49.5                    | 19.8              | 125.4                    | 66.0                 |

**Preferred Stocks.**—Preferred stock prices in 1937 continued to parallel the movements in industrial and utility common stock markets. Their recovery in recent years has been less decided than that shown for common stocks except in 1936, when the preferred section advanced 27 p.c. as compared with 20 p.c. for industrial and utility averages. The relative position of preferred issues was further improved in 1937 by a less pronounced decline of 14 p.c., approximately one-third less than the reaction in common stock averages. An index of 25 preferred stock prices advanced from 93.9 for December, 1936, to 103.1 in April, 1937, and then declined irregularly to 81.0 in December. The greatest part of this recession came in September and October.

## 12.—Index Numbers of 25 Preferred Stocks, by Months, January, 1927-April, 1938.

(1926=100.)

| Year.     | Jan.  | Feb.  | Mar.  | Apr.  | May.  | June. | July. | Aug.  | Sept. | Oct.  | Nov.  | Dec.  |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1927..... | 102.1 | 102.5 | 102.7 | 102.6 | 102.5 | 102.1 | 102.5 | 103.8 | 104.8 | 107.8 | 110.8 | 111.8 |
| 1928..... | 111.5 | 110.9 | 109.9 | 111.4 | 111.7 | 111.2 | 110.3 | 107.5 | 107.6 | 105.2 | 104.0 | 107.9 |
| 1929..... | 107.4 | 108.1 | 106.8 | 104.3 | 104.3 | 104.8 | 104.8 | 105.6 | 105.1 | 102.9 | 99.8  | 100.4 |
| 1930..... | 97.9  | 98.8  | 100.0 | 103.4 | 102.6 | 99.5  | 97.4  | 97.1  | 96.2  | 85.4  | 81.9  | 82.5  |
| 1931..... | 83.2  | 83.4  | 84.2  | 78.8  | 73.8  | 72.0  | 71.8  | 69.1  | 64.2  | 63.0  | 66.5  | 63.0  |
| 1932..... | 57.2  | 58.8  | 58.0  | 55.4  | 48.4  | 45.2  | 49.5  | 52.9  | 53.4  | 52.9  | 52.2  | 50.2  |
| 1933..... | 49.0  | 49.6  | 47.3  | 47.2  | 54.6  | 58.5  | 61.9  | 61.7  | 61.0  | 59.7  | 59.1  | 60.2  |
| 1934..... | 64.1  | 66.5  | 67.3  | 68.5  | 68.7  | 68.4  | 68.1  | 67.3  | 67.4  | 69.5  | 70.6  | 71.4  |
| 1935..... | 73.5  | 73.8  | 71.2  | 69.2  | 68.4  | 68.4  | 69.6  | 70.9  | 69.2  | 69.5  | 72.5  | 73.8  |
| 1936..... | 74.0  | 77.2  | 76.3  | 76.0  | 74.6  | 76.2  | 79.5  | 80.6  | 83.8  | 86.8  | 91.1  | 93.0  |
| 1937..... | 99.2  | 100.4 | 102.6 | 103.1 | 100.2 | 99.3  | 99.4  | 101.5 | 91.0  | 82.2  | 82.0  | 81.0  |
| 1938..... | 83.4  | 82.1  | 77.5  | 78.2  | -     | -     | -     | -     | -     | -     | -     | -     |

**Weighted Index Numbers of Mining Stocks.**—The movement of mining stocks showed the same broad outline as that for industrials and utilities, but the amplitude of fluctuations and positions of turning points differed materially. The first decline in the mining section started sooner and was much more severe. The second was less pronounced and subsequent recovery offered a marked contrast to weakness in utilities and the hesitant behaviour of the industrial section. The year's peak in gold stock prices came on Feb. 3, when an index for 21 gold issues reached 142.0, up 6 points from the first of the year. The decline which followed was gradual at first, but accelerated during April, and despite repeated rallies reactionary forces continued to predominate until the latter half of June. From 101.6 on June 23, the index moved up to 115.4 on Aug. 16, only to establish successive new lows of 98.7 and 96.5 on Sept. 10 and Oct. 19, respectively. A strong rebound followed by more gradual but persistent advances brought the series up again to 118.3 on Dec. 31.

Fluctuations in base metal stock prices were the most violent in many years. The net decline for 1937, indicated by comparison of 1936 and 1937 December averages, was 33 p.c., as compared with 12 p.c. for gold issues. Although the year's peak in base metals came later in February, major turning points for the group coincided closely with those for the gold section. They were marked by the following daily price indexes: 321.8 on Jan. 4, 372.6 on Feb. 22, 234.9 on June 23, 299.8 on Aug. 7, 168.7 on Oct. 19, and 214.7 on Dec. 31. The closing rise in stock prices anticipated later improvement in commodity markets.

13.—Weighted Index Numbers of Prices of Mining Stocks (on the 1926 Base), by Months, January, 1936, to April, 1938.

| Year and Month. | Gold. | Base Metal. | Total. | Year and Month. | Gold. | Base Metal. | Total. |
|-----------------|-------|-------------|--------|-----------------|-------|-------------|--------|
| 1936.           |       |             |        | 1937—con.       |       |             |        |
| January.....    | 124.8 | 214.8       | 142.4  | March.....      | 133.0 | 340.5       | 172.6  |
| February.....   | 130.2 | 230.4       | 149.8  | April.....      | 120.0 | 288.0       | 154.1  |
| March.....      | 122.7 | 232.2       | 144.2  | May.....        | 111.3 | 269.3       | 142.1  |
| April.....      | 122.8 | 241.1       | 145.8  | June.....       | 105.9 | 255.0       | 134.7  |
| May.....        | 128.9 | 239.2       | 150.3  | July.....       | 109.2 | 278.9       | 141.8  |
| June.....       | 134.4 | 246.0       | 156.1  | August.....     | 112.5 | 287.4       | 146.2  |
| July.....       | 134.4 | 254.1       | 167.0  | September.....  | 103.5 | 224.5       | 127.6  |
| August.....     | 132.6 | 264.0       | 158.1  | October.....    | 104.3 | 192.4       | 121.6  |
| September.....  | 131.2 | 267.1       | 157.6  | November.....   | 113.8 | 192.4       | 129.4  |
| October.....    | 126.4 | 250.4       | 153.2  | December.....   | 115.5 | 213.1       | 134.3  |
| November.....   | 131.8 | 312.5       | 167.0  | 1938.           |       |             |        |
| December.....   | 131.3 | 317.8       | 167.7  | January.....    | 121.0 | 241.7       | 144.1  |
| 1937.           |       |             |        | February.....   | 124.3 | 246.9       | 147.7  |
| January.....    | 137.5 | 329.6       | 174.6  | March.....      | 111.4 | 225.3       | 134.9  |
| February.....   | 139.4 | 344.8       | 177.2  | April.....      | 110.5 | 229.5       | 133.9  |

#### Section 4.—Prices of Services.

A study of the prices of services sheds considerable light on the cost of living, as such services are a considerable item in the average family budget. Information with regard to the trend of street-car fares, of rates for manufactured and natural fuel-gas, of domestic electric-light rates and of telephone charges was published at pp. 801-804 of the 1927-28 Year Book. Later information shows that the prices of manufactured fuel-gas have shown a downward tendency, the Dominion index number for 1936 being 93.0, as compared with 100.0 in 1926. The index number of the price of natural fuel-gas also declined from 100.0 in 1926 to 92.5 in 1930, rose again to 94.3 in 1932, then declined to 92.6 in 1936.

On the other hand, telephone rates have shown a distinct increase, the Dominion index number of domestic telephone rates having risen from 100.0 in 1926 to 107.4 for 1933, 1934, 1935, and 1936. Again, the business telephone rate has risen from 100.0 in 1926 to 118.5 for 1933, 1934, 1935, and 1936.

Additional information and details by provinces regarding the prices of services will be found at pp. 119-130 of the Annual Report on Prices and Price Indexes, 1913-36, issued by the Dominion Bureau of Statistics.

**Hospital Charges.**—In view of discussions of the increased cost entailed by illness and hospital treatment, special investigations on hospital charges are now made annually and the results are given as Dominion averages in the following table. In general, this shows that hospital charges in 1930 were 94 p.c. above the 1913 level. From 1930 to 1935 rates gradually declined to less than 89 p.c. above those in 1913, then rose slightly in 1936. Operating room charges have not increased at the same rate as room charges, being only 54 p.c. above those in 1913, while the latter averaged almost 90 p.c. higher. The cost of maintaining patients in hospitals declined more than 11 p.c. between 1930 and 1936.

The detailed results of this investigation, including the statistics by provinces, are to be found at pp. 120-124 of the Annual Report on Prices and Price Indexes, 1913-36, issued by the Dominion Bureau of Statistics.



14.—Average Daily Hospital Charges in Canada and Index Numbers Thereof (on the 1913 Base), 1913 and 1922-36.

| Item.                                | 1913. | 1922. | 1923. | 1924. | 1925. | 1926. | 1927. | 1928. |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Public wards.....\$                  | 0-99  | 1-71  | 1-73  | 1-77  | 1-78  | 1-83  | 1-86  | 1-96  |
| Index numbers.....                   | 100-0 | 175-0 | 177-1 | 180-4 | 181-2 | 183-2 | 185-2 | 196-9 |
| Semi-private rooms.....\$            | 1-57  | 2-69  | 2-73  | 2-74  | 2-84  | 2-82  | 2-83  | 2-85  |
| Index numbers.....                   | 100-0 | 173-1 | 175-6 | 176-1 | 182-2 | 185-2 | 186-3 | 187-8 |
| Private rooms.....\$                 | 2-68  | 4-49  | 4-52  | 4-58  | 4-92  | 5-07  | 5-14  | 5-25  |
| Index numbers.....                   | 100-0 | 169-1 | 170-3 | 172-3 | 185-9 | 188-5 | 191-1 | 195-3 |
| Operating room.....\$                | 5-16  | 7-24  | 7-64  | 7-87  | 7-97  | 8-17  | 8-31  | 8-36  |
| Index numbers.....                   | 100-0 | 141-8 | 148-9 | 153-0 | 155-1 | 156-7 | 159-1 | 160-1 |
| Costs of maintenance per head.....\$ | 1-68  | 3-12  | 3-17  | 3-25  | 3-26  | 3-48  | 3-45  | 3-49  |
| Index numbers.....                   | 100-0 | 189-7 | 192-5 | 197-1 | 198-3 | 201-9 | 199-7 | 202-3 |
| Item.                                | 1929. | 1930. | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. |
| Public wards.....\$                  | 2-03  | 2-04  | 2-03  | 2-03  | 1-99  | 1-98  | 1-98  | 1-99  |
| Index numbers.....                   | 203-9 | 204-5 | 204-1 | 204-1 | 200-6 | 199-1 | 199-5 | 200-1 |
| Semi-private rooms.....\$            | 2-87  | 2-89  | 2-89  | 2-85  | 2-82  | 2-80  | 2-79  | 2-79  |
| Index numbers.....                   | 189-1 | 190-4 | 190-2 | 188-0 | 185-8 | 184-8 | 183-7 | 183-9 |
| Private rooms.....\$                 | 5-23  | 5-24  | 5-23  | 5-11  | 5-06  | 5-06  | 5-01  | 5-01  |
| Index numbers.....                   | 194-5 | 194-9 | 194-5 | 190-2 | 188-1 | 187-2 | 186-4 | 186-4 |
| Operating room.....\$                | 8-37  | 8-36  | 8-33  | 8-23  | 8-14  | 8-10  | 8-09  | 8-04  |
| Index numbers.....                   | 160-3 | 160-1 | 159-7 | 157-6 | 150-1 | 155-1 | 155-0 | 154-0 |
| Cost of maintenance per head.....\$  | 3-62  | 3-63  | 3-58  | 3-44  | 3-25  | 3-22  | 3-23  | 3-23  |
| Index numbers.....                   | 210-4 | 211-2 | 207-8 | 199-9 | 189-0 | 187-2 | 188-0 | 188-2 |

## Section 5.—Index Numbers of Bond Yields.\*

Few economic statistics are of more significance than the net rates of return received on absolutely the safest securities, such as government bonds maturing on a fixed date. Interest rates naturally grade upward from the rates which the safest of possible borrowers has to pay, and from the fluctuations of that price an idea may be obtained as to the relation between the supply of, and the demand for, funds for investment.

The exceptional requirements of the war years turned the Dominion authorities to the internal market, a field which had hitherto served mainly the needs of the provinces and municipalities. To the latter, therefore, it is necessary to go for earlier historical records of long-term bond yields in the internal market. Province of Ontario issues covering the years from 1900 to date are available in this field, and were utilized for the first long-term bond yield index constructed by the Bureau of Statistics. The relatively long period for which these records have been preserved makes this series of considerable value. On pp. 805 and 806 of the 1937 Year Book a statement will be found bearing on the movements of Ontario bond yields since 1900. Since the War, however, the growing importance of Dominion financing in the domestic market has made it advisable to supplement the Ontario series with the Dominion index of bond yields shown in Table 15.

\* The index of Ontario long-term bond yields formerly shown may be found in the Bureau's monthly bulletin "Prices and Price Indexes", obtainable from the Dominion Statistician.

Prices of Dominion of Canada long-term bonds declined moderately during 1937, but remained well above average levels of recent years. Year-end averages showed a net loss of approximately 2 p.c., but were only 3 p.c. below the all-time peak levels of August and September, 1936. An index of prices for representative Dominion long-term issues dropped from 118.2 for December, 1936, to 112.7 for April, 1937. Gradual recovery subsequently caused the index to advance to 115.5 for August, and it closed at 115.6 after narrow intervening fluctuations. Weakness in February and March appeared to be mainly associated with outside factors, as there were no new financing operations or other disturbing internal developments at this time. Refunding and loan operations of the Dominion and provinces proved generally successful. Eastern provincial issues were firm throughout the year and in some cases showed greater strength than Dominion maturities. Saskatchewan and Alberta bonds suffered appreciable losses, while those for Manitoba and British Columbia registered moderate net declines.

15.—Index Numbers of Dominion of Canada Long-Term Bond Yields, by Months, 1919-38.

(1926=100.)

| Month.         | 1919. | 1920. | 1921. | 1922. | 1923. | 1924. | 1925. | 1926. | 1927. | 1928. |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| January.....   | 117.9 | 116.7 | 125.2 | 113.6 | 107.0 | 104.0 | 100.3 | 99.9  | 97.6  | 89.2  |
| February.....  | 116.8 | 117.0 | 122.3 | 112.5 | 104.3 | 104.2 | 99.7  | 99.6  | 96.5  | 89.5  |
| March.....     | 113.5 | 119.7 | 123.2 | 111.7 | 103.8 | 104.5 | 99.8  | 100.0 | 97.3  | 90.1  |
| April.....     | 111.3 | 120.9 | 125.4 | 111.3 | 104.0 | 105.5 | 100.0 | 100.1 | 95.7  | 90.3  |
| May.....       | 111.3 | 122.9 | 124.0 | 110.6 | 104.4 | 104.9 | 99.8  | 100.1 | 94.6  | 89.5  |
| June.....      | 109.7 | 124.6 | 125.1 | 111.8 | 104.0 | 104.6 | 98.5  | 100.4 | 95.7  | 93.3  |
| July.....      | 111.9 | 126.6 | 124.6 | 111.5 | 104.0 | 103.6 | 99.8  | 100.0 | 96.4  | 94.4  |
| August.....    | 112.5 | 128.2 | 124.7 | 111.5 | 104.4 | 102.5 | 100.4 | 100.0 | 94.7  | 95.9  |
| September..... | 112.7 | 130.4 | 124.7 | 110.7 | 104.4 | 101.2 | 100.4 | 100.1 | 95.4  | 95.2  |
| October.....   | 113.4 | 131.8 | 124.8 | 111.3 | 105.7 | 100.2 | 100.8 | 100.1 | 94.0  | 95.2  |
| November.....  | 113.4 | 134.2 | 119.4 | 112.1 | 106.2 | 100.2 | 101.0 | 100.1 | 92.8  | 95.9  |
| December.....  | 115.4 | 130.8 | 116.3 | 109.6 | 105.2 | 100.6 | 100.1 | 99.3  | 90.2  | 97.1  |
| Month.         | 1929. | 1930. | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. | 1937. | 1938. |
| January.....   | 97.3  | 102.1 | 93.9  | 112.7 | 96.3  | 93.2  | 70.9  | 72.4  | 64.6  | 66.3  |
| February.....  | 98.3  | 101.4 | 93.6  | 112.2 | 96.0  | 91.0  | 73.2  | 70.8  | 63.4  | 65.4  |
| March.....     | 102.3 | 101.1 | 91.9  | 109.1 | 97.7  | 86.1  | 71.4  | 69.9  | 72.7  | 64.7  |
| April.....     | 100.9 | 99.3  | 90.0  | 109.8 | 96.6  | 83.8  | 72.2  | 69.5  | 73.2  | 63.7  |
| May.....       | 100.2 | 98.4  | 80.3  | 109.3 | 95.0  | 81.8  | 71.4  | 68.8  | 71.0  | -     |
| June.....      | 104.0 | 98.2  | 88.3  | 111.7 | 93.3  | 82.1  | 73.4  | 66.9  | 69.3  | -     |
| July.....      | 104.0 | 98.0  | 88.3  | 107.5 | 93.5  | 80.1  | 72.1  | 65.1  | 69.0  | -     |
| August.....    | 102.0 | 95.9  | 88.3  | 100.5 | 92.2  | 77.8  | 71.6  | 63.2  | 63.1  | -     |
| September..... | 102.8 | 93.9  | 95.5  | 98.7  | 92.4  | 77.2  | 79.8  | 63.1  | 68.3  | -     |
| October.....   | 103.7 | 93.6  | 105.2 | 96.2  | 93.5  | 79.3  | 75.9  | 66.2  | 69.7  | -     |
| November.....  | 103.3 | 93.6  | 107.7 | 98.5  | 94.3  | 77.2  | 74.5  | 65.1  | 68.8  | -     |
| December.....  | 101.4 | 93.9  | 111.7 | 99.4  | 95.1  | 71.3  | 75.5  | 64.1  | 67.4  | -     |

## Section 6.—Wholesale Price Index Numbers of Principal Imports and Exports.

For a country such as Canada, whose economy is vitally affected by foreign trade, the importance of statistics relating to all phases of international commerce is readily apparent. Prices of imports and exports, although of less general concern than aggregate values, are nevertheless significant, and the examination of price fluctuations must form a part of any complete analysis of trade statistics. If trade value figures decline, it is important to know whether this represents a contraction of markets or simply a reduction in prices with volume maintained at former levels. Indexes of both volume and price are necessary for a complete knowledge of such facts. They are also useful in determining the influence of tariff policy upon trade movements. It is likewise of considerable importance that repercussions of international price fluctuations upon domestic price levels should be observed, and measurements made of their effect.

The calendar year import and export valuation indexes formerly published have been replaced by a new and more comprehensive series of wholesale price index numbers for principal imports and exports. These are available from 1913 to the present time on the base 1926=100. They compare closely with the corresponding valuation indexes and have been constructed so as to be directly comparable with other wholesale price index numbers which the Bureau publishes. From 1934 onward, the new series is available upon a monthly basis.

### 16.—Index Numbers of Wholesale Prices of Exports and Imports, 1913-1937.

(1926=100.)

#### EXPORTS.

| Year.     | Vegetables and Their Products. | Animals and Their Products. | Fibres, Textiles and Textile Products. | Wood, Wood Products and Paper. | Iron and Its Products. | Non-Ferrous Metals and Their Products. | Non-Metallic Minerals and Their Products. | Chemicals and Allied Products. | Total Exports. |
|-----------|--------------------------------|-----------------------------|--|--------------------------------|------------------------|--|---|--------------------------------|----------------|
| 1913..... | 60.6                           | 61.3                        | 63.2                                   | 58.3                           | 73.9                   | 89.0                                   | 93.7                                      | 75.3                           | 64.7           |
| 1914..... | 67.8                           | 60.2                        | 59.6                                   | 58.4                           | 71.6                   | 82.6                                   | 80.1                                      | 75.1                           | 66.6           |
| 1915..... | 84.7                           | 63.3                        | 66.4                                   | 57.3                           | 82.7                   | 113.7                                  | 106.6                                     | 75.1                           | 78.1           |
| 1916..... | 91.9                           | 74.3                        | 82.7                                   | 63.4                           | 111.9                  | 143.7                                  | 106.6                                     | 74.2                           | 88.7           |
| 1917..... | 142.4                          | 94.9                        | 166.3                                  | 78.6                           | 160.6                  | 141.8                                  | 122.0                                     | 85.6                           | 120.5          |
| 1918..... | 148.5                          | 107.5                       | 196.1                                  | 88.9                           | 177.9                  | 126.1                                  | 128.7                                     | 105.6                          | 126.2          |
| 1919..... | 151.1                          | 142.8                       | 181.7                                  | 106.4                          | 148.3                  | 119.3                                  | 128.3                                     | 108.2                          | 134.8          |
| 1920..... | 168.2                          | 136.9                       | 139.7                                  | 156.2                          | 196.1                  | 129.9                                  | 152.4                                     | 128.9                          | 158.1          |
| 1921..... | 100.0                          | 96.5                        | 95.5                                   | 141.6                          | 137.0                  | 90.3                                   | 138.6                                     | 120.6                          | 116.5          |
| 1922..... | 84.4                           | 96.5                        | 82.5                                   | 105.9                          | 110.3                  | 90.2                                   | 129.1                                     | 106.9                          | 94.7           |
| 1923..... | 77.1                           | 92.6                        | 94.9                                   | 114.2                          | 124.0                  | 92.9                                   | 101.7                                     | 100.4                          | 93.5           |
| 1924..... | 88.2                           | 82.6                        | 104.4                                  | 108.9                          | 118.8                  | 96.2                                   | 99.7                                      | 98.1                           | 95.7           |
| 1925..... | 107.7                          | 94.7                        | 114.3                                  | 103.9                          | 107.1                  | 106.1                                  | 93.4                                      | 98.1                           | 104.5          |
| 1926..... | 100.0                          | 100.0                       | 100.0                                  | 100.0                          | 100.0                  | 100.0                                  | 100.0                                     | 100.0                          | 100.0          |
| 1927..... | 97.0                           | 105.3                       | 88.1                                   | 99.1                           | 97.4                   | 90.7                                   | 89.2                                      | 100.7                          | 97.8           |
| 1928..... | 88.8                           | 111.3                       | 95.3                                   | 98.7                           | 91.9                   | 87.5                                   | 83.8                                      | 98.2                           | 94.2           |
| 1929..... | 89.3                           | 107.9                       | 85.8                                   | 91.9                           | 91.3                   | 88.0                                   | 83.7                                      | 95.6                           | 92.2           |
| 1930..... | 65.3                           | 94.2                        | 69.5                                   | 87.3                           | 87.4                   | 75.4                                   | 81.5                                      | 92.9                           | 77.4           |
| 1931..... | 41.7                           | 70.7                        | 56.7                                   | 78.3                           | 82.7                   | 66.2                                   | 67.8                                      | 87.9                           | 60.5           |
| 1932..... | 40.4                           | 55.7                        | 39.7                                   | 68.1                           | 81.3                   | 65.2                                   | 65.7                                      | 68.3                           | 54.9           |
| 1933..... | 44.9                           | 58.0                        | 46.1                                   | 60.0                           | 75.8                   | 68.6                                   | 65.7                                      | 69.9                           | 55.2           |
| 1934..... | 53.4                           | 64.5                        | 50.1                                   | 62.5                           | 78.0                   | 67.6                                   | 71.2                                      | 72.2                           | 60.6           |
| 1935..... | 56.7                           | 65.7                        | 49.5                                   | 60.8                           | 78.0                   | 73.8                                   | 70.5                                      | 71.7                           | 62.2           |
| 1936..... | 63.9                           | 69.5                        | 61.4                                   | 65.0                           | 80.1                   | 71.1                                   | 71.3                                      | 71.8                           | 66.8           |
| 1937..... | 87.2                           | 76.5                        | 73.1                                   | 72.1                           | 95.2                   | 79.9                                   | 69.7                                      | 72.1                           | 81.1           |

## 16.—Index Numbers of Wholesale Prices of Exports and Imports, 1913-1937—concluded.

(1926=100.)

## IMPORTS.

| Year.     | Vegetables and Their Products. | Animals and Their Products. | Fibres, Textiles and Textile Products. | Wood, Wood Products and Paper. | Iron and Its Products. | Non-Ferrous Metals and Their Products. | Non-Metallic Minerals and Their Products. | Chemicals and Allied Products. | Total Imports. |
|-----------|--------------------------------|-----------------------------|--|--------------------------------|------------------------|--|---|--------------------------------|----------------|
| 1913..... | 78.0                           | 92.3                        | 63.3                                   | -                              | 75.7                   | 93.6                                   | 61.9                                      | 51.9                           | 73.0           |
| 1914..... | 80.2                           | 95.6                        | 60.5                                   | -                              | 68.6                   | 79.1                                   | 55.2                                      | 55.4                           | 69.3           |
| 1915..... | 92.1                           | 104.9                       | 57.0                                   | -                              | 77.7                   | 98.2                                   | 64.7                                      | 61.4                           | 77.5           |
| 1916..... | 105.7                          | 129.0                       | 79.8                                   | -                              | 112.2                  | 146.9                                  | 67.6                                      | 88.5                           | 109.0          |
| 1917..... | 122.1                          | 148.0                       | 117.4                                  | -                              | 154.0                  | 160.4                                  | 75.8                                      | 102.7                          | 125.6          |
| 1918..... | 132.2                          | 147.0                       | 150.2                                  | -                              | 152.3                  | 162.9                                  | 80.4                                      | 116.9                          | 135.5          |
| 1919..... | 145.6                          | 212.9                       | 167.6                                  | -                              | 137.5                  | 115.6                                  | 96.4                                      | 99.5                           | 130.6          |
| 1920..... | 200.6                          | 178.8                       | 172.7                                  | -                              | 152.1                  | 116.4                                  | 118.5                                     | 114.1                          | 158.8          |
| 1921..... | 102.8                          | 101.4                       | 98.4                                   | -                              | 116.8                  | 76.8                                   | 114.0                                     | 105.9                          | 105.8          |
| 1922..... | 98.4                           | 102.4                       | 105.7                                  | -                              | 101.2                  | 79.2                                   | 104.4                                     | 99.2                           | 100.4          |
| 1923..... | 113.7                          | 101.6                       | 127.7                                  | -                              | 114.2                  | 88.5                                   | 94.0                                      | 97.1                           | 110.0          |
| 1924..... | 105.7                          | 97.1                        | 113.5                                  | -                              | 113.2                  | 88.2                                   | 93.8                                      | 95.7                           | 105.0          |
| 1925..... | 111.9                          | 108.2                       | 112.9                                  | -                              | 104.7                  | 96.0                                   | 95.7                                      | 95.5                           | 105.6          |
| 1926..... | 100.0                          | 100.0                       | 100.0                                  | -                              | 100.0                  | 100.0                                  | 100.0                                     | 100.0                          | 100.0          |
| 1927..... | 102.0                          | 111.7                       | 92.4                                   | -                              | 98.1                   | 94.7                                   | 93.2                                      | 98.0                           | 97.7           |
| 1928..... | 94.0                           | 132.0                       | 94.7                                   | -                              | 94.8                   | 99.7                                   | 88.4                                      | 92.3                           | 95.1           |
| 1929..... | 85.6                           | 113.3                       | 93.4                                   | -                              | 95.0                   | 116.9                                  | 80.4                                      | 92.0                           | 94.2           |
| 1930..... | 75.0                           | 94.5                        | 75.5                                   | -                              | 91.1                   | 94.7                                   | 87.3                                      | 87.5                           | 83.7           |
| 1931..... | 60.1                           | 72.5                        | 59.9                                   | -                              | 88.7                   | 57.5                                   | 80.3                                      | 83.3                           | 72.4           |
| 1932..... | 57.6                           | 59.1                        | 52.6                                   | -                              | 91.1                   | 46.5                                   | 84.8                                      | 80.3                           | 70.5           |
| 1933..... | 61.4                           | 67.7                        | 57.3                                   | -                              | 92.2                   | 59.1                                   | 79.4                                      | 86.9                           | 73.0           |
| 1934..... | 65.0                           | 60.7                        | 64.2                                   | -                              | 92.7                   | 66.7                                   | 83.6                                      | 88.0                           | 76.5           |
| 1935..... | 68.5                           | 74.6                        | 63.6                                   | -                              | 94.4                   | 68.0                                   | 82.5                                      | 89.7                           | 77.9           |
| 1936..... | 68.4                           | 78.7                        | 67.7                                   | -                              | 96.3                   | 71.6                                   | 82.0                                      | 80.9                           | 79.4           |
| 1937..... | 79.7                           | 89.0                        | 72.1                                   | -                              | 114.5                  | 95.6                                   | 82.8                                      | 95.1                           | 89.8           |

It will be seen from Table 16 that from 1926 to 1937 the total wholesale price index of exports showed a net decline of 8.7 p.c. more than that of imports. This is not unexpected in view of the preponderance of raw materials in Canadian export trade and the effect of the depression on such prices. For the low year of the depression, 1932, the total exports index was 54.9 and the imports index 70.5. From this level the recovery of export prices has therefore been 26.2 p.c. as compared with 19.3 for import prices. The groups in which recovery has been strongest for both exports and imports are: fibres, textiles and textile products; vegetables and their products; and animals and their products.

## CHAPTER XXI.—PUBLIC FINANCE.

The following treatment of public finance includes an outline of Dominion, provincial, and municipal finance in Canada, supported by the necessary detailed statistics, and closes with a brief discussion of the national wealth and national income of the Dominion as the basis of all public finance.

The great increase in Dominion expenditure since 1913 has been due partly to the Great War with the resulting burden of interest, pension charges, etc., and partly to railway expenditures and social services including, latterly, unemployment relief. Increases on a commensurate scale have also taken place during the same period in provincial and municipal expenditures. Thus, in their fiscal years ended 1936, the total ordinary expenditure of the nine Provincial Governments was \$248,141,808 as compared with \$53,826,219 in 1916, only 20 years before—an increase of over 361 p.c. (The aggregate interest payments of Provincial Governments rose from \$7,817,844 in 1916 to \$79,893,083 in 1936). Again, in recent years, between 1924 and 1935, the aggregate tax receipts of the municipalities of Ontario have increased from \$94,526,271 to \$122,108,912 (comparable figures are not available for earlier years)—an increase of over 29 p.c. In Quebec the ordinary receipts of municipalities increased from \$33,288,115 in 1915 to \$79,471,242 in 1933—an increase of 139 p.c.; the 1934 and 1935 figures given in Table 30 are not comparable as explained in the footnote thereto. While taxation receipts in the Prairie Provinces and the Maritime Provinces, for those years for which comparable figures are available do not show an upward trend, except in the case of Nova Scotia, the figures cover relatively recent years in the majority of cases, and in the Prairie Provinces a larger proportion of tax levies has remained uncollected. In British Columbia the taxes collected by the municipalities totalled \$9,382,099 in 1917 and \$17,185,917 in 1935.

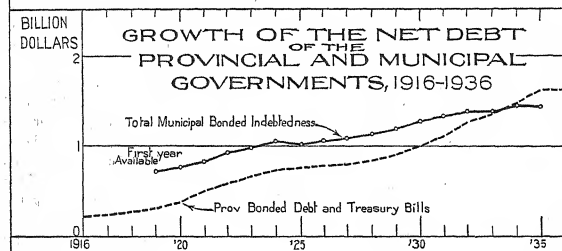
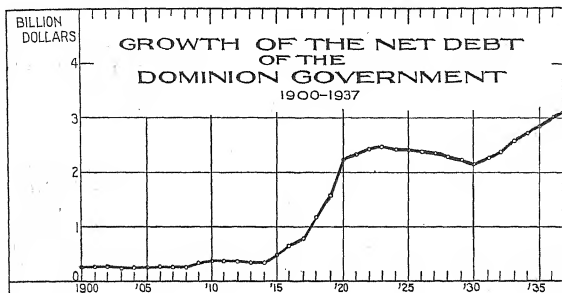
**Public Debt of Canada.**—The latest year for which a figure for the aggregate public debt of Canada can be given is 1936. The statement below is summarized from the statistics given in the respective Sections of this chapter, the guaranteed or indirect debt being shown separately. The figures with regard to provincial debt are for the respective fiscal years of the provinces ended in 1936, given on p. 878.

### SUMMARY OF THE AGGREGATE PUBLIC DEBT OF CANADA (*CIRCA*) 1936.

| (Dominion, Provincial, and Municipal Debt.)   |                          |    |
|---|--------------------------|----|
| <b>NET DIRECT DEBT—</b>   |                          | \$ |
| Net Debt of Dominion Government, Mar. 31, 1936.....   | 3,006,100,517            | \$ |
| Net Direct Liabilities Provincial Governments, 1936 (sinking funds and available capital, current and trust account assets deducted)..... | 1,084,107,202            |    |
| Direct Liabilities all Canadian Municipalities (less sinking funds and investments, 1935).....  | 1,445,537,075            |    |
| <b>TOTAL NET DIRECT DEBT.....</b>   | <b>5,535,744,794</b>     |    |
| <b>GUARANTEED OR INDIRECT DEBT—</b>   |                          |    |
| Dominion Government, Mar. 31, 1936—   |                          |    |
| Principal and interest guaranteed on railway and other securities.....  | 778,343,114              |    |
| Interest only guaranteed on railway securities.....   | 216,207,142              |    |
| Other Guarantees.....   | 284,247,286 <sup>1</sup> |    |
|   | 1,278,797,542            |    |
| Provincial Governments—fiscal years 1936.....   | 224,549,202              |    |
| <b>TOTAL GUARANTEED OR INDIRECT DEBT.....</b>   | <b>1,503,346,744</b>     |    |
| <b>GRAND AGGREGATE PUBLIC NET DIRECT DEBT AND GUARANTEED OR INDIRECT DEBT OF CANADA.....</b>  | <b>7,039,091,538</b>     |    |

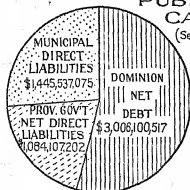
<sup>1</sup> Includes bank advances \$89,523,708, British Columbia and Manitoba Treasury Bills \$6,520,661, deposits of chartered banks in Bank of Canada \$138,202,917. There is also an unstated amount guaranteed for the Winnipeg Grain and Produce Clearing Association Limited for day to day margins of the Canadian Wheat Board.

## PUBLIC DEBT OF CANADA

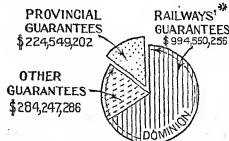


**APPORTIONMENT OF AGGREGATE PUBLIC DEBT OF CANADA, 1936**

(See text and statement on page 832)



**NET DIRECT DEBT**  
\$5,535,744,794



**GUARANTEED OR INDIRECT DEBT**  
\$1,503,346,744

\* Including Canadian National Steamships and Harbour Commissions.

## Section 1.—Dominion Public Finance.\*

**Historical Sketch.**—Both under the French *régime* and in the earlier part of the British, the territorial or casual revenues of Canada, consisting of certain seigniorial dues and the proceeds of the sale of government timber and land, were reserved to the Crown, while the right of levying taxes and of regulating the trade and commerce of the colony was, after 1763, deemed to be vested in the British Parliament.

By the Quebec Act of 1774, certain duties on spirits and molasses were imposed, to be expended by the Crown in order to provide a revenue "towards defraying the expenses of the administration of justice and the support of the civil government of the province". A little later, in 1778, the British Government, by the Declaratory Act (18 Geo. III, c. 12), renounced forever the right of taxing the colonies to provide Imperial revenue, but maintained its claim to impose duties considered necessary for the regulation of trade, the proceeds to go towards defraying the expenditures of the colonial administration. After the Constitutional Act of 1791, the customs duties remained under the control of the Imperial Government, their revenue, as well as the territorial revenue above mentioned, coming in to the Executive Administration independently of the Legislative Assembly and thus making the Executive power largely independent of the Legislature. In case these revenues proved insufficient, recourse could generally be had to the grant made by the Imperial Government for the support of the army. As time went on, however, the Crown revenues became more and more inadequate to meet the increasing expenditure, while the wave of economy in the United Kingdom after 1815 made it impossible any longer to supplement these revenues from military sources. On the other hand, the purely provincial revenues collected under the authorization of the Provincial Legislature showed an increasing surplus. The power of the purse thus began to pass into the hands of the Legislatures; further, in 1831 the British Parliament passed an Act placing the customs duties at the disposal of the Legislatures.

Under the Act of Union, a consolidated revenue fund was established. All appropriation bills were required to originate in the Legislative Assembly, which was forbidden to pass any vote, resolution or bill involving the expenditure of public money unless the same had first been recommended by a written message of the Governor General. The British Government surrendered all control of the hereditary or casual revenues, which were thenceforth paid into the treasury of the province to be disposed of as its Legislature should direct.

At the interprovincial conference which took place prior to Confederation, it was decided that the new Dominion Government, which was to take over permanently, as its chief source of revenue, the customs and excise duties that had yielded the greater part of the revenues of the separate provinces (direct taxation being as unpopular in British North America as in other new countries), was also to assume the provincial debts and to provide out of Dominion revenues definite cash subsidies for the support of the Provincial Governments. (See Tables 15 and 16.) Until the Great War, which made other taxes necessary, the customs and excise revenue con-

\* Revised under the direction of Dr. W. C. Clark, Deputy Minister, Department of Finance, with the exception of those parts dealing with war tax revenue and inland revenue on pp. 850 to 856, which were revised by the Department of National Revenue.

stituted the chief resource of the Dominion Government for general purposes—the Post Office revenue and the Government railway receipts, which are not taxes at all, being mainly or entirely absorbed by the expenses of administering these services. Indeed, for many years preceding the War, customs and excise duties, together with the revenue from the head tax on Chinese immigrants, were the only items of receipts which were classified as taxes by the Department of Finance. In the last pre-war fiscal year these two items aggregated \$126,143,275 out of total receipts on consolidated fund account amounting to \$163,174,395, the Post Office and Government railways furnishing between them \$26,348,847 of the remainder, offset, however, by expenditures on these two services amounting to \$27,757,196. Miscellaneous revenue, largely fees, amounted in that year to \$10,682,273—a comparatively small fraction of the total. As both customs and excise taxes were indirect, the average Canadian felt but little the pressure of taxation for Dominion purposes.

The War enormously increased the expenditure, and this increase had in the main to be met by loans. It is, however, a cardinal maxim of public finance that, where loans are contracted, sufficient new taxation should be imposed to meet the interest charge upon the loans and to provide a sinking fund for their ultimate extinction. This war taxation was begun in Canada within the first weeks of the War when, in the short war session of August, 1914, increases were made in the customs and excise duties on various commodities, including, coffee, sugar, spirituous liquors, and tobacco. In 1915 special additional duties of 5 p.c. *ad valorem* were imposed on commodities imported under the British preferential tariff and 7½ p.c. *ad valorem* on commodities imported under the intermediate and general tariffs, certain commodities being excepted. New internal taxes were also imposed on bank circulation, on the income of trust and loan companies, on insurance in other than life and marine companies, on telegrams and cablegrams, railway tickets, sleeping-car berths, etc., also on cheques, postal notes, money orders, letters and post cards. In the following year, the business profits war tax (dropped in 1921)\* was introduced, and in 1917 an income tax was imposed. In 1918 both of these taxes were increased and their application widened, and in 1919 the income tax was again increased, and still further augmented in 1920 by a surtax of 5 p.c. of the tax on incomes of \$5,000 and over; the sales tax was also introduced in 1920. The cumulative result of these war taxes was that, in the fiscal year ended Mar. 31, 1921, customs duties were for the first time displaced from their position as the chief factor in Canadian revenue, the war taxes yielding \$168,385,327, as against the customs yield of \$163,266,804. This situation has remained true down to 1937 with the exception of the period between 1928 and 1931, when customs duties temporarily assumed their former position.

The importance which the sales tax has attained as a source of revenue will be seen from Tables 9 and 10. When first introduced in 1920 the tax was 1 p.c. on sales but the rate has been varied from year to year and from May 2, 1936, has been 8 p.c. A statement is appended showing the changes made from the inception of the tax up to the present. A lesser, but still substantial, source of revenue is the special excise tax on importations, instituted in 1931, the changes in rates of which are shown in Statement II.

\* Related revenue from this tax has been collected in subsequent fiscal years down to 1933 (see Table 8, p. 851).



## I.—STATEMENT OF SALES TAX CHANGES, 1920-38.

NOTE.—Sales tax is payable by purchaser to manufacturer or wholesaler. For proceeds of tax, see Tables 2, 9, and 10.

| From—              | To—                | Domestic Sales.  | Importations.   |
|--------------------|--------------------|--|---|
| May 19, 1920.....  | June 16, 1920..... | 1 p.c. on sales by manufacturers.<br>1 p.c. on sales by wholesalers.   | 1 p.c. on importations.   |
| June 17, 1920..... | May 9, 1921.....   | 1 p.c. on sales by manufacturers to wholesalers.<br>1 p.c. on sales by wholesalers.<br>2 p.c. on sales by manufacturers to retailers or consumers.   | 1 p.c. on importations by manufacturers and by wholesalers.<br>2 p.c. on importations by retailers or consumers.  |
| May 10, 1921.....  | May 23, 1922.....  | 1½ p.c. on sales by manufacturers to wholesalers.<br>1½ p.c. on sales by wholesalers.<br>3 p.c. on sales by manufacturers to retailers or consumers.<br>Except lumber, upon which tax was 2 p.c. on all domestic sales.  | 2½ p.c. on importations by manufacturers and by wholesalers.<br>4 p.c. on importations by retailers or consumers.<br>Except lumber, upon which tax was 3 p.c. on all importations.  |
| May 24, 1922.....  | Dec. 31, 1923..... | 2½ p.c. on sales by manufacturers to wholesalers.<br>2½ p.c. on sales by wholesalers.<br>4½ p.c. on sales by manufacturers to retailers or consumers.<br>Except lumber, upon which tax was 3 p.c. on all domestic sales. | 3½ p.c. on importations by manufacturers and by wholesalers.<br>6 p.c. on importations by retailers or consumers.<br>Except lumber, upon which tax was 4½ p.c. on all importations. |
| Jan. 1, 1924.....  | Apr. 10, 1924..... | 6 p.c. on sales by manufacturers or producers. (3 p.c. on a restricted list.)  | 6 p.c. on importations. (3 p.c. on a restricted list.)  |
| Apr. 11, 1924..... | Feb. 17, 1927..... | 5 p.c. on sales by manufacturers. (2½ p.c. on a restricted list.)  | 5 p.c. on importations. (2½ p.c. on a restricted list.)   |
| Feb. 18, 1927..... | Feb. 16, 1928..... | 4 p.c. on sales by manufacturers. (2 p.c. on a restricted list.)   | 4 p.c. on importations. (2 p.c. on a restricted list.)  |
| Feb. 17, 1928..... | Mar. 1, 1929.....  | 3 p.c. on sales by manufacturers. (1½ p.c. on a restricted list.)  | 3 p.c. on importations. (1½ p.c. on a restricted list.)   |
| Mar. 2, 1929.....  | May 1, 1930.....   | 2 p.c. on sales by manufacturers. (1 p.c. on a restricted list.)   | 2 p.c. on importations. (1 p.c. on a restricted list.)  |
| May 2, 1930.....   | June 1, 1931.....  | 1 p.c. on sales by manufacturers. (½ of 1 p.c. on a restricted list.)  | 1 p.c. on importations. (½ of 1 p.c. on a restricted list.)   |
| June 2, 1931.....  | Apr. 6, 1932.....  | 4 p.c. on sales by manufacturers. (2 p.c. on a restricted list and 2 p.c. on a restricted list of commodities produced or manufactured in Canada.)   | 4 p.c. on importations. (2 p.c. on a restricted list.)  |
| Apr. 7, 1932.....  | Mar. 21, 1933..... | 6 p.c. on sales by manufacturers. (3 p.c. on a restricted list and 3 p.c. on a restricted list of commodities produced or manufactured in Canada.)   | 6 p.c. on importations. (3 p.c. on a restricted list.)  |

## I.—STATEMENT OF SALES TAX CHANGES, 1920-38—concluded.

| From—              | To—                | Domestic Sales.   | Importations.           |
|--------------------|--------------------|---|-------------------------|
| Mar. 22, 1933..... | Mar. 22, 1935..... | 6 p.c. on sales by manufacturers.<br>3 p.c. on articles manufactured in Canada by labour of blind persons.                  | 6 p.c. on importations. |
| Mar. 23, 1935..... | May 1, 1936.....   | 6 p.c. on sales by manufacturers.<br>3 p.c. on articles manufactured in Canada by labour of blind or deaf and dumb persons. | 6 p.c. on importations. |
| May 2, 1936.....   | To date.....       | 8 p.c. on sales by manufacturers.<br>4 p.c. on articles manufactured in Canada by labour of blind or deaf and dumb persons. | 8 p.c. on importations. |

## II.—STATEMENT OF SPECIAL EXCISE TAX CHANGES, 1931-38.

| From—              | To—                | Details.  |
|--------------------|--------------------|---|
| June 2, 1931.....  | Apr. 6, 1932.....  | 1 p.c. on importations.<br>(Restricted free list.)  |
| Apr. 7, 1932.....  | Apr. 13, 1934..... | 3 p.c. on importations.<br>(Restricted free list.)  |
| Apr. 19, 1934..... | Mar. 22, 1935..... | 3 p.c. on importations.<br>(Restricted free list.)<br>1½ p.c. on importations entitled to entry under the British preferential tariff or under trade agreements between Canada and other British countries.                           |
| Mar. 23, 1935..... | To date.....       | 3 p.c. on importations.<br>(Restricted free list.)<br>Special excise tax does not apply on importations entitled to entry under the British Preferential Tariff or under trade agreements between Canada and other British countries. |

A more detailed sketch of the changes made in taxation from 1914 to 1926 will be found at pp. 755-759 of the 1926 Year Book, while similar information *re* tax changes in 1927 to 1929 was given at pp. 791-792 of the 1930 Year Book and for the years 1930 to 1935 at pp. 824-826 of the 1936 Year Book.

**Recent Modifications in the System of Taxation.**—In 1936 important changes were made in various taxation rates. The ordinary rate of income tax on corporations was increased from 13½ p.c. to 15 p.c., and where returns are consolidated, the rate was increased from 15 p.c. to 17 p.c. No changes were made in the existing rates on individual incomes. In order to stimulate an expansion of mining activity, an exemption from corporate income tax was granted to any metalliferous mine coming into production between May 1, 1936, and Jan. 1, 1940, such exemption to apply to its income for the first three years following the commencement of production. A new category embracing non-resident-owned investment corporations was established with provision for a rate of half the normal rate of tax on corporations.

The rate of sales tax was increased from 6 p.c. to 8 p.c. Certain changes in the exemption list were made to eliminate double taxation on materials consumed in the process of manufacture commonly known as 'consumable materials'.

Changes were made in the schedule of excise taxes on automobiles with a limitation providing that the tax per automobile in no case shall exceed \$250.

The excise duty on Canadian brandy was reduced from \$4 to \$3 per gallon. The duty on spirits used in the manufacture of medicines, etc., was reduced from \$2.50 to \$1.50 per gallon.

The more important tariff changes were as follows: Intermediate Tariff on automobiles was fixed at  $17\frac{1}{2}$  p.c. instead of former varying rates of  $17\frac{1}{2}$ ,  $22\frac{1}{2}$ , and 30 p.c.; Intermediate Tariff on agricultural implements reduced from  $12\frac{1}{2}$  to  $7\frac{1}{2}$  p.c.; Intermediate Tariff on gasoline reduced from  $2\frac{1}{2}$  cents to 1 cent per gallon.

Under the British Preferential Tariff the following were the more important changes: free listing of iron and steel machinery of a class or kind not made in Canada; the removal of existing specific duties on all yarns or fabrics wholly of cotton, and on yarns and fabrics of artificial silk; and a reduction in rate on all unenumerated commodities made of iron or steel.

Reductions under all tariffs applied to printing machinery and equipment, various requirements for public hospitals, and all articles imported for use of the blind.

An important change was the provision for allowing Canadians returning from abroad to import free of customs duties goods to the value of \$100, for their personal use.

In 1937 no changes were made in the rates of taxation. Several small items were added to the list of goods exempted from the sales tax, including articles specially designed for the use of the blind, raw and salted hides, certain refractory materials, spinal braces and parts thereof, ingredients used in canning fish, parts for grain- and seed-cleaning machines and art work and printing plates made therefrom for non-advertising purposes in periodical publications.

Tariff changes of considerable importance were effected in 1937, resulting for the most part from the revised trade agreement between Canada and the United Kingdom, signed at Ottawa on Feb. 23, 1937. Canada's commitments under the agreement were implemented by amendments to the customs tariff introduced during the course of the Budget Speech on Feb. 25.

The agreement resulted in reduction of the British preferential rate of duty under 179 tariff items. The concessions included reduced rates, or free entry, on textiles, including those of wool, cotton, silk and artificial silk, as well as on clothing and wearing apparel, knitted goods of all kinds, blankets and carpets; on glass tableware and cut glass; on various primary forms of iron and steel, and on a wide range of processed steel goods, including machinery, vacuum cleaners, and sewing machines, enamelled ware, and electrical goods; on leather and leather products; on boots and shoes; on numerous paper products; and on paints and varnishes, earthenware, canned fish, soaps, brushes, and silverware.

The 1937 Budget Speech also introduced a considerable number of tariff amendments not directly related to the trade agreement. Certain of these were merely technical in character, but others provided for reductions under all tariffs on fumigants, plastic materials, seamless well-casing, and other articles, and for reductions of the intermediate or both intermediate and general rates on a number of products of which plate glass and cotton clothing were among the most important.

There were no increases in duty under the British preferential tariff. The intermediate rate on furniture was raised from 30 p.c. to 37½ p.c., in each case less a discount of 10 p.c. to most-favoured-nations, as the result of a Tariff Board report received while the House of Commons was in committee. Other increases of the intermediate or general tariff were few in number and of minor importance.

As a result of commercial arrangements with other countries, Canada, during 1937, extended her intermediate tariff to the Panama Canal Zone and accorded Brazil most-favoured-nation treatment. All non-self-governing British colonies and specified mandated territories were given most-favoured-nation treatment, and the list of countries entitled to the British preferential tariff was expanded by the addition of a number of non-self-governing colonies not already receiving its benefits. And, finally, the trade agreements with Australia and New Zealand were revised and extended. Canada granted some additional concessions to Australia and New Zealand, of which probably the most important was a reduction of the rate on lamb and mutton from 3 cents per lb. to ½ cent per lb. The reduced rates went into effect on Oct. 1, 1937.

A statement at pp. 811-817 of the 1937 Year Book showed complete details of the Dominion tax system as of July, 1936.

### Subsection 1.—The Current Balance Sheet of the Dominion.

A summary review of the current financial situation of the Dominion as at Mar. 31, 1933-37, is given in the balance sheet shown as Table 1. This shows the figures for gross debt on Mar. 31, 1937, to have been \$3,542,521,139, partly offset by active assets aggregating \$458,568,837, leaving the net debt at \$3,083,952,202. Non-active assets, including such public works as canals and railways, also loans to railways, amounted in the aggregate to \$1,833,901,293, leaving a debit balance on Consolidated Fund Account on Mar. 31, 1937, of \$1,250,050,909. The details of the various assets and liabilities are contained in the schedules accompanying the balance sheet and printed in the Public Accounts.

#### 1.—Balance Sheets of the Dominion of Canada, as at Mar. 31, 1933-37.

NOTE.—Dashes indicate that the items were not applicable in the years so indicated.

| Item.  | 1933.<br>\$        | 1934.<br>\$        | 1935.<br>\$        | 1936.<br>\$        | 1937.<br>\$        |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| ASSETS.  |                    |                    |                    |                    |                    |
| <b>Active Assets—</b>  |                    |                    |                    |                    |                    |
| Cash on hand and in banks..  | 1,555,876          | 9,874,579          | 16,296,697         | 20,243,808         | 26,239,458         |
| Specie reserve.....  | 69,875,518         | 71,406,030         | 2,443,224          | 2,235,629          | —                  |
| Bank of Canada, Class "B" shares.....  | —                  | —                  | —                  | —                  | 5,100,000          |
| Railway accounts <sup>1</sup> .....  | 14,677,338         | 17,305,439         | 33,584,413         | 46,087,498         | 56,335,222         |
| Advances to provinces, Harbour Commissions, Canadian Farm Loan Board, etc..... | 185,226,261        | 191,920,713        | 175,034,198        | 223,788,091        | 231,014,250        |
| Advances to foreign governments.....   | 30,494,720         | 30,494,720         | 30,494,720         | 30,494,720         | 30,494,720         |
| Soldier and general land settlement loans.....                                 | 47,711,084         | 45,219,132         | 44,648,325         | 43,594,540         | 42,477,774         |
| Miscellaneous current accounts.....  | 50,345,012         | 44,843,344         | 57,043,834         | 59,398,223         | 66,907,513         |
| <b>Totals, Active Assets.....</b>  | <b>399,885,839</b> | <b>411,068,957</b> | <b>359,845,411</b> | <b>425,843,509</b> | <b>458,568,837</b> |

For footnotes, see end of table, p. 840.

## 1.—Balance Sheets of the Dominion of Canada, as at Mar. 31, 1933-37—concluded.

| Item.   | 1933.<br>\$          | 1934.<br>\$          | 1935.<br>\$          | 1936.<br>\$          | 1937.<br>\$          |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|
| ASSETS—concluded.   |                      |                      |                      |                      |                      |
| Balance of liabilities over active assets, being net debt, Mar. 31..... | 2,596,480,826        | 2,729,978,140        | 2,846,110,958        | 3,006,100,517        | 3,083,952,202        |
| <b>Total, Gross Debt .....</b>  | <b>2,996,366,665</b> | <b>3,141,042,097</b> | <b>3,205,956,369</b> | <b>3,431,944,026</b> | <b>3,542,521,139</b> |
| <b>Non-Active Assets—</b>   |                      |                      |                      |                      |                      |
| Public works, canals.....   | 240,104,671          | 242,079,743          | 242,411,265          | 242,855,235          | 242,726,334          |
| Public works, railways.....   | 443,546,600          | 443,182,346          | 442,884,582          | 442,910,909          | 443,109,941          |
| Public works, miscellaneous.....  | 247,245,431          | 252,124,944          | 259,118,195          | 265,165,018          | 267,970,363          |
| Military property and stores.....                                       | 12,035,420           | 12,035,420           | 12,035,420           | 12,035,421           | 12,035,420           |
| Territorial accounts.....   | 9,895,948            | 9,895,948            | 9,895,948            | 9,895,948            | 9,895,948            |
| Railway accounts (old).....   | 88,398,829           | 88,398,829           | 88,398,829           | 88,398,829           | 88,398,829           |
| Railway accounts (loans non-active).....                                | 655,527,456          | 655,527,456          | 655,527,455          | 655,527,455          | 655,527,456          |
| Canadian National Steamships (loans non-active).....                    | 15,367,531           | 15,353,467           | 15,840,634           | 15,507,970           | 13,754,191           |
| Miscellaneous investments and other accounts (non-active).....          | 72,941,777           | 75,960,711           | 77,192,578           | 79,621,230           | 100,462,811          |
| Balance Consolidated Fundas at Mar. 31 of preceding year                | 667,125,993          | 811,417,104          | 935,419,276          | 1,042,806,062        | 1,194,182,502        |
| Excess of expenditure over revenue, year ended Mar. 31.                 | 144,291,170          | 124,002,112          | 107,386,776          | 151,379,450          | 55,868,407           |
| <b>Totals, Non-Active Assets or Net Debt.....</b>                       | <b>2,596,480,826</b> | <b>2,729,978,140</b> | <b>2,846,110,958</b> | <b>3,006,100,517</b> | <b>3,083,952,202</b> |
| LIABILITIES. <sup>a</sup>   |                      |                      |                      |                      |                      |
| Dominion notes in circulation   | 180,926,882          | 172,017,922          | 3                    | 3                    | 3                    |
| Bank Note Circulation Redemption Fund.....                              | 6,584,813            | 6,486,355            | 6,696,471            | 6,857,942            | 7,019,898            |
| Post Office account, money orders, postal notes, etc., outstanding..... | 2,184,456            | 3,570,744            | 2,137,533            | 2,726,925            | 4,074,164            |
| Post Office Savings Bank deposits.....                                  | 23,920,915           | 23,158,919           | 22,547,006           | 22,047,287           | 21,879,593           |
| Insurance and superannuation funds.....                                 | 98,500,190           | 109,481,507          | 126,166,496          | 150,614,097          | 176,973,747          |
| Trust funds.....  | 18,525,396           | 18,271,120           | 19,587,159           | 20,943,718           | 20,933,993           |
| Contingent and special funds.....                                       | 2,594,601            | 4,441,481            | 5,625,412            | 6,044,065            | 13,567,412           |
| Province accounts.....  | 9,623,817            | 9,623,817            | 9,623,817            | 9,623,817            | 9,623,817            |
| Funded debt less sinking funds.....                                     | 2,651,898,934        | 2,791,706,560        | 3,011,713,862        | 3,211,347,008        | 3,285,066,671        |
| Interest due and outstanding.....                                       | 1,606,661            | 1,683,672            | 1,858,613            | 1,739,167            | 3,351,844            |
| <b>Totals, Liabilities or Gross Debt.....</b>                           | <b>2,996,366,665</b> | <b>3,141,042,097</b> | <b>3,205,956,369</b> | <b>3,431,944,026</b> | <b>3,542,521,139</b> |

<sup>1</sup> Included in "Miscellaneous current accounts" in earlier Year Books. <sup>2</sup> Direct liabilities only.  
 Indirect liabilities or guarantees given by the Dominion of Canada are listed in Table 22, on pp. 865-866.  
<sup>3</sup> The Bank of Canada assumed liability for outstanding Dominion notes from Mar. 11, 1935.

## Subsection 2.—Receipts and Disbursements.

The receipts of the Dominion Government on Ordinary Account for the fiscal year ended Mar. 31, 1937, were \$445,028,955, an increase of \$72,806,749 as compared with the previous year; besides these, special receipts amounted to \$8,463,997 and other credits, including refunds to capital account and credits to non-active accounts, amounted to \$660,795—a total revenue of \$454,153,747. The regular expenditure on Ordinary Account was \$387,112,072, while Special Expenditures amounted to \$78,003,702. Under the category of "Government-Owned Enterprises", total disbursements amounted to \$44,218,526, under "Capital Account" to \$3,491,544, and under "Write Down of Assets" to \$19,179,588. Thus total disbursements amounted to

\$532,005,432. There was an increase of \$77,851,685 in the net debt (gross debt less active assets) during the year. (See Table 20 for interest-bearing debt.)

Detailed statistics of receipts and disbursements are contained in Tables 2 and 3. Tables 4 and 5 are historical tables giving the figures of the main items of Dominion receipts and expenditures since Confederation, while Table 6 shows the per capita receipts and expenditures for these years, calculated on census and estimated populations. Per capita receipts and expenditures are given by principal items in Table 7.

**Changes in the Public Accounts, 1936.**—Several important changes were made under various headings in the Public Accounts for 1936. On the revenue side "War and Demobilization Receipts", previously carried as "Special Receipts", were transferred to Ordinary Account (Casual Revenue). On the expenditure side several recurring items were also transferred from "Special" to "Ordinary", as follows: cost of loan flotations, representing flotation costs of new loans and annual charges for amortization of bond discount; the Government's annual contribution to the Superannuation Fund; the annual payment to maintain the reserve in the Government Annuities Fund; adjustment of war claims; and expenditures made under the Railway Grade Crossing Act. A new category was established under the heading "Government-Owned Enterprises", to cover expenditures incurred by the Government on account of the Canadian National Railways, the Canadian National Steamships and various Harbour Commissions. Other major changes were the establishment of a separate category for Write Down of Assets, and transference of payment of Old Age Pensions from the Department of Labour to the Department of Finance.

In Tables 2, 3, and 7 the new classification of items has been adopted for the 1936 and 1937 figures and the figures for 1933 to 1935 have been adjusted to the new basis. The result is that the figures for each year as given in the tables do not conform with the figures shown in the Public Accounts for that same year, because of the new set-up for 1936, but the figures below are on a comparable basis throughout.

## 2.—Details of Revenue Receipts, fiscal years ended Mar. 31, 1933-37.

NOTE.—See text above re adjustment of statistics for 1933-35 as compared with earlier Year Books. Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the years so indicated.

| Item.   | 1933.       | 1934.       | 1935.       | 1936.       | 1937.       |
|---|-------------|-------------|-------------|-------------|-------------|
|   | \$          | \$          | \$          | \$          | \$          |
| <b>Consolidated Fund Receipts—</b>              |             |             |             |             |             |
| Taxation—                                       |             |             |             |             |             |
| Customs.....                                    | 70,072,932  | 66,305,356  | 70,561,975  | 74,004,560  | 53,771,061  |
| Excise duties.....                              | 37,833,858  | 35,494,220  | 43,189,655  | 44,409,797  | 45,956,857  |
| Wax Tax Revenue—                                |             |             |             |             |             |
| Banks.....                                      | 1,327,535   | 1,335,546   | 1,368,480   | 1,280,933   | 1,209,804   |
| Insurance companies.....                        | 826,150     | 741,681     | 750,100     | 790,843     | 774,303     |
| Business profits.....                           | 54          | —           | —           | —           | —           |
| Income tax.....                                 | 62,066,697  | 61,399,172  | 66,808,066  | 82,709,803  | 102,365,242 |
| Sales tax.....                                  | 56,813,813  | 61,391,400  | 72,447,311  | 77,551,974  | 112,832,259 |
| Tax on cheques, transportation tax,<br>etc..... | 25,377,762  | 45,184,175  | 39,744,759  | 35,181,074  | 39,641,163  |
| Tax on gold.....                                | —           | —           | 3,573,383   | 1,412,825   | —           |
| Totals, Receipts from Taxation..                | 254,318,801 | 271,851,550 | 304,443,729 | 317,811,809 | 386,550,809 |

## 2.—Details of Revenue Receipts, fiscal years ended Mar. 31, 1933-37—concluded.

| Item.  | 1933.              | 1934.              | 1935.              | 1936.              | 1937.              |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
|  | \$                 | \$                 | \$                 | \$                 | \$                 |
| <b>Consolidated Fund Receipts—concluded.</b> |                    |                    |                    |                    |                    |
| <b>Non-Tax Revenue—</b>                      |                    |                    |                    |                    |                    |
| Canada Grain Act.....                        | 1,444,840          | 1,235,621          | 1,204,536          | 1,213,087          | 1,192,099          |
| Canada Gazette.....                          | 73,836             | 55,722             | 47,257             | 49,295             | 47,697             |
| Canals.....                                  | 831,020            | 877,630            | 837,871            | 889,764            | 1,008,765          |
| Casual.....                                  | 3,206,163          | 3,621,720          | 4,336,881          | 4,636,537          | 6,275,853          |
| Chinese revenue.....                         | 8,632              | 6,237              | 5,506              | 6,476              | 7,444              |
| Dominion lands, parks, etc.....              | 458,934            | 418,729            | 516,389            | 457,680            | 478,133            |
| Electricity inspection.....                  | 298,352            | 440,290            | 484,498            | 542,101            | 646,117            |
| Fines and forfeitures.....                   | 212,075            | 177,812            | 89,806             | 294,674            | 134,389            |
| Fisheries.....                               | 4,429              | 39,508             | 42,935             | 42,104             | 55,656             |
| Gas inspection.....                          | 84,078             | 76,186             | 96,096             | 90,948             | 93,289             |
| Insurance inspection.....                    | 160,298            | 148,535            | 139,304            | 146,874            | 151,966            |
| Interest on investments.....                 | 11,220,989         | 11,148,232         | 10,963,478         | 10,614,125         | 11,231,035         |
| Marine.....                                  | 178,118            | 207,532            | 218,437            | 221,673            | 263,260            |
| Mariners' Fund.....                          | 178,961            | 183,054            | 181,203            | 187,448            | 204,525            |
| Military College.....                        | 20,116             | 20,317             | 20,044             | 19,616             | 20,012             |
| Military pensions revenue.....               | 166,414            | 165,207            | 173,794            | 178,408            | 189,515            |
| Ordnance lands.....                          | 16,677             | 17,855             | 15,819             | 15,685             | 15,451             |
| Patent and copyright fees.....               | 539,341            | 429,341            | 428,677            | 454,782            | 463,850            |
| Penitentiaries.....                          | 121,426            | 97,962             | 73,765             | 67,683             | 62,324             |
| Post Office.....                             | 30,928,317         | 30,893,157         | 31,248,324         | 32,507,889         | 34,274,552         |
| Premium, discount, and exchange (net).....   | 145,938            | —                  | 751,491            | 35,600             | —                  |
| Public works.....                            | 212,830            | 249,721            | 254,158            | 251,273            | 274,431            |
| Radio receiving licences.....                | 1,404,351          | 1,291,485          | 1,487,408          | 1,574,431          | 989,619            |
| R.C.M.P. officers' pensions.....             | 12,050             | 12,444             | 9,202              | 10,807             | 10,195             |
| Weights and measures inspection.....         | 394,223            | 399,717            | 407,303            | 401,467            | 395,904            |
| Totals, Non-Tax Revenue.....                 | 52,321,428         | 52,219,014         | 54,031,182         | 54,910,397         | 58,478,086         |
| <b>Totals, Consolidated Fund Receipts...</b> | <b>306,640,229</b> | <b>324,070,564</b> | <b>358,474,911</b> | <b>372,222,206</b> | <b>445,028,955</b> |
| <b>Special Receipts—</b>                     |                    |                    |                    |                    |                    |
| Sundry receipts and credits.....             | 4,489,339          | 409,271            | 3,397,169          | 319,833            | 8,463,997          |
| <b>Other Credits—</b>                        |                    |                    |                    |                    |                    |
| Refunds on capital account.....              | 500,774            | 89,752             | 80,409             | 27,033             | 616,069            |
| Credits to non-active accounts.....          | 104,944            | 91,003             | 21,275             | 26,924             | 44,726             |
| <b>Totals, Other Credits.....</b>            | <b>605,718</b>     | <b>180,755</b>     | <b>101,684</b>     | <b>53,957</b>      | <b>660,795</b>     |
| <b>Grand Totals, Receipts.....</b>           | <b>311,735,286</b> | <b>324,660,590</b> | <b>361,973,764</b> | <b>372,595,996</b> | <b>454,153,747</b> |

## 3.—Details of Expenditures, fiscal years ended Mar. 31, 1933-37.

NOTE.—See text on p. 841 re new classification. Dashes in this table indicate that there were no expenditures under the corresponding heads because the items were not applicable in the years so indicated.

| Item.   | 1933.     | 1934.     | 1935.     | 1936.     | 1937.     |
|---|-----------|-----------|-----------|-----------|-----------|
|   | \$        | \$        | \$        | \$        | \$        |
| <b>Ordinary Expenditures—</b>                             |           |           |           |           |           |
| Agriculture.....  | 8,066,372 | 6,995,768 | 7,106,535 | 9,399,311 | 8,741,070 |
| Auditor General's Office.....                             | 379,847   | 375,791   | 376,556   | 428,665   | 423,367   |
| Civil Service Commission.....                             | 243,777   | 221,086   | 220,787   | 358,688   | 304,921   |
| External Affairs, including Office of Prime Minister..... | 863,055   | 974,172   | 1,426,999 | 1,289,879 | 1,340,912 |

## 3.—Details of Expenditures, fiscal years ended Mar. 31, 1933-37—continued.

| Item.  | 1933.              | 1934.              | 1935.              | 1936.              | 1937.              |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
|  | \$                 | \$                 | \$                 | \$                 | \$                 |
| <b>Ordinary Expenditures—concluded.</b>                |                    |                    |                    |                    |                    |
| Finance—   |                    |                    |                    |                    |                    |
| Interest on public debt.....                           | 134,999,069        | 139,725,417        | 138,533,202        | 134,549,169        | 137,410,345        |
| Cost of loan flotations.....                           | 1,639,154          | 2,549,381          | 2,890,192          | 3,576,858          | 3,839,431          |
| Subsidies to provinces.....                            | 13,677,334         | 13,737,565         | 13,768,953         | 13,768,953         | 13,793,190         |
| Special grants to provinces.....                       | 1,600,000          | 1,600,000          | 1,600,000          | 3,975,000          | 3,225,000          |
| Other grants and contributions.....                    | 498,675            | 395,856            | 466,505            | 736,505            | 540,224            |
| Superannuation.....                                    | 1,074,529          | 1,009,392          | 921,925            | 835,124            | 768,046            |
| Government contribution to Superannuation Fund.....    | 2,269,936          | 1,985,564          | 1,947,495          | 1,874,964          | 2,018,754          |
| Old age pensions.....                                  | 11,512,543         | 12,313,595         | 14,942,459         | 16,744,484         | 21,149,352         |
| Premium, discount, and exchange (net).....             | —                  | 167,026            | —                  | —                  | 399,630            |
| Other departmental expenditure.....                    | 2,049,720          | 3,152,063          | 3,939,064          | 3,734,858          | 3,678,448          |
| Fisheries.....   | 1,736,912          | 1,596,453          | 1,640,532          | 1,710,345          | 1,690,619          |
| Governor General's Secretary's Office.....             | 136,014            | 136,180            | 132,789            | 137,857            | 143,216            |
| Insurance.....   | 160,618            | 151,934            | 158,397            | 162,798            | 171,658            |
| Justice Department—                                    |                    |                    |                    |                    |                    |
| Justice.....   | 2,457,786          | 2,434,400          | 2,410,414          | 2,454,869          | 2,502,594          |
| Penitentiaries.....                                    | 2,869,735          | 2,676,505          | 2,667,340          | 2,376,651          | 2,371,932          |
| Labour Department—                                     |                    |                    |                    |                    |                    |
| Labour.....  | 605,426            | 590,706            | 581,215            | 659,577            | 720,376            |
| Technical education.....                               | 201,736            | 129,071            | 90,720             | 98,784             | 76,222             |
| Government annuities—payments to maintain reserve..... | 289,435            | 184,238            | 146,057            | 271,827            | 540,832            |
| Legislation—   |                    |                    |                    |                    |                    |
| House of Commons.....                                  | 2,209,580          | 985,992            | 1,796,121          | 1,485,515          | 1,759,641          |
| Library of Parliament.....                             | 65,352             | 69,137             | 71,300             | 75,962             | 74,994             |
| Senate.....  | 747,294            | 285,694            | 490,696            | 491,076            | 587,325            |
| General.....   | 80,854             | 62,069             | 95,000             | 54,577             | 72,817             |
| Dominion Franchise Office.....                         | —                  | —                  | 1,545,283          | 498,203            | 52,593             |
| Chief Electoral Office, including elections.....       | 56,446             | 31,544             | 146,220            | 1,039,464          | 71,820             |
| Mines and Resources—                                   |                    |                    |                    |                    |                    |
| Immigration and Colonization.....                      | 1,688,906          | 1,374,263          | 1,268,788          | 1,322,218          | 1,312,835          |
| Indian Affairs.....                                    | 4,499,145          | 4,380,273          | 4,361,733          | 4,808,609          | 4,903,880          |
| Interior.....  | 3,503,321          | 2,856,583          | 2,749,828          | 2,838,997          | 2,887,354          |
| Mines and Geological Survey.....                       | 1,048,701          | 909,141            | 964,869            | 1,040,346          | 1,134,714          |
| Movement of Coal and Domestic Fuel Act.....            | 1,219,818          | 2,771,787          | 2,123,971          | 2,102,631          | 2,276,785          |
| National Defence—                                      |                    |                    |                    |                    |                    |
| Militia Service.....                                   | 8,718,881          | 8,773,545          | 8,852,632          | 10,141,230         | 11,345,751         |
| Naval Service.....                                     | 2,167,328          | 2,171,423          | 2,222,003          | 2,380,018          | 4,763,294          |
| Air Service.....                                       | 1,731,219          | 1,684,562          | 2,258,142          | 3,777,320          | 5,821,824          |
| General Services.....                                  | 1,132,887          | 847,332            | 847,017            | 878,506            | 992,224            |
| National Revenue (including Income Tax).....           | 10,846,109         | 10,359,966         | 10,165,641         | 10,962,988         | 11,205,101         |
| Pensions, war, military, and civil.....                | 44,634,727         | 43,436,330         | 43,786,375         | 43,337,096         | 43,356,180         |
| Pensions and National Health.....                      | 11,434,268         | 10,372,480         | 10,936,574         | 12,053,582         | 12,452,392         |
| Post Office.....                                       | 31,607,404         | 30,553,768         | 30,252,310         | 31,437,719         | 31,906,272         |
| Privy Council.....                                     | 47,259             | 49,112             | 46,343             | 45,802             | 45,488             |
| Public Archives.....                                   | 174,221            | 156,842            | 208,719            | 164,953            | 160,362            |
| Public Printing and Stationery.....                    | 231,263            | 172,476            | 367,744            | 168,697            | 199,367            |
| Public Works.....                                      | 13,108,013         | 10,827,171         | 9,904,494          | 12,945,277         | 14,318,757         |
| Royal Canadian Mounted Police.....                     | 5,625,689          | 5,315,327          | 5,744,326          | 5,929,515          | 6,634,760          |
| Secretary of State.....                                | 605,704            | 386,516            | 394,963            | 70,972             | 654,705            |
| Soldier Settlement.....                                | 818,325            | 810,420            | 746,127            | 761,721            | 805,945            |
| Trade and Commerce—                                    |                    |                    |                    |                    |                    |
| Mail subsidies and steamship subventions.....          | 2,081,818          | 2,220,661          | 2,274,255          | 2,426,484          | 2,119,915          |
| Canada Grain Act.....                                  | 2,026,412          | 1,759,183          | 1,679,236          | 1,848,251          | 1,738,585          |
| Other departmental expenditures.....                   | 3,275,381          | 3,006,685          | 3,057,023          | 3,458,336          | 5,823,518          |
| Transport—   |                    |                    |                    |                    |                    |
| Marine.....  | 5,802,147          | 5,438,740          | 5,742,429          | 5,857,428          | 5,614,342          |
| Canadian Broadcasting Corporation.....                 | 149,297            | 1,024,892          | 1,243,923          | 1,500,000          | 878,174            |
| Railways and canals.....                               | 3,684,028          | 3,315,333          | 4,581,444          | 4,250,138          | 4,019,131          |
| Maritime Freight Rates Act.....                        | 1,922,073          | 1,989,130          | 2,529,394          | 2,348,399          | 2,505,823          |
| Railway Grade Crossing Fund.....                       | 317,588            | 310,075            | 274,820            | 127,719            | 53,966             |
| <b>Totals, Ordinary Expenditures.....</b>              | <b>354,643,261</b> | <b>351,771,161</b> | <b>359,709,969</b> | <b>372,539,149</b> | <b>387,112,672</b> |
| <b>Capital Expenditures—</b>                           |                    |                    |                    |                    |                    |
| Canals.....  | 3,156,328          | 1,986,140          | 337,907            | 457,926            | 51,945             |
| Railways.....  | 1,658,812          | 754,194            | 526,772            | 280,897            | 205,035            |
| Public Works.....                                      | 4,233,789          | 3,839,751          | 6,243,737          | 5,799,541          | 3,236,564          |
| <b>Totals, Capital Expenditures.....</b>               | <b>9,048,929</b>   | <b>6,580,085</b>   | <b>7,107,416</b>   | <b>6,544,154</b>   | <b>3,491,544</b>   |



## 3.—Details of Expenditures, fiscal years ended Mar. 31, 1933-37—concluded.

| Item.  | 1933.              | 1934.              | 1935.              | 1936.              | 1937.              |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
|  | \$                 | \$                 | \$                 | \$                 | \$                 |
| <b>Special Expenditures—</b>   |                    |                    |                    |                    |                    |
| Unemployment Relief Act, 1930.....   | 548,399            | 4,155              | 2,500              | 26,338             |                    |
| Unemployment Relief Act, 1931.....   | 17,047,816         | 563,876            | 52,243             | 20,173             |                    |
| Unemployment Relief Act, 1932.....   | 19,124,720         | 6,948,192          | 398,928            | 111,071            |                    |
| Unemployment Relief Act, 1933.....   | —                  | 28,382,089         | 2,419,952          | 493,416            | 1                  |
| Unemployment Relief Act, 1934.....   | —                  | —                  | 49,113,684         | 1,151,357          |                    |
| Unemployment Relief Act, 1935.....   | —                  | —                  | —                  | 48,027,323         |                    |
| Public Works Construction Acts.....  | —                  | —                  | 8,672,549          | 29,580,578         |                    |
| Unemployment Relief and Assistance Act, 1936.....  | —                  | —                  | —                  | —                  | 45,698,788         |
| Grants-in-aid to provinces.....  | —                  | —                  | —                  | —                  | 33,929,774         |
| Dominion's share of joint Dominion-Provincial projects.....  | —                  | —                  | —                  | —                  | 12,091,397         |
| Transportation facilities into mining areas.....   | —                  | —                  | —                  | —                  | 1,221,227          |
| Railway maintenance.....   | —                  | —                  | —                  | —                  | 2,662,084          |
| Administration.....  | —                  | —                  | —                  | —                  | 194,809            |
| Dominion projects as provided by Special Supplementary Estimates.....  | —                  | —                  | —                  | —                  | 23,553,924         |
| Special drought area relief.....   | —                  | —                  | —                  | —                  | 8,750,990          |
| Wheat bonus.....   | 1,811,472          | —                  | —                  | —                  | —                  |
| 1930 Wheat Crop Equalization Payments Act.....   | —                  | —                  | —                  | 6,600,000          | —                  |
| Loss on 1930 Wheat Pool and stabilization operations, payment to Canadian Wheat Board of net liabilities assumed Dec. 2, 1935..... | —                  | —                  | —                  | 15,856,645         | —                  |
| Loss on 1930 Oats Pool under guarantee of bank advances to Canadian Co-operative Wheat Producers Limited.....                      | —                  | —                  | —                  | 174,353            | —                  |
| <b>Totals, Special Expenditures....</b>  | <b>38,532,407</b>  | <b>35,898,312</b>  | <b>60,659,856</b>  | <b>102,047,284</b> | <b>78,003,702</b>  |
| <b>Government-Owned Enterprises—</b>   |                    |                    |                    |                    |                    |
| Losses Charged to  |                    |                    |                    |                    |                    |
| Consolidated Revenue Fund—   |                    |                    |                    |                    |                    |
| Canadian National Railways.....  | 62,139,413         | 58,955,388         | 48,407,901         | 47,421,465         | 43,303,394         |
| Canadian National Steamships.....  | —                  | —                  | —                  | 269,969            | —                  |
| Harbour Commissions.....   | —                  | —                  | —                  | 1,126,056          | 249,718            |
| Loans and Advances (Non-Active)—   |                    |                    |                    |                    |                    |
| Canadian National Steamships.....  | Cr. 1,382,503      | Cr. 14,064         | 487,167            | Cr. 332,064        | Cr. 1,763,779      |
| Harbour Commissions.....   | 4,897,314          | 2,109,837          | 1,241,733          | 2,455,578          | 2,419,193          |
| Write-down of Active Assets to Non-Active Assets—  |                    |                    |                    |                    |                    |
| Canadian National Railways.....  | 41,121,216         | —                  | —                  | —                  | —                  |
| Harbour Commissions.....   | 21,817,023         | —                  | —                  | —                  | —                  |
| <b>Totals, Government-Owned Enterprises.....</b>   | <b>128,592,463</b> | <b>61,051,161</b>  | <b>50,136,801</b>  | <b>50,940,402</b>  | <b>44,218,526</b>  |
| <b>Other Charges—</b>  |                    |                    |                    |                    |                    |
| Write-down of Assets Chargeable to Consolidated Fund—  |                    |                    |                    |                    |                    |
| Reduction in soldier and general land settlement loans.....  | 773                | 1,766,083          | 468,916            | 487,642            | 627,063            |
| Yearly established losses in seed grain and relief accounts.....   | 104,944            | 91,003             | 21,275             | 26,924             | 44,425             |
| Cancellation of Canadian Farm Loan Board capital stock.....  | —                  | —                  | —                  | —                  | 20,385             |
| Write-down of Active Assets to Non-Active Assets—  |                    |                    |                    |                    |                    |
| Province of Manitoba treasury bills..  | —                  | —                  | —                  | —                  | 804,897            |
| Province of Saskatchewan treasury bills.....   | —                  | —                  | —                  | —                  | 17,682,158         |
| Soldier and general land settlement non-active account—adjustment.....   | —                  | —                  | —                  | —                  | 60                 |
| Non-Active Accounts—   |                    |                    |                    |                    |                    |
| Canadian Pacific Railway advances (Relief Acts).....   | 1,447,223          | 1,000,000          | —                  | —                  | —                  |
| Miscellaneous.....   | —                  | 100                | 200                | —                  | —                  |
| Account previously carried as active asset transferred to non-active.....  | —                  | —                  | 11,208             | —                  | —                  |
| <b>Totals, Other Charges.....</b>  | <b>1,552,940</b>   | <b>2,857,186</b>   | <b>501,599</b>     | <b>514,566</b>     | <b>19,179,588</b>  |
| <b>Grand Totals, Expenditures.....</b>   | <b>532,369,940</b> | <b>459,157,965</b> | <b>478,106,581</b> | <b>532,585,555</b> | <b>532,005,432</b> |

<sup>1</sup> Relief expenditures for 1937 were continued under the Unemployment Relief and Assistance Act, 1936, and other items shown immediately following.

4.—Principal Items of Dominion Expenditure, 1868-1937 (continued on pp. 846-847).

NOTE.—From 1888 to 1906, inclusive, the fiscal years ended on June 30; after 1906, on Mar. 31.

| Fiscal Year. | Consolidated Fund. |  |                             |               |                                   |                              |                           |   |
|--------------|--------------------|--|-----------------------------|---------------|-----------------------------------|------------------------------|---------------------------|---|
|              | Interest on Debt.  | Charges of Management, Premium, Discount and Exchange. | Pensions, War and Military. | Public Works. | Railways and Canals. <sup>1</sup> | Subsidies to Prov-<br>inces. | Post Office. <sup>2</sup> | Total Expenditure Chargeable to Consolidated Fund. <sup>3</sup> |
|              | \$                 | \$   | \$                          | \$            | \$                                | \$                           | \$                        | \$  |
| 1868...      | 4,501,506          | 359,190  | 56,422                      | 126,270       | 881,503                           | 2,753,960                    | 616,802                   | 13,486,093  |
| 1869...      | 4,907,014          | 465,657  | 50,504                      | 65,013        | 641,814                           | 2,604,050                    | 787,886                   | 14,038,054  |
| 1870...      | 5,047,054          | 339,999  | 53,586                      | 120,031       | 743,070                           | 2,588,605                    | 808,623                   | 14,345,510  |
| 1871...      | 5,165,304          | 426,655  | 52,611                      | 597,275       | 752,772                           | 2,624,940                    | 815,471                   | 15,023,052  |
| 1872...      | 5,257,231          | 346,413  | 62,251                      | 849,780       | 913,236                           | 2,930,113                    | 929,069                   | 17,589,499  |
| 1873...      | 5,209,206          | 173,544  | 49,204                      | 1,297,999     | 1,378,164                         | 2,921,400                    | 1,067,858                 | 19,174,048  |
| 1874...      | 5,724,443          | 264,889  | 56,428                      | 1,918,126     | 2,800,824                         | 4,752,757                    | 1,387,270                 | 23,051,317  |
| 1875...      | 6,590,900          | 227,201  | 63,657                      | 1,750,010     | 1,881,893                         | 3,750,962                    | 1,520,861                 | 23,713,071  |
| 1876...      | 6,406,902          | 208,149  | 110,201                     | 1,948,242     | 1,897,283                         | 3,690,355                    | 1,622,827                 | 24,488,372  |
| 1877...      | 6,797,227          | 207,875  | 112,531                     | 1,262,823     | 2,230,346                         | 3,655,851                    | 1,705,312                 | 23,519,302  |
| 1878...      | 7,048,884          | 192,087  | 105,842                     | 997,470       | 2,374,314                         | 3,472,808                    | 1,724,939                 | 23,503,158  |
| 1879...      | 7,194,734          | 227,923  | 107,795                     | 1,013,023     | 2,570,361                         | 3,442,764                    | 1,784,424                 | 24,455,382  |
| 1880...      | 7,773,809          | 289,055  | 102,889                     | 1,046,342     | 2,226,450                         | 3,430,840                    | 1,818,271                 | 24,850,634  |
| 1881...      | 7,594,143          | 225,444  | 96,389                      | 1,108,815     | 2,608,717                         | 3,455,618                    | 1,766,655                 | 25,502,452  |
| 1882...      | 7,740,904          | 195,044  | 101,197                     | 1,342,000     | 2,758,833                         | 3,530,900                    | 1,080,867                 | 27,007,104  |
| 1883...      | 7,008,552          | 234,470  | 98,440                      | 1,755,250     | 3,117,465                         | 3,606,073                    | 2,176,080                 | 28,730,157  |
| 1884...      | 7,700,181          | 229,006  | 95,543                      | 2,908,852     | 3,122,103                         | 3,603,714                    | 2,312,965                 | 31,107,700  |
| 1885...      | 9,419,482          | 387,495  | 89,879                      | 2,302,363     | 3,268,222                         | 3,959,327                    | 2,488,815                 | 33,037,066  |
| 1886...      | 10,137,000         | 346,621  | 88,310                      | 2,040,552     | 3,339,670                         | 4,182,520                    | 2,763,180                 | 39,011,612  |
| 1887...      | 9,682,929          | 297,742  | 102,100                     | 2,133,310     | 3,073,894                         | 4,199,341                    | 2,818,907                 | 35,057,080  |
| 1888...      | 9,823,313          | 343,592  | 120,334                     | 2,162,110     | 4,190,332                         | 4,188,514                    | 2,889,729                 | 36,718,495  |
| 1889...      | 10,148,932         | 273,590  | 116,030                     | 2,299,231     | 4,065,301                         | 4,051,428                    | 2,982,321                 | 39,917,835  |
| 1890...      | 9,950,841          | 230,409  | 107,301                     | 1,972,501     | 4,362,200                         | 3,904,922                    | 3,074,470                 | 38,904,481  |
| 1891...      | 9,584,137          | 262,065  | 103,850                     | 1,937,446     | 4,505,510                         | 3,903,757                    | 3,161,676                 | 38,343,568  |
| 1892...      | 9,765,978          | 183,938  | 92,457                      | 1,627,851     | 4,337,877                         | 3,935,914                    | 3,131,120                 | 36,765,894  |
| 1893...      | 9,806,888          | 213,794  | 90,309                      | 1,927,832     | 3,848,404                         | 3,935,765                    | 3,421,203                 | 36,814,063  |
| 1894...      | 10,212,596         | 180,975  | 86,927                      | 2,033,955     | 3,700,550                         | 4,200,655                    | 3,517,261                 | 37,585,025  |
| 1895...      | 10,406,294         | 278,950  | 84,349                      | 1,742,317     | 3,704,120                         | 4,250,675                    | 3,603,047                 | 38,132,005  |
| 1896...      | 10,502,430         | 248,575  | 86,080                      | 1,299,769     | 3,826,226                         | 4,235,064                    | 3,509,611                 | 39,949,142  |
| 1897...      | 10,045,003         | 315,814  | 90,832                      | 1,463,719     | 3,725,000                         | 4,238,059                    | 3,789,478                 | 38,949,700  |
| 1898...      | 10,516,958         | 96,199   | 96,199                      | 1,287,373     | 4,049,275                         | 4,287,372                    | 3,815,412                 | 39,349,812  |
| 1899...      | 10,855,112         | 173,257  | 96,129                      | 1,902,064     | 4,246,404                         | 4,250,630                    | 3,603,799                 | 41,903,500  |
| 1900...      | 10,699,465         | 227,194  | 93,453                      | 2,289,889     | 5,244,301                         | 4,250,608                    | 3,758,015                 | 42,975,279  |
| 1901...      | 10,807,855         | 201,881  | 93,551                      | 3,380,632     | 6,377,961                         | 4,250,607                    | 3,831,446                 | 46,866,368  |
| 1902...      | 10,975,935         | 203,250  | 83,305                      | 4,221,294     | 6,508,477                         | 4,402,008                    | 4,023,687                 | 50,759,392  |
| 1903...      | 11,068,139         | 294,968  | 87,025                      | 4,065,533     | 7,221,709                         | 4,402,503                    | 4,105,178                 | 51,091,903  |
| 1904...      | 11,128,037         | 288,994  | 113,495                     | 4,607,330     | 8,397,434                         | 4,402,262                    | 4,347,641                 | 55,812,333  |
| 1905...      | 10,630,115         | 276,072  | 140,424                     | 6,765,440     | 9,808,932                         | 4,516,038                    | 4,054,628                 | 64,319,083  |
| 1906...      | 10,814,958         | 340,902  | 170,022                     | 7,484,716     | 9,779,678                         | 6,720,373                    | 4,991,577                 | 67,240,781  |
| 1907...      | 6,712,771          | 244,548  | 128,832                     | 5,530,571     | 7,011,858                         | 6,745,384                    | 3,070,557                 | 51,542,101  |
| 1908...      | 10,973,597         | 383,820  | 187,557                     | 8,721,327     | 10,585,114                        | 6,032,775                    | 6,005,930                 | 76,041,482  |
| 1909...      | 11,004,534         | 356,707  | 191,533                     | 12,300,184    | 10,780,126                        | 9,117,143                    | 6,592,886                 | 84,064,232  |
| 1910...      | 13,098,160         | 388,973  | 216,697                     | 7,261,218     | 10,215,038                        | 9,361,388                    | 7,215,338                 | 79,411,747  |
| 1911...      | 12,535,851         | 376,777  | 240,586                     | 8,621,431     | 11,223,251                        | 9,082,472                    | 7,984,223                 | 87,774,108  |
| 1912...      | 12,259,397         | 455,011  | 245,045                     | 10,344,487    | 12,330,463                        | 10,281,045                   | 9,127,036                 | 98,161,441  |
| 1913...      | 12,405,882         | 502,988  | 288,138                     | 13,468,059    | 13,766,180                        | 13,211,000                   | 10,882,894                | 112,059,587   |
| 1914...      | 12,983,505         | 440,902  | 317,184                     | 16,007,513    | 13,885,133                        | 13,280,460                   | 12,822,597                | 128,949,818   |
| 1915...      | 15,544,743         | 554,729  | 358,558                     | 19,348,582    | 13,876,060                        | 10,451,673                   | 15,661,191                | 135,823,207   |
| 1916...      | 21,421,585         | 791,336  | 671,133                     | 12,039,252    | 20,777,830                        | 11,451,673                   | 10,009,139                | 130,350,727   |
| 1917...      | 35,802,667         | 496,367  | 2,814,540                   | 8,633,006     | 27,124,004                        | 11,449,148                   | 16,300,579                | 148,599,343   |
| 1918...      | 47,845,588         | 485,712  | 8,155,691                   | 7,432,901     | 34,849,608                        | 11,399,148                   | 18,046,558                | 178,284,313   |
| 1919...      | 77,431,432         | 1,305,076  | 18,282,440                  | 6,295,060     | 45,494,584                        | 11,327,236                   | 19,723,758                | 232,731,283   |
| 1920...      | 107,527,089        | 1,462,658  | 28,004,461                  | 9,016,246     | 8,418,024                         | 11,490,860                   | 20,734,312                | 303,843,930   |
| 1921...      | 139,551,520        | 1,102,068  | 37,420,751                  | 10,840,875    | 8,886,456                         | 11,490,800                   | 22,095,561                | 361,118,145   |
| 1922...      | 155,247,849        | 4,100,501  | 66,153,001                  | 10,574,366    | 8,694,094                         | 12,211,924                   | 28,121,425                | 347,500,764   |
| 1923...      | 197,892,735        | 1,003,068  | 93,885,998                  | 9,978,440     | 7,891,261                         | 12,207,313                   | 27,704,502                | 332,293,732   |
| 1924...      | 136,237,872        | 993,907  | 83,411,081                  | 11,900,847    | 2,126,809                         | 12,386,136                   | 28,005,941                | 324,813,190   |
| 1925...      | 134,789,004        | 849,604  | 34,888,665                  | 12,029,578    | 1,966,152                         | 12,281,391                   | 29,873,802                | 318,891,901   |
| 1926...      | 130,601,493        | 884,388  | 37,208,700                  | 13,416,045    | 2,120,228                         | 12,375,128                   | 30,699,686                | 320,560,470   |
| 1927...      | 129,675,367        | 987,205  | 37,902,939                  | 11,178,054    | 2,152,015                         | 12,510,740                   | 31,007,698                | 319,548,173   |
| 1928...      | 128,902,945        | 926,705  | 39,778,130                  | 14,037,366    | 2,335,361                         | 12,516,740                   | 31,782,968                | 336,167,961   |
| 1929...      | 124,995,069        | 990,617  | 41,487,327                  | 17,003,254    | 2,406,272                         | 12,553,724                   | 33,453,058                | 350,352,924   |
| 1930...      | 121,566,213        | 1,088,742  | 40,608,158                  | 13,359,359    | 2,499,990                         | 12,496,953                   | 35,026,629                | 337,770,764   |
| 1931...      | 121,259,844        | 939,613  | 45,965,729                  | 23,738,284    | 7,891,080                         | 12,453,736                   | 36,292,604                | 359,555,280   |
| 1932...      | 121,151,106        | 4,492,509  | 48,688,389                  | 16,099,739    | 2,708,898                         | 13,094,970                   | 34,448,986                | 375,405,344   |
| 1933...      | 134,999,069        | 870,760  | 45,078,919                  | 11,778,684    | 2,516,911                         | 13,777,394                   | 30,142,827                | 358,528,270   |
| 1934...      | 139,725,417        | 874,633  | 43,883,132                  | 9,666,753     | 2,300,990                         | 13,727,555                   | 29,202,730                | 346,648,546   |
| 1935...      | 138,533,202        | 978,745  | 44,235,808                  | 8,726,385     | 2,344,508                         | 13,768,953                   | 29,074,317                | 354,368,220   |
| 1936...      | 134,549,169        | 284,003  | 43,337,090                  | 11,718,877    | 2,718,190                         | 13,768,953                   | 29,479,874                | 372,539,149   |
| 1937...      | 137,410,345        | 595,904  | 43,356,180                  | 13,340,345    | 2,645,199                         | 13,736,190                   | 30,588,575                | 387,112,072   |

<sup>1</sup> Expenditure (Collection of Revenue). After 1919 railway receipts were applied directly to railway expenditure; this accounts for the great decline in the figures in 1920 and subsequent years.

<sup>2</sup> The expenditures shown do not include moneys spent for Civil Government account and miscellaneous expenditures and to this extent do not correspond with the Post Office figures shown in Table 3 for the years 1923-37.

<sup>3</sup> Includes various non-enumerated items.

<sup>4</sup> Nine months.

## 4.—Principal Items of Dominion

NOTE.—Dashes in this table indicate that there were no expenditures under the

| Fiscal Year. | Capital Expenditure. |                           |                             |                 |                                     |                              |                        |   |  |
|--------------|----------------------|---------------------------|-----------------------------|-----------------|-------------------------------------|------------------------------|------------------------|---|--|
|              | Canals.              | Canadian Pacific Railway. | Debts Allowed to Provinces. | Dominion Lands. | Inter-colonial, etc. Miscellaneous. | Public Works, Miscellaneous. | Hudson Bay Railway.    | National Transcontinental Ry., Incl. Quebec Bridge. | Prince Edward Island Railway. <sup>1</sup> |
|              | \$                   | \$                        | \$                          | \$              | \$                                  | \$                           | \$                     | \$  | \$   |
| 1868..       | 51,408               | -                         | -                           | -               | 455,250                             | 41,690                       | -                      | -   | -  |
| 1869..       | 130,142              | -                         | -                           | -               | 282,615                             | 8,548                        | -                      | -   | -  |
| 1870..       | -                    | -                         | -                           | -               | 1,093,229                           | -                            | -                      | -   | -  |
| 1871..       | -                    | 30,148                    | -                           | -               | 2,866,376                           | -                            | -                      | -   | -  |
| 1872..       | 255,646              | 489,428                   | 1,666,200                   | -               | 5,131,141                           | 68,740                       | -                      | -   | -  |
| 1873..       | 256,547              | 561,818                   | 13,859,080                  | -               | 5,019,240                           | 99,517                       | -                      | -   | -  |
| 1874..       | 1,189,592            | 310,225                   | 4,927,061                   | -               | 3,614,899                           | 135,963                      | -                      | -   | -  |
| 1875..       | 1,714,830            | 1,546,242                 | -                           | -               | 3,426,100                           | 189,484                      | -                      | -   | 46,087                                     |
| 1876..       | 2,388,733            | 3,346,567                 | -                           | -               | 1,108,622                           | 267,840                      | -                      | -   | 42,546                                     |
| 1877..       | 4,131,375            | 1,691,150                 | -                           | -               | 1,318,552                           | 258,538                      | -                      | -   | 200,000                                    |
| 1878..       | 3,643,233            | 2,228,373                 | -                           | -               | 408,817                             | 170,139                      | -                      | -   | 6,551                                      |
| 1879..       | 3,004,099            | 2,240,286                 | -                           | -               | 226,639                             | 77,179                       | -                      | -   | 40,129                                     |
| 1880..       | 2,123,306            | 4,044,523                 | -                           | -               | 2,048,015                           | 8,730                        | -                      | -   | 16,540                                     |
| 1881..       | 2,077,029            | 4,968,504                 | -                           | 334,681         | 608,733                             | 187,370                      | -                      | -   | -  |
| 1882..       | 1,647,759            | 4,589,076                 | -                           | 511,882         | 585,569                             | 70,949                       | -                      | -   | 402  |
| 1883..       | 1,765,002            | 10,033,800                | -                           | 556,870         | 1,616,633                           | 119,869                      | -                      | -   | 57,186                                     |
| 1884..       | 1,577,205            | 11,192,722                | 7,172,298                   | 723,658         | 2,689,690                           | 491,376                      | -                      | -   | 130,663                                    |
| 1885..       | 1,504,621            | 9,900,282                 | 5,420                       | 303,593         | 1,247,000                           | 182,306                      | -                      | -   | 76,957                                     |
| 1886..       | 1,333,325            | 3,672,585                 | 3,113,334                   | 130,653         | 765,967                             | 569,202                      | -                      | -   | 4,688                                      |
| 1887..       | 1,783,698            | 915,057                   | -                           | 162,392         | 926,030                             | 353,044                      | -                      | -   | 5,800                                      |
| 1888..       | 1,033,118            | 52,099                    | -                           | 135,048         | 1,713,487                           | 963,778                      | -                      | -   | -  |
| 1889..       | 972,918              | 80,716                    | -                           | 130,684         | 2,623,137                           | 575,408                      | -                      | -   | -  |
| 1890..       | 1,025,364            | 40,981                    | -                           | 133,892         | 2,351,787                           | 3,220,926                    | -                      | -   | -  |
| 1891..       | 1,280,726            | 37,367                    | -                           | 94,847          | 1,184,818                           | 515,702                      | -                      | -   | -  |
| 1892..       | 1,483,479            | 60,212                    | -                           | 86,735          | 316,784                             | 224,390                      | -                      | -   | 8,300                                      |
| 1893..       | 2,098,573            | 413,837                   | -                           | 115,038         | 299,081                             | 181,875                      | -                      | -   | -  |
| 1894..       | 3,027,104            | 148,540                   | -                           | 149,147         | 439,209                             | 102,059                      | -                      | -   | -  |
| 1895..       | 2,452,274            | 49,209                    | -                           | 99,842          | 327,605                             | 102,393                      | -                      | -   | -  |
| 1896..       | 2,256,779            | 65,669                    | -                           | 82,184          | 260,396                             | 114,826                      | -                      | -   | -  |
| 1897..       | 2,348,637            | 14,054                    | -                           | 91,412          | 190,570                             | 129,238                      | -                      | -   | -  |
| 1898..       | 3,207,250            | 692                       | -                           | 127,505         | 252,756                             | 364,018                      | -                      | -   | 17,542                                     |
| 1899..       | 3,899,877            | 8,419                     | 267,026                     | 151,213         | 1,081,930                           | 385,004                      | -                      | -   | 22,000                                     |
| 1900..       | 2,639,505            | 236                       | -                           | 199,470         | 3,255,348                           | 1,089,827                    | -                      | -   | 53,546                                     |
| 1901..       | 2,360,870            | 8,979                     | -                           | 269,061         | 3,633,837                           | 1,006,983                    | -                      | -   | 280,174                                    |
| 1902..       | 2,114,690            | 449                       | -                           | 370,838         | 4,620,841                           | 2,190,125                    | -                      | -   | 475,998                                    |
| 1903..       | 1,823,274            | -                         | -                           | 449,542         | 2,254,267                           | 1,268,004                    | -                      | -   | 829,414                                    |
| 1904..       | 1,580,737            | 33,076                    | -                           | 748,855         | 1,879,506                           | 1,834,397                    | -                      | 6,240   | 688,878                                    |
| 1905..       | 2,071,594            | -                         | -                           | 794,419         | 4,755,878                           | 1,642,042                    | -                      | 775,491   | 591,413                                    |
| 1906..       | 1,552,121            | -                         | -                           | 599,789         | 3,765,171                           | 2,359,528                    | -                      | 1,841,270   | 496,125                                    |
| 1907..       | 887,839              | -                         | -                           | 526,583         | 1,512,491 <sup>1</sup>              | 1,797,871                    | -                      | 5,537,867   | 91,210                                     |
| 1908..       | 1,723,156            | 600                       | -                           | 768,244         | 4,369,738                           | 2,969,049                    | -                      | 18,910,253  | 390,962                                    |
| 1909..       | 1,873,868            | 939                       | -                           | 767,747         | 3,874,480                           | 2,832,265                    | 92,428                 | 31,317,132  | 561,207                                    |
| 1910..       | 1,050,707            | -                         | -                           | 785,157         | 1,278,409                           | 4,514,606                    | 53,043                 | 19,868,064  | 206,397                                    |
| 1911..       | 2,349,475            | 2,918                     | -                           | -5,508          | 763,833                             | 3,742,717                    | 184,150                | 23,715,549  | 94,321                                     |
| 1912..       | 2,560,938            | -                         | -                           | -               | 1,710,449                           | 4,116,385                    | 159,632                | 22,264,130  | 128,042                                    |
| 1913..       | 2,259,842            | -                         | -                           | -               | 2,406,988 <sup>2</sup>              | 6,057,515                    | 1,099,063              | 15,279,837  | 103,001                                    |
| 1914..       | 2,829,661            | -                         | -                           | -               | 4,348,000                           | 10,100,017                   | 4,498,717              | 15,274,206  | 129,575                                    |
| 1915..       | 5,490,796            | -                         | -                           | -               | 6,914,977                           | 11,049,030                   | 4,773,744              | 12,648,242  | 570,531                                    |
| 1916..       | 6,170,953            | -                         | -                           | -               | 7,861,899                           | 8,471,229                    | 4,897,131              | 8,826,265   | 1,350,475                                  |
| 1917..       | 4,304,539            | -                         | -                           | -               | 4,873,032                           | 7,588,116                    | 2,604,390              | 6,650,203   | 609,752                                    |
| 1918..       | 1,781,737            | -                         | -                           | -               | -                                   | 6,347,201                    | 1,879,699              | 103,137   | -  |
| 1919..       | 2,211,964            | -                         | -                           | -               | -                                   | 5,705,349                    | 5,662,558              | 1,723,898   | -  |
| 1920..       | 4,550,761            | -                         | -                           | -               | 3,285,736                           | 38,869,683                   | -235,608               | 527,480   | -3,540 <sup>3</sup>                        |
| 1921..       | 5,450,006            | -                         | -                           | -               | 731,018                             | 27,559,809                   | 30,030                 | 20,164  | -  |
| 1922..       | 4,482,610            | -                         | -                           | -               | 9,649                               | 10,431,699                   | 34,776                 | -   | 97,000                                     |
| 1923..       | 4,966,184            | -                         | -                           | -               | 59,950                              | 31,411,510                   | 27,803                 | -   | -  |
| 1924..       | 6,747,895            | -                         | -                           | -               | -                                   | 3,804,427                    | 207,872                | -   | 196,418                                    |
| 1925..       | 10,619,903           | -                         | -                           | -               | -                                   | 6,030,320                    | -124,154               | -   | -  |
| 1926..       | 12,024,456           | -                         | -                           | -               | -                                   | 4,805,949                    | -2,484                 | -   | -  |
| 1927..       | 13,845,689           | -                         | -                           | -               | -                                   | 2,920,670                    | 2,823,905              | -   | -  |
| 1928..       | 13,762,905           | 71                        | -                           | -               | -                                   | 3,281,097                    | 3,554,503 <sup>4</sup> | -   | 63,419 <sup>5</sup>                        |
| 1929..       | 13,184,562           | -                         | -                           | -               | -7,990,740                          | 16,818,019                   | 6,159,563              | -   | -  |
| 1930..       | 9,324,177            | -                         | -                           | -               | -25,866                             | 6,573,530                    | 6,472,214              | -415  | -  |
| 1931..       | 9,842,011            | -                         | -                           | -               | -277,535                            | 12,099,276                   | 4,139,690              | 8,877   | -  |
| 1932..       | 3,268,951            | -                         | -                           | -               | -2,504                              | 7,438,511                    | 5,236,663              | -59,185   | -  |
| 1933..       | 3,026,931            | -                         | -                           | -               | -                                   | 4,018,420                    | 1,635,395              | -   | -  |
| 1934..       | 1,975,073            | -                         | -                           | -               | -                                   | 3,778,293                    | 737,028                | -   | -  |
| 1935..       | 331,522              | -                         | -                           | -               | -                                   | 6,188,584                    | 432,028                | 4,874   | -  |
| 1936..       | 443,970              | -                         | -                           | -               | -                                   | 5,793,371                    | 279,780                | -   | -  |
| 1937..       | 51,945               | -                         | -                           | -               | -                                   | 3,236,564                    | 203,035                | -   | -  |

<sup>1</sup> Included with Canadian Government Railways since the consolidation of the system.<sup>2</sup> Including \$2,725,504 for the improvement of the St. Lawrence, spent during the previous years by Montreal Harbour Commission.<sup>3</sup> Including \$17,956, cost of new car for the Governor General.<sup>4</sup> Nine months.<sup>5</sup> Including \$38,583, cost of new car for the Governor General.<sup>6</sup> Including \$15,000, cost of new car for the Governor General.<sup>7</sup> Includes New Brunswick Railway.

Expenditure, 1868-1937—concluded.

corresponding heads because the items were not applicable in the years so indicated.

| Capital Expenditure—concluded. |           |                               |                            | Other Expenditure. |                         |                |                    | Fiscal Year. |
|--------------------------------|-----------|-------------------------------|----------------------------|--------------------|-------------------------|----------------|--------------------|--------------|
| North-west Territories.        | Militia.  | Canadian Government Railways. | Total Capital Expenditure. | Railway Subsidies. | War and Demobilization. | Other Charges. | Total Expenditure. |              |
| \$                             | \$        | \$                            | \$                         | \$                 | \$                      | \$             | \$                 |              |
| 19,113                         | -         | -                             | 548,438                    | -                  | -                       | 37,158         | 14,071,689         | 1868         |
| 1,821,887                      | -         | -                             | 440,418                    | -                  | -                       | 429,663        | 14,908,166         | 1869         |
| 773,872                        | -         | -                             | 3,515,116                  | -                  | -                       | 155,988        | 18,016,614         | 1870         |
| 241,889                        | -         | -                             | 3,670,396                  | -                  | -                       | -              | 19,293,478         | 1871         |
| 63,239                         | -         | -                             | 7,853,050                  | -                  | -                       | 223,456        | 25,665,975         | 1872         |
| -                              | -         | -                             | 19,859,441                 | -                  | -                       | 5,719          | 39,039,808         | 1873         |
| -                              | -         | -                             | 10,177,740                 | -                  | -                       | 4,019          | 33,488,070         | 1874         |
| -                              | -         | -                             | 5,922,743                  | -                  | -                       | 2,253,007      | 32,838,911         | 1875         |
| -                              | -         | -                             | 7,154,008                  | -                  | -                       | 315,764        | 31,958,144         | 1876         |
| -                              | -         | -                             | 7,599,710                  | -                  | -                       | 1,388,984      | 32,507,996         | 1877         |
| -                              | -         | -                             | 6,657,200                  | -                  | -                       | 388,413        | 30,545,772         | 1878         |
| -                              | -         | -                             | 5,648,332                  | -                  | -                       | 676,225        | 30,770,939         | 1879         |
| -                              | -         | -                             | 8,241,174                  | -                  | -                       | 949,948        | 34,041,756         | 1880         |
| -                              | -         | -                             | 8,176,817                  | -                  | -                       | 117,772        | 33,796,643         | 1881         |
| -                              | -         | -                             | 7,405,637                  | -                  | -                       | 201,885        | 34,674,625         | 1882         |
| -                              | -         | -                             | 14,147,869                 | -                  | -                       | 21,369         | 42,886,890         | 1883         |
| -                              | -         | -                             | 23,977,702                 | 205,000            | -                       | 2,567,453      | 57,890,862         | 1884         |
| -                              | -         | -                             | 13,220,185                 | 403,245            | -                       | 502,587        | 49,163,078         | 1885         |
| -                              | -         | -                             | 9,589,734                  | 2,701,249          | -                       | 10,534,973     | 61,837,569         | 1886         |
| 293,918                        | -         | -                             | 4,439,939                  | 1,406,533          | -                       | -              | 41,504,152         | 1887         |
| 539,930                        | -         | -                             | 4,437,460                  | 1,027,042          | -                       | 155,623        | 42,338,620         | 1888         |
| 31,448                         | -         | -                             | 4,420,313                  | 846,722            | -                       | 1,333,328      | 43,518,198         | 1889         |
| 4,773                          | -         | -                             | 6,778,603*                 | 1,678,196          | -                       | 44,947         | 41,770,333         | 1890         |
| 2,901                          | -         | -                             | 3,115,960                  | 1,265,706          | -                       | 68,074         | 40,793,208         | 1891         |
| -1,243                         | -         | -                             | 2,104,457                  | 1,248,216          | -                       | 2,093,569      | 42,272,136         | 1892         |
| 8,911                          | -         | -                             | 3,083,318                  | 511,394            | -                       | 139,963        | 40,853,728         | 1893         |
| -1,149                         | -         | -                             | 3,862,970                  | 1,229,885          | -                       | 330,354        | 43,008,234         | 1894         |
| -833                           | -         | -                             | 3,030,490                  | 1,310,549          | -                       | 399,294        | 42,872,338         | 1895         |
| -543                           | 1,000,000 | -                             | 3,781,311                  | 3,228,740          | -                       | 137,185        | 44,096,384         | 1896         |
| 3,824                          | 745,965   | -                             | 3,523,700                  | 416,955            | -                       | 682,881        | 42,972,756         | 1897         |
| -1,272                         | 173,740   | -                             | 4,142,231                  | 1,414,935          | -                       | 944,589        | 45,334,281         | 1898         |
| -1,853                         | 387,810   | -                             | 6,201,616                  | 3,201,220          | -                       | 239,398        | 51,542,635         | 1899         |
| -1,473                         | 220,851   | -                             | 7,467,370                  | 725,720            | -                       | 1,549,098      | 52,717,467         | 1900         |
| -1,632                         | 135,885   | -                             | 7,698,857                  | 2,512,329          | -                       | 909,512        | 57,972,896         | 1901         |
| -1,543                         | 299,697   | -                             | 10,077,095                 | 2,093,939          | -                       | 1,040,374      | 63,970,800         | 1902         |
| -3,040                         | 428,223   | -                             | 7,049,684                  | 1,463,222          | -                       | 1,541,768      | 61,748,572         | 1903         |
| -2,616                         | 1,299,910 | -                             | 7,879,102                  | 2,046,878          | -                       | 6,716,235      | 72,255,048         | 1904         |
| -2,478                         | 1,299,964 | -                             | 11,931,014                 | 1,275,630          | -                       | 2,277,812      | 79,804,139         | 1905         |
| -1,767                         | 1,299,876 | -                             | 11,912,104                 | 1,637,574          | -                       | 2,487,323      | 83,277,642         | 1906         |
| -1,352                         | 75,283    | -                             | 11,327,792                 | 1,324,869          | -                       | 1,583,297      | 85,778,138         | 1907*        |
| -911                           | 1,297,905 | -                             | 30,423,996                 | 2,037,623          | -                       | 3,470,609      | 112,578,680        | 1908         |
| -1,045                         | 1,243,072 | -                             | 42,592,122                 | 1,785,887          | -                       | 4,999,288      | 139,441,524        | 1909         |
| -650                           | 1,299,970 | -                             | 20,655,703                 | 2,048,097          | -                       | 4,280,227      | 115,395,774        | 1910         |
| -33,088                        | -         | -                             | 30,813,767                 | 1,284,892          | -                       | 2,988,393      | 122,861,250        | 1911         |
| -                              | -         | -                             | 30,939,576                 | 850,400            | -                       | 7,181,665      | 137,142,082        | 1912         |
| -                              | -         | -                             | 27,206,046                 | 4,935,507          | -                       | 255,787        | 144,456,878        | 1913         |
| -                              | -         | -                             | 37,180,176                 | 19,036,237         | -                       | 2,640,162      | 186,241,048        | 1914         |
| -                              | -         | -                             | 41,447,320                 | 5,191,507          | 60,750,476              | 5,185,016      | 248,098,526        | 1915         |
| -                              | -         | -                             | 38,566,950                 | 1,400,171          | 168,197,755             | 3,186,898      | 339,702,502        | 1916         |
| -                              | -         | -                             | 26,890,032                 | 959,584            | 306,483,815             | 1,275,848      | 498,203,118        | 1917         |
| -                              | -         | -                             | 43,111,904                 | 720,405            | 343,836,892             | 10,705,787     | 676,690,210        | 1918         |
| -                              | -         | -                             | 25,031,266                 | 43,805             | 446,519,440             | -7,283,582     | 697,042,212        | 1919         |
| -                              | -         | -                             | 69,301,878                 | 334,845            | 346,612,955             | 10,965,313     | 786,031,611*       | 1920         |
| -                              | -         | -                             | 40,012,807                 | -                  | 492,048                 | 16,997,544     | 628,302,513*       | 1921         |
| -                              | -         | -                             | 10,295,333                 | -                  | 1,544,250               | 301,518        | 463,528,389*       | 1922         |
| -                              | -         | -                             | 9,807,499                  | -                  | 4,464,760               | 4,042,931      | 434,735,277*       | 1923         |
| -                              | -         | -                             | 10,861,277                 | -1,523             | 446,083                 | 7,902,759      | 370,589,247*       | 1924         |
| -                              | -         | -                             | 16,550,511                 | -                  | 506,981                 | 3,953,433      | 351,199,809*       | 1925         |
| -                              | -         | -                             | 16,798,549                 | -                  | 191,898                 | 6,330,092      | 365,136,429*       | 1926         |
| -                              | -         | -                             | 19,568,703                 | -                  | 64,438                  | 7,814,977      | 358,565,751*       | 1927         |
| -                              | -         | -                             | 20,635,648                 | -                  | 1,656,011               | 1,705,311      | 378,458,440*       | 1928         |
| -                              | -         | -                             | 22,809,275                 | -                  | -669,309                | 2,067,153      | 388,905,935*       | 1929         |
| -                              | -         | -                             | 22,561,144                 | -                  | 59,702                  | 9,744,021      | 398,176,249*       | 1930         |
| -                              | -         | -                             | 25,222,318                 | -                  | 61,889                  | 10,678,959     | 440,008,855*       | 1931         |
| -                              | -         | -                             | 16,979,788                 | -                  | 75,471                  | 55,384,653     | 450,865,541*       | 1932         |
| -                              | -         | -                             | 8,548,155                  | -                  | 51,499                  | 96,732,739     | 531,780,839*       | 1933         |
| -                              | -         | -                             | 6,490,332                  | -                  | 47,571                  | 101,636,263    | 457,068,558*       | 1934         |
| -                              | -         | -                             | 7,027,008                  | -                  | 54,188                  | 131,815,072    | 475,004,747*       | 1935         |
| -                              | -         | -                             | 6,544,154*                 | -                  | 11                      | 153,502,252    | 532,585,555*       | 1936         |
| -                              | -         | -                             | 3,491,544*                 | -                  | 11                      | 141,401,816    | 532,005,432*       | 1937         |

\* Includes certain advances non-active which for the years 1933-37 are shown in Table 3, p. 844, and for earlier years are given at the foot of p. 893 of the 1934-35 Year Book.

† Refunds on capital account of \$27,063 in 1935 and \$918,059 in 1937 included in revenue receipts.

‡ Included in ordinary expenditure.

## 5.—Principal Items of Receipts (Consolidated Fund) and Total Receipts, 1868-1937.

NOTE.—From 1868 to 1906, inclusive, the fiscal years ended on June 30; after 1906 on Mar. 31.

| Fiscal Year. | Customs Duties. | Excise Duties. | War Tax Revenue. <sup>1</sup> | Total Revenue from Taxation. | Interest on Investments. | Post Office and Money Orders. | Total Revenue Receipts. <sup>2</sup> |
|--------------|-----------------|----------------|-------------------------------|------------------------------|--------------------------|-------------------------------|--------------------------------------|
|              | \$              | \$             | \$                            | \$                           | \$                       | \$                            | \$                                   |
| 1868.        | 8,573,380       | 3,002,588      | -                             | 11,700,681                   | 174,073                  | 525,692                       | 13,687,928                           |
| 1869.        | 8,327,880       | 2,713,028      | -                             | 11,112,873                   | 824,494                  | 535,315                       | 14,370,175                           |
| 1870.        | 9,334,213       | 3,619,623      | -                             | 13,087,882                   | 383,956                  | 573,566                       | 15,539,657                           |
| 1871.        | 11,841,105      | 4,295,945      | -                             | 16,320,369                   | 554,384                  | 612,631                       | 19,375,037                           |
| 1872.        | 12,787,982      | 4,735,652      | -                             | 17,715,552                   | 488,042                  | 692,375                       | 20,714,814                           |
| 1873.        | 12,054,164      | 4,460,682      | -                             | 17,616,555                   | 396,404                  | 833,657                       | 20,970,591                           |
| 1874.        | 14,325,193      | 5,504,904      | -                             | 20,129,185                   | 610,853                  | 1,139,973                     | 24,507,453                           |
| 1875.        | 15,351,012      | 5,069,687      | -                             | 20,664,879                   | 840,887                  | 1,155,332                     | 24,049,724                           |
| 1876.        | 12,823,838      | 5,563,487      | -                             | 18,614,415                   | 798,908                  | 1,102,540                     | 22,592,065                           |
| 1877.        | 12,548,988      | 4,941,398      | -                             | 17,697,925                   | 717,084                  | 1,113,946                     | 22,327,751                           |
| 1878.        | 12,782,824      | 4,888,672      | -                             | 17,841,938                   | 791,758                  | 1,207,790                     | 22,406,357                           |
| 1879.        | 12,900,659      | 5,390,763      | -                             | 18,476,613                   | 592,500                  | 1,172,418                     | 22,020,525                           |
| 1880.        | 14,071,343      | 4,222,428      | -                             | 18,479,577                   | 834,793                  | 1,252,498                     | 23,364,547                           |
| 1881.        | 18,406,092      | 5,343,022      | -                             | 23,942,139                   | 751,513                  | 1,352,110                     | 29,635,298                           |
| 1882.        | 21,581,570      | 5,884,890      | -                             | 27,549,047                   | 914,009                  | 1,587,888                     | 35,182,549                           |
| 1883.        | 23,009,582      | 6,260,117      | -                             | 29,269,699                   | 1,001,193                | 1,800,391                     | 36,503,699                           |
| 1884.        | 20,023,890      | 5,459,309      | -                             | 25,483,199                   | 980,668                  | 1,755,674                     | 32,815,226                           |
| 1885.        | 18,935,428      | 6,449,101      | -                             | 25,384,529                   | 1,997,035                | 1,841,872                     | 33,554,041                           |
| 1886.        | 19,302,308      | 5,852,906      | -                             | 25,215,213                   | 2,299,079                | 1,901,690                     | 33,479,883                           |
| 1887.        | 22,373,051      | 6,308,201      | -                             | 28,682,152                   | 990,887                  | 2,020,624                     | 35,775,631                           |
| 1888.        | 22,091,682      | 6,071,487      | -                             | 28,163,199                   | 932,025                  | 2,379,242                     | 35,908,464                           |
| 1889.        | 23,699,413      | 6,886,739      | -                             | 30,586,152                   | 1,305,392                | 2,220,504                     | 38,782,870                           |
| 1890.        | 23,913,546      | 7,618,118      | -                             | 31,531,664                   | 1,082,271                | 2,357,839                     | 39,879,925                           |
| 1891.        | 23,805,218      | 6,914,850      | -                             | 30,220,068                   | 1,077,223                | 2,515,823                     | 38,579,911                           |
| 1892.        | 20,361,382      | 7,945,098      | -                             | 28,306,480                   | 1,089,420                | 2,652,749                     | 36,921,872                           |
| 1893.        | 20,910,662      | 8,367,304      | -                             | 29,278,026                   | 1,150,187                | 2,773,509                     | 38,208,609                           |
| 1894.        | 19,119,030      | 8,381,089      | -                             | 27,500,119                   | 1,217,809                | 2,809,841                     | 36,374,888                           |
| 1895.        | 17,684,741      | 7,966,733      | -                             | 25,301,474                   | 1,338,047                | 2,732,790                     | 33,978,129                           |
| 1896.        | 19,768,741      | 7,026,006      | -                             | 27,692,747                   | 1,379,001                | 3,064,074                     | 36,815,891                           |
| 1897.        | 19,886,273      | 9,170,379      | -                             | 25,556,657                   | 1,443,004                | 3,202,938                     | 37,829,778                           |
| 1898.        | 21,622,739      | 7,871,563      | -                             | 29,494,352                   | 1,513,455                | 3,527,810                     | 40,586,510                           |
| 1899.        | 25,150,745      | 9,641,227      | -                             | 34,791,972                   | 1,590,442                | 3,193,778                     | 40,743,903                           |
| 1900.        | 28,219,458      | 9,888,075      | -                             | 38,087,533                   | 1,683,051                | 3,205,535                     | 51,031,467                           |
| 1901.        | 28,293,930      | 10,318,266     | -                             | 38,612,196                   | 1,784,834                | 3,441,505                     | 52,516,333                           |
| 1902.        | 31,916,394      | 11,197,134     | -                             | 43,113,528                   | 1,892,224                | 3,918,419                     | 58,052,333                           |
| 1903.        | 36,738,083      | 12,013,779     | -                             | 48,751,812                   | 2,020,853                | 4,397,833                     | 69,348,084                           |
| 1904.        | 40,481,591      | 12,958,708     | -                             | 53,420,299                   | 2,235,256                | 4,652,352                     | 75,795,251                           |
| 1905.        | 41,437,569      | 12,586,475     | -                             | 54,029,124                   | 2,105,631                | 5,125,373                     | 71,156,072                           |
| 1906.        | 46,053,377      | 14,010,220     | -                             | 60,063,597                   | 2,140,312                | 5,933,843                     | 80,141,394                           |
| 1907.        | 39,717,079      | 11,805,413     | -                             | 51,522,492                   | 1,235,746                | 5,061,728                     | 67,972,110                           |
| 1908.        | 57,200,276      | 15,782,152     | -                             | 72,982,428                   | 1,925,569                | 7,107,887                     | 96,055,417                           |
| 1909.        | 47,088,444      | 14,937,768     | -                             | 62,026,212                   | 2,256,643                | 7,401,624                     | 85,549,589                           |
| 1910.        | 59,767,681      | 15,253,353     | -                             | 75,021,034                   | 2,807,465                | 7,958,548                     | 101,618,476                          |
| 1911.        | 71,838,089      | 16,869,837     | -                             | 88,707,926                   | 1,668,737                | 9,146,932                     | 117,884,328                          |
| 1912.        | 85,081,872      | 19,261,692     | -                             | 104,313,564                  | 1,281,817                | 10,492,394                    | 136,106,217                          |
| 1913.        | 111,764,689     | 21,447,445     | -                             | 133,212,144                  | 1,430,511                | 12,051,729                    | 158,690,427                          |
| 1914.        | 104,691,238     | 21,452,037     | -                             | 126,143,275                  | 1,904,841                | 12,954,580                    | 163,174,895                          |
| 1915.        | 75,941,220      | 21,479,731     | 95,057 <sup>3</sup>           | 97,519,008                   | 2,980,247                | 13,046,665                    | 133,073,482                          |
| 1916.        | 98,649,409      | 29,423,492     | 3,620,782                     | 124,666,969                  | 3,358,210                | 18,558,690                    | 172,149,394                          |
| 1917.        | 134,043,842     | 24,412,348     | 16,302,238                    | 174,758,428                  | 3,094,012                | 20,902,384                    | 232,701,294                          |
| 1918.        | 144,172,630     | 27,168,445     | 25,379,901                    | 196,720,976                  | 4,460,724                | 21,345,394                    | 260,778,953                          |
| 1919.        | 147,169,188     | 30,342,034     | 56,177,508                    | 233,688,730                  | 7,421,002                | 21,603,542                    | 312,946,747                          |
| 1920.        | 168,796,823     | 42,698,083     | 62,079,801                    | 293,574,707                  | 17,086,081               | 24,471,709                    | 349,746,235                          |
| 1921.        | 193,206,804     | 37,118,367     | 168,385,327                   | 385,770,498                  | 24,815,246               | 26,700,198                    | 430,262,184                          |
| 1922.        | 105,686,645     | 36,755,207     | 177,484,161                   | 319,926,013                  | 21,961,513               | 25,462,209                    | 382,271,571                          |
| 1923.        | 118,066,409     | 35,791,997     | 181,634,878                   | 335,453,341                  | 18,466,903               | 29,016,771                    | 403,094,210                          |
| 1924.        | 121,500,799     | 38,181,747     | 182,036,261                   | 341,718,807                  | 11,916,479               | 28,865,374                    | 400,581,318                          |
| 1925.        | 108,146,871     | 38,603,439     | 147,164,158                   | 293,914,518                  | 11,332,328               | 28,782,353                    | 351,515,392                          |
| 1926.        | 127,355,144     | 42,923,549     | 157,296,329                   | 327,575,013                  | 8,535,089                | 30,334,575                    | 382,893,996                          |
| 1927.        | 141,968,678     | 48,513,160     | 156,167,434                   | 346,649,272                  | 8,559,401                | 29,069,199                    | 400,452,480                          |
| 1928.        | 150,965,818     | 57,400,808     | 150,319,087                   | 364,705,803                  | 10,937,822               | 31,562,580                    | 429,642,577                          |
| 1929.        | 187,206,332     | 63,634,964     | 145,029,742                   | 395,921,038                  | 12,227,652               | 30,611,964                    | 460,161,481                          |
| 1930.        | 179,429,920     | 65,635,701     | 134,086,005                   | 379,551,626                  | 13,518,205               | 33,845,385                    | 445,916,992                          |
| 1931.        | 181,208,965     | 57,748,808     | 107,320,636                   | 299,278,399                  | 10,421,224               | 30,212,326                    | 386,106,876                          |
| 1932.        | 104,132,677     | 48,654,806     | 122,266,064                   | 275,053,603                  | 9,330,125                | 32,234,946                    | 339,721,805                          |
| 1933.        | 70,072,932      | 37,833,858     | 146,412,011                   | 254,318,801                  | 11,220,089               | 30,928,317                    | 311,126,329                          |
| 1934.        | 68,305,356      | 35,494,220     | 170,061,973                   | 271,851,549                  | 11,148,231               | 30,893,157                    | 324,471,271                          |
| 1935.        | 76,561,975      | 43,189,655     | 181,118,715                   | 304,449,720                  | 10,963,478               | 31,245,324                    | 361,871,929                          |
| 1936.        | 74,004,560      | 44,409,797     | 197,484,627                   | 317,311,809                  | 10,614,125               | 32,607,889                    | 372,595,996                          |
| 1937.        | 83,771,091      | 45,956,857     | 256,822,921                   | 386,550,869                  | 11,231,035               | 34,274,552                    | 454,153,747                          |

<sup>1</sup> For detailed statements see Table S, p. 851.  
for most earlier years and special receipts since 1921.<sup>2</sup> Includes various smaller items of revenue receipts  
<sup>3</sup> Nine months.  
<sup>4</sup> First year reported.

### 6.—Per Capita Figures of Taxation, Total Revenue Receipts, Expenditure on Consolidated Fund Account and Total Expenditure, 1888-1937.

Note.—The years marked with an asterisk (\*) are those of the censuses, April 2, 1871; April 4, 1881; April 6, 1891; April 1, 1901; June 1, 1911, 1921 and 1931. For the intercensal years the populations are estimated as at June 1 (see p. 155 for estimates of population). See the tables on pp. 839-842 for the figures of revenue and expenditure on which this table is based.

| Fiscal Year.            | Per Capita.            |                         |  |                      | Fiscal Year.            | Per Capita.            |                         |  |                      |
|-------------------------|------------------------|-------------------------|--|----------------------|-------------------------|------------------------|-------------------------|--|----------------------|
|                         | Revenue from Taxation. | Total Revenue Receipts. | Expenditure on Consolidated Fund Acct. | Total Disbursements. |                         | Revenue from Taxation. | Total Revenue Receipts. | Expenditure on Consolidated Fund Acct. | Total Disbursements. |
|                         | \$                     | \$                      | \$                                     | \$                   |                         | \$                     | \$                      | \$                                     | \$                   |
| 1868.....               | 3.33                   | 3.90                    | 3.84                                   | 4.01                 | 1903.....               | 8.63                   | 12.27                   | 9.15                                   | 10.93                |
| 1869.....               | 3.12                   | 4.03                    | 3.94                                   | 4.18                 | 1904.....               | 9.17                   | 12.13                   | 9.54                                   | 12.40                |
| 1870.....               | 5.61                   | 4.29                    | 3.96                                   | 4.97                 | 1905.....               | 9.00                   | 11.88                   | 10.72                                  | 12.13                |
| 1871*.....              | 4.42                   | 5.25                    | 4.24                                   | 5.23                 | 1906.....               | 9.69                   | 12.93                   | 10.85                                  | 13.44                |
| 1872.....               | 4.72                   | 5.62                    | 4.69                                   | 5.84                 | 1907 <sup>1</sup> ..... | 8.31                   | 10.60                   | 8.22                                   | 10.61                |
| 1873.....               | 4.60                   | 5.43                    | 5.01                                   | 10.20                | 1908.....               | 11.02                  | 14.50                   | 11.57                                  | 16.99                |
| 1874.....               | 5.17                   | 6.29                    | 5.99                                   | 8.60                 | 1909.....               | 9.12                   | 12.58                   | 12.36                                  | 19.02                |
| 1875.....               | 5.23                   | 6.23                    | 6.00                                   | 8.32                 | 1910.....               | 10.74                  | 14.54                   | 11.36                                  | 16.51                |
| 1876.....               | 4.64                   | 5.64                    | 6.11                                   | 7.97                 | 1911 <sup>1</sup> ..... | 12.31                  | 16.36                   | 12.18                                  | 17.04                |
| 1877.....               | 4.35                   | 5.04                    | 5.70                                   | 8.00                 | 1912.....               | 14.12                  | 18.42                   | 15.28                                  | 18.56                |
| 1878.....               | 4.33                   | 5.44                    | 5.70                                   | 7.41                 | 1913.....               | 17.45                  | 22.10                   | 14.68                                  | 18.93                |
| 1879.....               | 4.41                   | 6.46                    | 5.84                                   | 7.35                 | 1914.....               | 16.01                  | 20.71                   | 16.17                                  | 23.64                |
| 1880.....               | 4.34                   | 5.49                    | 5.84                                   | 8.00                 | 1915.....               | 12.22                  | 16.67                   | 16.98                                  | 31.09                |
| 1881 <sup>1</sup> ..... | 5.54                   | 6.85                    | 5.90                                   | 7.82                 | 1916.....               | 15.58                  | 21.52                   | 16.29                                  | 42.46                |
| 1882.....               | 6.30                   | 8.04                    | 6.19                                   | 7.93                 | 1917.....               | 21.65                  | 28.87                   | 18.44                                  | 61.81                |
| 1883.....               | 6.61                   | 8.31                    | 6.49                                   | 9.68                 | 1918.....               | 24.14                  | 32.01                   | 21.88                                  | 70.77                |
| 1884.....               | 5.95                   | 7.93                    | 6.93                                   | 12.40                | 1919.....               | 28.12                  | 37.65                   | 28.00                                  | 83.87                |
| 1885.....               | 5.60                   | 7.87                    | 7.72                                   | 10.84                | 1920.....               | 34.31                  | 40.83                   | 35.51                                  | 91.87                |
| 1886.....               | 5.56                   | 7.31                    | 8.00                                   | 13.63                | 1921 <sup>1</sup> ..... | 41.96                  | 49.65                   | 41.09                                  | 60.11                |
| 1887.....               | 6.20                   | 7.73                    | 7.71                                   | 8.07                 | 1922.....               | 35.87                  | 42.86                   | 38.97                                  | 51.97                |
| 1888.....               | 6.02                   | 7.68                    | 7.85                                   | 9.63                 | 1923.....               | 37.24                  | 44.74                   | 39.88                                  | 48.26                |
| 1889.....               | 6.47                   | 8.20                    | 7.81                                   | 9.20                 | 1924.....               | 37.83                  | 44.47                   | 39.53                                  | 40.83                |
| 1890.....               | 6.60                   | 8.34                    | 7.53                                   | 8.74                 | 1925.....               | 31.63                  | 37.52                   | 34.32                                  | 37.78                |
| 1891 <sup>1</sup> ..... | 6.35                   | 7.98                    | 7.52                                   | 8.44                 | 1926.....               | 34.60                  | 40.51                   | 37.63                                  | 37.69                |
| 1892.....               | 5.80                   | 7.56                    | 7.53                                   | 8.66                 | 1927.....               | 35.98                  | 41.56                   | 38.17                                  | 37.21                |
| 1893.....               | 5.94                   | 7.75                    | 7.47                                   | 8.29                 | 1928.....               | 37.09                  | 43.09                   | 34.19                                  | 38.51                |
| 1894.....               | 5.52                   | 7.31                    | 7.55                                   | 8.64                 | 1929.....               | 39.49                  | 45.88                   | 35.00                                  | 38.78                |
| 1895.....               | 5.05                   | 6.76                    | 7.59                                   | 8.53                 | 1930.....               | 37.09                  | 43.68                   | 35.06                                  | 39.01                |
| 1896.....               | 5.46                   | 7.23                    | 7.52                                   | 8.69                 | 1931 <sup>1</sup> ..... | 23.55                  | 34.32                   | 37.55                                  | 42.41                |
| 1897.....               | 5.58                   | 7.39                    | 7.49                                   | 8.40                 | 1932.....               | 26.15                  | 32.66                   | 36.73                                  | 43.92                |
| 1898.....               | 6.70                   | 7.84                    | 7.60                                   | 8.76                 | 1933.....               | 23.81                  | 29.13                   | 33.57                                  | 49.79                |
| 1899.....               | 6.65                   | 8.93                    | 8.00                                   | 9.85                 | 1934.....               | 25.12                  | 29.98                   | 32.03                                  | 42.31                |
| 1900.....               | 7.18                   | 9.63                    | 8.11                                   | 9.94                 | 1935.....               | 27.84                  | 33.09                   | 32.41                                  | 43.71                |
| 1901.....               | 7.19                   | 9.78                    | 8.72                                   | 10.79                | 1936.....               | 28.77                  | 33.79                   | 33.78                                  | 48.29                |
| 1902.....               | 7.85                   | 10.57                   | 9.24                                   | 11.64                | 1937.....               | 34.76                  | 40.84                   | 34.81                                  | 47.84                |

<sup>1</sup> Nine months.

### 7.—Per Capita Revenue Receipts and Expenditures, by Principal Items, 1933-37.

Note.—See Table 2 on pp. 839-840 for the revenue receipts and Table 3 on pp. 840-842 for expenditures on which these per capita figures are based. Dashes in this table indicate that no revenue was collected or expenditures made under the corresponding heads because the items were not applicable in the years so indicated.

| Item.  | 1933.<br>\$ | 1934.<br>\$ | 1935.<br>\$ | 1936.<br>\$ | 1937.<br>\$ |
|--|-------------|-------------|-------------|-------------|-------------|
| REVENUE RECEIPTS.                            |             |             |             |             |             |
| Consolidated Fund Receipts—                  |             |             |             |             |             |
| Taxation—                                    |             |             |             |             |             |
| Customs.....                                 | 6.56        | 6.13        | 7.00        | 6.71        | 7.53        |
| Excise duties.....                           | 3.54        | 3.28        | 3.95        | 4.02        | 4.13        |
| War Tax Revenue—                             |             |             |             |             |             |
| Banks.....                                   | 0.12        | 0.12        | 0.13        | 0.11        | 0.11        |
| Insurance companies.....                     | 0.08        | 0.07        | 0.07        | 0.07        | 0.07        |
| Business profits.....                        | —           | —           | —           | —           | —           |
| Income tax.....                              | 5.81        | 5.67        | 6.11        | 7.49        | 9.21        |
| Sales tax.....                               | 5.32        | 5.67        | 6.63        | 7.03        | 10.15       |
| Tax on cheques, transportation tax, etc..... | 2.38        | 4.17        | 3.64        | 3.19        | 3.56        |
| Tax on gold.....                             | —           | —           | 0.33        | 0.13        | —           |
| Totals, Receipts from Taxation.....          | 23.81       | 25.11       | 27.86       | 28.75       | 34.76       |

<sup>1</sup> Less than one-half of one cent.

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### 7.—Per Capita Revenue Receipts and Expenditures, by Principal Items, 1933-37—concluded.

| Item.   | 1933.<br>\$  | 1934.<br>\$  | 1935.<br>\$  | 1936.<br>\$  | 1937.<br>\$  |
|---|--------------|--------------|--------------|--------------|--------------|
| <b>REVENUE RECEIPTS.—Concluded.</b>   |              |              |              |              |              |
| <b>Consolidated Fund Receipts—concluded.</b>  |              |              |              |              |              |
| Non-Tax Revenue—  |              |              |              |              |              |
| Canada Grain Act.....   | 0-14         | 0-11         | 0-11         | 0-11         | 0-11         |
| Dominion lands.....   | 0-04         | 0-04         | 0-05         | 0-04         | 0-04         |
| Interest on investments.....  | 1-05         | 1-03         | 1-27         | 0-06         | 1-01         |
| Post Office.....  | 2-90         | 2-85         | 2-85         | 2-94         | 3-08         |
| Premium, discount and exchange (net).....   | 0-01         | —            | 0-07         | 1            | —            |
| Radio licences.....   | 0-13         | 0-12         | 0-14         | 0-14         | 0-09         |
| Totals, Non-Tax Revenue <sup>1</sup> .....  | 4-90         | 4-82         | 4-94         | 4-98         | 5-26         |
| <b>Totals, Consolidated Fund Receipts.</b>  | <b>28-71</b> | <b>29-94</b> | <b>32-78</b> | <b>33-75</b> | <b>40-02</b> |
| Special receipts and other credits.....   | 0-48         | 0-05         | 0-32         | 0-03         | 0-82         |
| <b>Grand Totals, Receipts.</b>  | <b>29-19</b> | <b>29-99</b> | <b>33-10</b> | <b>33-78</b> | <b>40-84</b> |
| <b>EXPENDITURES.</b>  |              |              |              |              |              |
| <b>Ordinary Expenditures—</b>   |              |              |              |              |              |
| Agriculture.....  | 0-76         | 0-65         | 0-65         | 0-85         | 0-79         |
| Finance—  |              |              |              |              |              |
| Interest on public debt.....  | 12-64        | 12-91        | 12-67        | 12-20        | 12-36        |
| Subsidies to provinces.....   | 1-28         | 1-27         | 1-26         | 1-25         | 1-90         |
| Old age pensions.....   | 1-08         | 1-14         | 1-37         | 1-52         | 1-90         |
| Fisheries.....  | 0-17         | 0-15         | 0-15         | 0-15         | 0-15         |
| Justice (including penitentiaries).....   | 0-50         | 0-47         | 0-46         | 0-44         | 0-44         |
| Labour (including technical education and Government annuities).....                            | 0-10         | 0-08         | 0-07         | 0-09         | 0-12         |
| Mines and Resources—  |              |              |              |              |              |
| Immigration and Colonization.....   | 0-16         | 0-13         | 0-12         | 0-12         | 0-12         |
| Indian Affairs.....   | 0-42         | 0-40         | 0-40         | 0-44         | 0-44         |
| Interior.....   | 0-33         | 0-26         | 0-25         | 0-27         | 0-26         |
| Mines and Geological Survey.....  | 0-10         | 0-08         | 0-09         | 0-09         | 0-10         |
| Movement of Coal and Domestic Fuel Act.....   | 0-11         | 0-26         | 0-19         | 0-19         | 0-20         |
| National Defence.....   | 1-29         | 1-25         | 1-30         | 1-56         | 2-06         |
| National Revenue (including Income Tax).....  | 1-02         | 0-96         | 0-93         | 0-99         | 1-01         |
| Pensions, war, military, and civil.....   | 4-18         | 4-01         | 4-00         | 3-93         | 3-90         |
| Pensions and National Health.....   | 1-07         | 0-96         | 1-00         | 1-09         | 1-12         |
| Post Office.....  | 2-96         | 2-82         | 2-77         | 2-85         | 2-87         |
| Public Works.....   | 1-23         | 1-00         | 0-91         | 1-17         | 1-31         |
| Royal Canadian Mounted Police.....  | 0-53         | 0-49         | 0-53         | 0-54         | 0-51         |
| Trade and Commerce.....   | 0-09         | 0-65         | 0-64         | 0-70         | 0-84         |
| Transport—  |              |              |              |              |              |
| Marine.....   | 0-54         | 0-50         | 0-53         | 0-53         | 0-50         |
| Canadian Broadcasting Corporation.....  | 0-01         | 0-09         | 0-11         | 0-14         | 0-08         |
| Railways and Canals (including Maritime Freight Rates Act and Railway Grade Crossing Fund)..... | 0-55         | 0-52         | 0-63         | 0-61         | 0-59         |
| <b>Totals, Ordinary Expenditures<sup>2</sup>.</b>   | <b>33-20</b> | <b>32-50</b> | <b>32-89</b> | <b>33-78</b> | <b>34-81</b> |
| <b>Totals, Capital Expenditures.</b>  | <b>0-85</b>  | <b>0-61</b>  | <b>0-65</b>  | <b>0-59</b>  | <b>0-31</b>  |
| <b>Totals, Special Expenditures.</b>  | <b>3-61</b>  | <b>3-32</b>  | <b>5-55</b>  | <b>9-25</b>  | <b>7-91</b>  |
| <b>Government-Owned Enterprises.</b>  | <b>12-64</b> | <b>5-64</b>  | <b>4-53</b>  | <b>4-62</b>  | <b>9-98</b>  |
| <b>Other Expenditures.</b>  | <b>0-14</b>  | <b>0-36</b>  | <b>0-05</b>  | <b>0-05</b>  | <b>1-73</b>  |
| <b>Grand Totals, Expenditures.</b>  | <b>49-84</b> | <b>42-33</b> | <b>43-72</b> | <b>48-29</b> | <b>47-84</b> |

<sup>1</sup> Less than one-half of one cent.<sup>2</sup> Includes other items not specified.

### Subsection 3.—War Tax Revenue.

An account of the various war taxes imposed in 1915 and subsequently has already been given on p. 835 in the introduction to this Section. For convenience of reference, the amounts received from these taxes since the beginning are segregated and the totals paid to the Receiver General are given in Table 8. The taxes imposed on banks, trust and loan companies, and insurance companies are collected by the Department of Finance. The excise war taxes, the business profits war tax and the income war tax are collected by the Department of National Revenue. The amounts of excise war taxes collected from different sources in the past six fiscal years are given in Table 9, while Table 10 contains the details by provinces for the latest year. (See also Tables 37 to 42 of this Chapter.)

### 8.—War Tax Revenues Received by the Receiver General, fiscal years ended Mar. 31, 1915-37.

NOTE.—Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the years indicated.

| Fiscal Year. | Banks. <sup>1</sup> | Trust and Loan Companies. <sup>1</sup> | Insurance Companies. <sup>1</sup> | Business Profits. <sup>2</sup> | Income Tax.   | Sales, Transportation Tax, etc. | Total War Tax Revenue. |
|--------------|---------------------|--|-----------------------------------|--------------------------------|---------------|---------------------------------|------------------------|
|              | \$                  | \$                                     | \$                                | \$                             | \$            | \$                              | \$                     |
| 1915         | —                   | —                                      | —                                 | —                              | —             | 98,057                          | 98,057                 |
| 1916         | 1,300,447           | 324,250                                | 459,247                           | —                              | —             | 1,536,838                       | 3,620,782              |
| 1917         | 1,114,023           | 202,415                                | 419,609                           | 12,506,517                     | —             | 2,059,584                       | 16,302,238             |
| 1918         | 1,115,758           | 269,129                                | 496,540                           | 21,271,084                     | —             | 2,227,390                       | 25,379,901             |
| 1919         | 1,090,764           | 323,340                                | 546,114                           | 32,970,062                     | 9,349,720     | 11,888,508                      | 56,177,508             |
| 1920         | 1,170,223           | 274,216                                | 638,731                           | 44,145,184                     | 20,263,749    | 15,587,707                      | 82,079,801             |
| 1921         | 1,257,534           | 293,802                                | 807,687                           | 40,841,401                     | 46,381,824    | 78,803,099                      | 168,985,527            |
| 1922         | 1,293,897           | 338,994                                | 749,959                           | 22,815,687                     | 78,684,835    | 73,656,489                      | 177,484,161            |
| 1923         | 1,244,437           | 312,392                                | 852,328                           | 13,031,462                     | 59,711,538    | 106,482,718                     | 181,634,875            |
| 1924         | 1,236,957           | 308,632                                | 857,587                           | 4,752,681                      | 54,204,028    | 120,076,376                     | 182,036,261            |
| 1925         | 1,217,754           | 315,315                                | 867,992                           | 2,704,427                      | 56,248,043    | 85,810,717                      | 147,164,158            |
| 1926         | 1,176,899           | 326,714                                | 950,221                           | 1,173,449                      | 55,571,962    | 98,067,108                      | 157,296,321            |
| 1927         | 1,174,668           | 335,368                                | 947,830                           | 710,102                        | 47,386,309    | 105,613,160                     | 156,167,434            |
| 1928         | 1,224,645           | 345,430                                | 999,003                           | 956,031                        | 56,571,047    | 90,222,631                      | 160,819,087            |
| 1929         | 1,242,899           | 7,641                                  | 894,894                           | 455,252                        | 59,422,323    | 83,007,233                      | 145,029,742            |
| 1930         | 1,408,420           | —                                      | 74,416                            | 173,300                        | 69,020,726    | 63,409,143                      | 124,935,005            |
| 1931         | 1,429,264           | 6                                      | 74,250                            | 34,439                         | 71,048,022    | 34,734,661                      | 107,320,633            |
| 1932         | 1,350,121           | —                                      | 12,152                            | 3,000                          | 61,254,400    | 59,606,391                      | 122,266,064            |
| 1933         | 1,327,535           | —                                      | 826,150                           | 54                             | 62,066,697    | 82,191,575                      | 146,412,011            |
| 1934         | 1,335,646           | —                                      | 741,681                           | —                              | 61,399,171    | 106,575,575                     | 170,051,973            |
| 1935         | 1,368,480           | —                                      | 750,100                           | —                              | 66,805,066    | 112,192,069                     | 181,118,715            |
| 1936         | 1,250,933           | —                                      | 760,843                           | —                              | 82,709,808    | 112,733,045                     | 197,484,627            |
| 1937         | 1,209,894           | —                                      | 774,363                           | —                              | 102,365,242   | 152,473,422                     | 250,822,921            |
| Totals       | 27,019,365          | 3,922,644                              | 14,501,647                        | 198,544,083                    | 1,120,467,016 | 1,599,683,847                   | 2,964,738,902          |

<sup>1</sup>The figures are for special taxation only, imposed in 1915 as outlined on p. 835. "Insurance Companies" are exclusive of life and marine insurance companies. <sup>2</sup>Although this tax was not charged upon profits accruing after Dec. 31, 1920 (see 14-15 Geo. V, e. 10), belated revenue therefrom continued to be received until 1933.

### 9.—Summary of Excise War Taxes Collected by the Department of National Revenue, fiscal years ended Mar. 31, 1932-37.

(Accrued Revenue.)

NOTE.—Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the years so indicated.

| Item.                              | 1932.                   | 1933.                   | 1934.                    | 1935.                    | 1936.                    | 1937.                    |
|------------------------------------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                    | \$                      | \$                      | \$                       | \$                       | \$                       | \$                       |
| Licences                           | 37,127                  | 42,366                  | 42,506                   | 48,576                   | 41,872                   | 44,734                   |
| Stamps                             | 2,852,913               | 3,276,618               | 4,438,833                | 4,419,907                | 4,404,764                | 5,543,480                |
| Matches                            | 1,949,470               | 1,659,907               | 1,672,590                | 1,457,117                | 1,650,806                | 1,496,165                |
| Automobiles                        | 332,668                 | 220,328                 | 385,490                  | 1,241,818                | 1,261,618                | 1,317,561                |
| Playing cards                      | 276,528                 | 206,020                 | 240,483                  | 244,000                  | 273,090                  | 232,500                  |
| Tobacco preparations               | —                       | —                       | 862,119                  | 1,051,997                | 1,078,376                | 1,112,021                |
| Cigars                             | 217,938                 | 153,677                 | 120,469                  | 120,795                  | 124,837                  | 121,106                  |
| Wines                              | 258,061                 | 195,309                 | 213,631                  | 248,425                  | 203,466                  | 207,191                  |
| Alc. beer and porter               | 6,297,559               | 4,972,604               | 4,718,307                | 1,773,712                | —                        | —                        |
| Malt products                      | —                       | —                       | 209,332                  | 64,225                   | —                        | —                        |
| Sugar                              | —                       | —                       | 14,122,564               | 10,679,488               | 10,037,792               | 10,306,171               |
| Transportation and telephones      | —                       | 1,031,657               | 1,376,046                | 1,463,203                | 1,460,952                | 1,582,223                |
| Embossed cheques (Departmental)    | 194,372                 | 115,711                 | 201,395                  | 216,834                  | 229,511                  | 252,399                  |
| Lighters                           | —                       | —                       | —                        | —                        | 18,881                   | 26,273                   |
| Penalties and interest             | 219,032                 | 91,073                  | 142,328                  | 64,588                   | 85,672                   | 103,764                  |
| Sales, domestic                    | 34,587,788              | 49,275,963              | 54,244,032               | 64,011,591               | 70,259,941               | 99,421,015               |
| Domestic Totals                    | 47,193,756              | 61,241,293              | 83,458,830               | 87,126,375               | 91,052,965               | 121,757,133              |
| Imports—                           |                         |                         |                          |                          |                          |                          |
| Sales                              | 7,834,822               | 8,701,609               | 8,979,576                | 10,432,314               | 10,918,243               | 16,717,786               |
| Excise                             | 253,505                 | 34,707                  | 1,434,656                | 1,510,296                | 1,561,298                | 1,889,731                |
| Special excise 3 p.c. <sup>1</sup> | 4,982,217               | 13,377,726              | 14,534,620               | 15,007,274               | 12,939,182               | 15,415,315               |
| Grand Totals, Excise Taxes         | 60,264,300 <sup>2</sup> | 83,355,335 <sup>2</sup> | 108,407,782 <sup>2</sup> | 114,076,259 <sup>2</sup> | 116,471,661 <sup>2</sup> | 155,779,965 <sup>2</sup> |

<sup>1</sup>1 p.c. in 1932.

<sup>2</sup>Included refunds of \$657,909 in 1932, \$1,163,759 in 1933, \$1,832,208 in 1934, \$2,352,759 in 1935, \$3,270,014 in 1936 and \$3,306,541 in 1937.



**10.—Excise War Taxes Collected by the Department of National Revenue, by Provinces, fiscal year ended Mar. 31, 1937.**

NOTE.—Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the cases indicated.

| Province or Other Source. | Licences.     | Stamps.          | Matches.         | Automobiles.     | Sales, Domestic.  | Toilet Preparations. | Playing Cards. |
|---------------------------|---------------|------------------|------------------|------------------|-------------------|----------------------|----------------|
|                           | \$            | \$               | \$               | \$               | \$                | \$                   | \$             |
| Prince Edward Island..... | 96            | 13,214           | —                | —                | 33,373            | —                    | —              |
| Nova Scotia.....          | 907           | 111,722          | —                | 757              | 1,255,821         | 31                   | —              |
| New Brunswick.....        | 808           | 81,950           | —                | 4,384            | 904,770           | 41                   | —              |
| Quebec.....               | 15,078        | 1,660,482        | 807,045          | 119,417          | 33,033,858        | 294,175              | 75,000         |
| Ontario.....              | 19,690        | 2,786,349        | 689,150          | 1,185,108        | 55,331,962        | 774,567              | 147,500        |
| Manitoba.....             | 1,746         | 230,202          | —                | 1,236            | 2,999,994         | 34,783               | —              |
| Saskatchewan.....         | 608           | 126,683          | —                | 69               | 733,110           | 589                  | —              |
| Alberta.....              | 1,447         | 187,388          | —                | 1,078            | 1,159,579         | 447                  | —              |
| British Columbia.....     | 4,256         | 336,611          | —                | 5,514            | 3,937,116         | 7,388                | —              |
| Yukon.....                | 8             | 2,063            | —                | —                | 1,422             | —                    | —              |
| Departmental sales.....   | —             | 6,816            | —                | —                | 10                | —                    | —              |
| <b>Totals.....</b>        | <b>44,734</b> | <b>5,543,480</b> | <b>1,496,195</b> | <b>1,317,561</b> | <b>99,421,015</b> | <b>1,112,021</b>     | <b>222,500</b> |

| Province or Other Source. | Cigars.        | Wines.         | Sugar.            | Embossed Cheques. | Transportation and Telephones. | Lighters.     | Interest.      |
|---------------------------|----------------|----------------|-------------------|-------------------|--------------------------------|---------------|----------------|
|                           | \$             | \$             | \$                | \$                | \$                             | \$            | \$             |
| Prince Edward Island..... | —              | —              | —                 | —                 | —                              | —             | 42             |
| Nova Scotia.....          | —              | —              | 1,124,158         | —                 | 28,385                         | —             | 1,029          |
| New Brunswick.....        | —              | —              | 913,491           | —                 | 20,700                         | —             | 2,141          |
| Quebec.....               | 84,078         | 23,482         | 2,438,075         | —                 | 989,486                        | 1,986         | 46,729         |
| Ontario.....              | 36,190         | 160,467        | 3,713,877         | —                 | 374,906                        | 24,287        | 39,630         |
| Manitoba.....             | —              | 18             | —                 | —                 | 28,837                         | —             | 4,034          |
| Saskatchewan.....         | —              | 8,435          | —                 | —                 | 43,647                         | —             | 1,109          |
| Alberta.....              | —              | —              | 466,090           | —                 | 49,720                         | —             | 2,019          |
| British Columbia.....     | 838            | 14,789         | 1,650,474         | —                 | 46,492                         | —             | 6,131          |
| Yukon.....                | —              | —              | —                 | —                 | 50                             | —             | —              |
| Departmental sales.....   | —              | —              | —                 | 252,899           | —                              | —             | —              |
| <b>Totals.....</b>        | <b>121,106</b> | <b>207,191</b> | <b>10,366,171</b> | <b>252,899</b>    | <b>1,533,223</b>               | <b>26,273</b> | <b>193,764</b> |

| Province or Other Source.        | Domestic Total.    | Importations.     |                  |                        | Grand Total.       |
|----------------------------------|--------------------|-------------------|------------------|------------------------|--------------------|
|                                  |                    | Sales.            | Excise.          | Special Excise, 3 p.c. |                    |
|                                  | \$                 | \$                | \$               | \$                     | \$                 |
| Prince Edward Island.....        | 46,725             | 24,795            | 279              | 6,809                  | 78,608             |
| Nova Scotia.....                 | 2,533,800          | 366,539           | 5,422            | 301,154                | 3,226,915          |
| New Brunswick.....               | 1,028,285          | 481,159           | 1,607            | 180,890                | 2,591,941          |
| Quebec.....                      | 39,588,890         | 4,431,561         | 1,399,857        | 4,086,978              | 49,507,285         |
| Ontario.....                     | 65,283,683         | 7,232,035         | 374,036          | 8,571,857              | 81,401,611         |
| Manitoba.....                    | 3,300,850          | 1,083,125         | 41,290           | 539,957                | 4,965,252          |
| Saskatchewan.....                | 914,251            | 259,984           | 4,343            | 253,512                | 1,432,091          |
| Alberta.....                     | 1,867,773          | 567,035           | 10,101           | 348,760                | 2,793,669          |
| British Columbia.....            | 6,009,608          | 2,239,602         | 52,671           | 1,114,972              | 9,416,853          |
| Yukon.....                       | 3,542              | 30,499            | 125              | 10,396                 | 44,562             |
| Departmental sales.....          | 259,726            | —                 | —                | —                      | 259,726            |
| British Post Office parcels..... | —                  | 1,452             | —                | —                      | 1,452              |
| <b>Totals.....</b>               | <b>121,757,133</b> | <b>16,717,756</b> | <b>1,889,731</b> | <b>15,415,315</b>      | <b>155,779,965</b> |

**Subsection 4.—Inland Revenue.**

Under the Inland Revenue Act (R.S.C., 1906, c. 5), the Department of Inland Revenue had the control and management of standard weights and measures and of the collection of excise duties, of stamp duties, internal taxes, bridge and ferry tolls and rents until 1918. It administered the statutes which dealt with the adulteration of food and other articles, electricity and gas inspection, patent medicines, petroleum, naphtha, and the analysis of fertilizers and feeding stuffs. This Department also established the food standards which were put into force by Orders in Council under the authority of Sec. 26 of the Adulteration Act. Later the

administration of the Adulteration of Food, and the Proprietary and Patent Medicine Acts was transferred to the Department of Health, that of the Commercial Feeding Stuffs, and Fertilizers Acts to the Department of Agriculture, and that of the Acts relating to weights and measures, and the inspection of gas, electric light, and water meters to the Department of Trade and Commerce. By Order in Council of May 18, 1918, the Departments of Customs and of Inland Revenue were combined as the Department of Customs and Inland Revenue, under one Minister of the Crown. On June 4, 1921, the Department of Customs and Inland Revenue was consolidated as the Department of Customs and Excise (11-12 Geo. V, c. 26). As from Apr. 1, 1927, the name of this Department, which collects the great bulk of the revenue of the Dominion, was changed to Department of National Revenue by authority of 17 Geo. V, c. 34. This Act provides for three chief departmental officers—the Commissioner of Customs, the Commissioner of Excise and the Commissioner of Income Tax, while an Assistant Commissioner of Customs may also be appointed.

In the fiscal year ended Mar. 31, 1937, the gross amount of customs duties collected by the Department was \$92,282,059, as compared with \$82,784,317 in 1936, \$84,627,473 in 1935, \$73,154,472 in 1934, \$77,271,965 in 1933, \$113,997,851 in 1932, and \$149,250,992 in 1931. The total of excise duties and excise war taxes collected in the fiscal year ended Mar. 31, 1937, was \$202,498,882, as compared with \$161,830,681 in 1936, \$158,576,297 in 1935, \$145,176,663 in 1934, \$123,478,841 in 1933, \$109,586,366 in 1932, and \$93,986,975 in 1931.\* The total of income tax collected in the fiscal year ended Mar. 31, 1937, was \$102,365,242, as compared with \$82,709,803 in 1936. While the income tax and the business profits war tax (see Table 8) are collected by the Commissioner of Income Tax, the other main branches of inland revenue—the excise duties and excise war taxes—are collected by the Commissioner of Excise.

**Canadian Excise Tariff.**—The following is a statement of the Canadian excise tariff, as existing at Jan. 1, 1938:—

|   |   |
|---|---|
| 1. Spirits distilled in Canada, per proof gal. \$ 4-00  | 3. Beer or Malt Liqueur:—   |
| Canadian brandy, per proof gal. .... 3-00   | (a) Brewed in whole or part from any substance other than malt, per gal. .... 0-22    |
| Except Spirits as follows:—   | (b) Imported (in addition to any of the duties otherwise imposed), per gal. .... 0-07 |
| (a) Used in a bonded manufactory for medicines, extracts, etc., per proof gal. ... 1-50   | 4. Malt—  |
| (b) Used in a bonded manufactory for perfumes, per proof gal. .... 1-50   | (a) Produced in Canada and screened, per lb. .... 0-06                                |
| (c) Used in a bonded manufactory for vinegar, per proof gal. .... 0-27  | (b) Imported, per lb. .... 0-08   |
| (d) Used for chemical compositions approved by Governor in Council, per proof gal. .... 0-15  | (c) Imported, crushed or ground, per lb. .... 0-06                                    |
| (e) Sold to licensed druggists for pharmaceutical preparations, per proof gal. ... 1-50   | 5. Malt Syrup:—   |
| (f) Distilled from native fruits and used by a licensed wine manufacturer for fortification of native wines, per proof gal. .... Free | (a) Produced in Canada, per lb. .... 0-10   |
| 2. Spirits imported (in addition to any of the duties otherwise imposed), per proof gal. .... 0-30                                    | (b) Imported, per lb. .... 0-16   |
|   | 6. Tobacco, Cigars and Cigarettes:—   |
|   | (a) Manufactured tobacco, per lb. .... 0-20   |
|   | (b) Cigarettes weighing not more than 3 lb. per M., per M. .... 4-00                  |
|   | (c) Cigarettes, weighing more than 3 lb., per M., per M. .... 11-00                   |
|   | (d) Cigars, per M. .... 3-00  |

A drawback of 99 p.c. of the duty may be granted when domestic spirits, testing not less than 50 p.c. over proof, are delivered in limited quantities to universities, scientific or research laboratories, or to any *bona fide* public hospital for medicinal purposes only.

**Revenue from Excise Duties.**—The inland revenue collected from excise duties, other than war taxes, is shown by items for the past six fiscal years in Table 11.

\*Table 9, p. 851, gives the details of the revenues from individual taxes for the years 1932-37 and Table 10, p. 852, gives this information by provinces for 1937.

Tobacco, including cigarettes, is shown by the figures to have supplied about 61 p.c. of the revenue from excise duties in the fiscal year 1937.

### 11.—Details of Excise Duties Collected, fiscal years ended Mar. 31, 1932-37.

(As shown in the Report of the Commissioner of Excise.)

Norn.—Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the years indicated.

| Item.                    | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             | 1937.             |
|--------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                          | \$                | \$                | \$                | \$                | \$                | \$                |
| Spirits.....             | 8,153,448         | 7,201,375         | 7,176,513         | 8,155,162         | 7,401,581         | 8,316,069         |
| Validation fee.....      | -                 | -                 | 323,482           | 443,550           | 600,417           | 1,055,719         |
| Beer or malt liquor..... | 385,436           | 302,539           | 234,877           | 1,143,910         | 408,760           | 390,277           |
| Malt syrup.....          | -                 | -                 | -                 | 168,705           | 163,710           | 160,175           |
| Malt.....                | 3,633,438         | 2,875,779         | 2,773,984         | 6,263,464         | 7,091,832         | 8,050,880         |
| Tobacco.....             | 36,047,484        | 29,330,598        | 25,857,511        | 27,903,910        | 28,678,512        | 28,334,748        |
| Cigars.....              | 456,654           | 368,352           | 347,803           | 376,136           | 373,668           | 372,058           |
| Licences.....            | 45,605            | 44,863            | 54,710            | 45,201            | 40,540            | 38,891            |
| <b>Totals.....</b>       | <b>49,322,065</b> | <b>40,123,506</b> | <b>36,763,880</b> | <b>44,500,638</b> | <b>45,759,020</b> | <b>46,718,917</b> |

Statistics of Licences and Distillation.—As a by-product of the collection of excise duties, statistics are compiled of excise licences issued and of distillation; figures for recent years are given in Table 12.

### 12.—Statistics of Distillation, fiscal years ended Mar. 31, 1932-37.

| Schedule.   | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             | 1937.             |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Licences issued.....No.                                       | 27                | 24                | 20                | 18                | 18                | 18                |
| Licence fees.....\$   | 7,125             | 6,250             | 5,750             | 5,000             | 4,750             | 4,500             |
| Grain, etc., for Distillation—                                |                   |                   |                   |                   |                   |                   |
| Malt.....lb.  | 10,802,254        | 6,807,110         | 8,250,033         | 3,878,133         | 6,400,673         | 8,674,360         |
| Indian corn....."   | 19,637,775        | 17,871,546        | 27,497,313        | 22,508,624        | 32,961,102        | 52,575,085        |
| Rye....."   | 27,121,120        | 17,552,045        | 13,929,865        | 4,772,654         | 7,128,903         | 10,440,518        |
| Other grain....."   | 159,080           | 17,125            | 121,208           | 119,000           | 192,098           | 323,960           |
| <b>Totals, Grain Used.....</b>                                | <b>57,770,229</b> | <b>42,247,835</b> | <b>49,807,419</b> | <b>31,278,411</b> | <b>40,742,776</b> | <b>72,013,923</b> |
| Molasses used....."   | 71,888,200        | 39,272,623        | 69,111,370        | 48,550,415        | 74,932,898        | 87,235,182        |
| Wine and other materials....."                                | 15,917,061        | 3,071,695         | 1,525,833         | 2,357,528         | 304,531           | 2,247,500         |
| Proof spirits manufactured.....proof gal.                     | 7,099,637         | 4,345,834         | 6,411,230         | 4,321,457         | 6,553,190         | 8,723,005         |
| Duty Collected Ex-manufactory on Deficiencies and Assessment— |                   |                   |                   |                   |                   |                   |
| Amount.....proof gal.   | 9,643             | 575               | 297               | 80                | 664               | 678               |
| Duty.....\$   | 87,061            | 5,187             | 2,076             | 559               | 2,655             | 2,942             |
| <b>Totals, duties collected plus licence fees.....\$</b>      | <b>94,186</b>     | <b>11,437</b>     | <b>7,826</b>      | <b>5,559</b>      | <b>7,405</b>      | <b>7,442</b>      |

It will be seen from the above table that the quantity of spirits manufactured dropped between 1932 and 1933 from 7,099,637 proof gal. to 4,345,834 proof gal. Since 1933 there has been an increase to 8,723,005 proof gal. for 1937, although for the year 1935 the low figure of 4,321,457 was recorded. The duties collected ex-manufactory on deficiencies etc., plus licence fees fell from \$94,186 to \$5,559 between 1932 and 1935 but showed an improvement at \$7,442 for 1937.

Alcohol and Tobacco Taken out of Bond.—In Table 13 are shown the quantities of spirits, malt liquor, malt, cigars, cigarettes, and tobacco taken out of bond for consumption in the fiscal years ended 1911 to 1937.

Between 1920 and 1937 the number of cigars taken out of bond fell from 270,089,761 to 123,956,872 and the quantity of tobacco, which was 23,049,012 lb. in 1920, had fallen to 20,870,651 lb. by 1925, since when there was a steady increase

to 24,122,763 lb. in 1937. The consumption of cigarettes increased from 1,553,468,890 in 1919 to 5,082,314,590 in 1931 but thereafter showed a decline. After 1935, however, consumption reached new records.

Between 1923 and 1929 spirits taken out of bond (exclusive of imported spirits) rose from 729,678 gal. to 2,016,802 gal., but there was a decided and steady drop to 769,527 gal. for 1933. Since 1933 substantial increases have been shown. Malt liquor showed an increase from 36,789,195 gal. in 1923 to 65,719,129 gal. in 1929 but there was a decrease to 40,105,883 for 1934; the figure for 1937 was 59,920,298 gal.

**13.—Quantities of Spirits, Malt Liquor, Malt, and Tobacco Taken out of Bond for Consumption, fiscal years ended Mar. 31, 1911-37.**

NOTE.—For years prior to 1900, see 1916-17 Year Book, p. 528, and for 1901-10, see 1933 Year Book, p. 840.

| Fiscal Year. | Spirits. <sup>1</sup> | Malt Liquor. | Malt.       | Cigars.     | Cigarettes.   | Tobacco. <sup>2</sup> |
|--------------|-----------------------|--------------|-------------|-------------|---------------|-----------------------|
|              | gal.                  | gal.         | lb.         | No.         | No.           | lb.                   |
| 1911.....    | 4,146,452             | 41,752,448   | 101,525,430 | 227,585,692 | 585,935,370   | 18,993,322            |
| 1912.....    | 4,562,382             | 47,818,647   | 114,029,523 | 252,718,242 | 782,663,841   | 21,419,046            |
| 1913.....    | 4,999,937             | 52,314,400   | 123,920,607 | 294,772,933 | 977,743,301   | 22,371,636            |
| 1914.....    | 4,762,618             | 56,060,846   | 133,794,639 | 288,219,892 | 1,160,023,170 | 22,248,700            |
| 1915.....    | 4,021,060             | 47,963,225   | 111,037,743 | 236,366,542 | 1,090,125,936 | 21,180,887            |
| 1916.....    | 3,629,324             | 39,635,877   | 89,476,590  | 207,647,808 | 1,082,324,710 | 20,898,241            |
| 1917.....    | 4,118,147             | 34,827,284   | 78,815,746  | 239,752,252 | 1,367,276,750 | 20,735,080            |
| 1918.....    | 4,591,972             | 28,442,427   | 59,626,049  | 254,445,945 | 1,064,708,933 | 21,780,168            |
| 1919.....    | 2,941,108             | 26,024,117   | 49,184,747  | 221,087,110 | 1,553,468,890 | 19,880,446            |
| 1920.....    | 3,816,124             | 35,865,897   | 69,975,631  | 270,089,761 | 2,440,932,912 | 23,049,012            |
| 1921.....    | 2,816,071             | 35,509,757   | 82,210,351  | 214,362,197 | 2,459,832,278 | 19,380,238            |
| 1922.....    | 730,474               | 38,404,346   | 87,561,176  | 181,255,533 | 2,450,397,154 | 20,528,233            |
| 1923.....    | 729,678               | 36,789,195   | 84,922,024  | 183,965,151 | 1,917,778,908 | 22,072,709            |
| 1924.....    | 899,291               | 43,717,823   | 105,446,169 | 198,042,909 | 2,420,052,731 | 21,172,307            |
| 1925.....    | 1,910,316             | 48,106,177   | 118,237,385 | 168,097,387 | 2,631,093,150 | 20,870,051            |
| 1926.....    | 1,082,785             | 52,443,505   | 127,789,729 | 174,363,188 | 2,853,448,160 | 21,595,473            |
| 1927.....    | 1,404,111             | 51,726,251   | 126,967,976 | 175,335,838 | 3,333,999,800 | 21,589,727            |
| 1928.....    | 1,898,357             | 58,391,360   | 142,543,947 | 181,730,614 | 3,927,022,325 | 21,907,747            |
| 1929.....    | 2,016,802             | 65,719,129   | 158,490,019 | 190,981,166 | 4,607,500,425 | 21,973,221            |
| 1930.....    | 1,926,063             | 62,892,150   | 149,746,711 | 196,251,957 | 5,035,878,655 | 22,195,455            |
| 1931.....    | 1,180,536             | 58,641,404   | 137,997,652 | 177,841,987 | 5,082,314,590 | 22,320,345            |
| 1932.....    | 781,612               | 52,091,768   | 121,257,224 | 152,159,301 | 4,401,628,765 | 22,301,085            |
| 1933.....    | 769,527               | 40,632,084   | 95,604,554  | 122,664,715 | 3,728,832,089 | 22,515,889            |
| 1934.....    | 938,946               | 40,105,883   | 92,319,768  | 115,968,080 | 4,842,728,835 | 22,516,265            |
| 1935.....    | 1,063,928             | 51,703,781   | 117,985,480 | 125,519,841 | 4,958,250,855 | 22,891,129            |
| 1936.....    | 1,621,286             | 56,913,009   | 128,204,424 | 124,570,870 | 5,310,132,016 | 23,113,591            |
| 1937.....    | 1,900,714             | 59,920,298   | 134,154,094 | 123,956,872 | 5,855,935,609 | 24,122,763            |

<sup>1</sup> Exclusive of imported spirits but inclusive of non-potable spirits down to 1921.

<sup>2</sup> Including snuff.

**Subsection 5.—Subsidies and Loans to Provinces.**

**Subsidies.**—By the provisions of the British North America Act and subsequent arrangements entered into from time to time, the Dominion is required to make certain annual payments to the individual provinces. These payments fall into the following classes:—

**Interest on Debt Allowances.**—By the terms of the Union of the provinces at Confederation in 1867, the Dominion assumed all the outstanding debts and liabilities of the provinces and undertook to pay, except in the case of Ontario and Quebec, interest at 5 p.c. on the amounts by which the actual per capita indebtedness of the provinces fell short of a basic debt allowance calculated at approximately \$25 per capita. On the subsequent entry of additional provinces into Confederation,

similar arrangements were effected regarding the assumption of their pre-Confederation indebtedness. From time to time, adjustments have been made in the basis of calculation of the debt allowances of the various provinces and the Dominion pays interest at 5 p.c. per annum on the amounts by which the actual debts of the provinces, on their entry into Confederation, fell short of the allowed debts as adjusted. The aggregate annual payment from the Dominion to the provinces in respect of interest on debt allowances is \$1,609,386.

*Allowances for Government and Legislature.*—Under the terms of the Union, annual grants of specific amounts were made to the various provinces for the support of their governments and legislatures. These fixed amounts vary with the population of the provinces according to the following scale, approved in 1907:—

| Where population is—                       | \$      |
|--|---------|
| Under 150,000 .....                        | 100,000 |
| 150,000, but does not exceed 200,000 ..... | 150,000 |
| 200,000, " " 400,000 .....                 | 180,000 |
| 400,000, " " 800,000 .....                 | 190,000 |
| 800,000, " " 1,500,000 .....               | 220,000 |
| Over 1,500,000 .....                       | 240,000 |

The aggregate annual allowances presently paid under this head amount to \$1,750,000.

*Allowances per Head of Population.*—Under the British North America Act of 1867, a grant of 80 cents per head of the population was allowed to each province. The British North America Act of 1907 provided that the grant would be paid to each province at the rate of 80 cents per head up to a population of 2,500,000, and at the rate of 60 cents per head for so much of the population as exceeds that number. The cost to the Dominion in 1937 of the annual allowances paid to the provinces per head of population was \$8,094,931.

*Special Grants.*—In the case of certain of the provinces, grants have been added to the original scale of subsidies in view of special circumstances obtaining, which, for the fiscal year 1937, amounted in aggregate to \$2,280,880 as set forth below:—

*Prince Edward Island.*—A special grant of \$195,000, less a deduction of \$39,120 (net grant of \$155,880).

*New Brunswick.*—An annual grant of \$150,000 since 1875 in consideration of the repeal of lumber duties reserved to the provinces by the B.N.A. Act of 1867.

*Manitoba.*—A special grant on the basis of population amounting at present to \$562,500 per annum.

*Saskatchewan and Alberta.*—Currently receiving an annual sum as compensation for loss of revenue derivable from their Public Lands, based on their respective populations which amounts, in the case of Saskatchewan, to \$750,000 per annum at present, and, in the case of Alberta, to \$562,500.

*British Columbia.*—A special grant amounting at present to \$100,000 per annum.

*Other Special Grants.*—In addition to the above, there are other special grants paid to the Maritime Provinces and British Columbia which are voted annually, aggregating, in the fiscal year 1937, \$3,225,000 as follows:—

|                            | \$        |
|----------------------------|-----------|
| Prince Edward Island ..... | 275,000   |
| Nova Scotia .....          | 1,300,000 |
| New Brunswick .....        | 900,000   |
| British Columbia .....     | 750,000   |

## 14.—Subsidies of Dominion to Provincial Governments, fiscal years ended 1932-37.

| Province.                 | 1932.                | 1933.                | 1934.                | 1935.                | 1936.                | 1937.                |
|---------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                           | \$                   | \$                   | \$                   | \$                   | \$                   | \$                   |
| Prince Edward Island..... | 381,932 <sup>1</sup> | 381,932 <sup>1</sup> | 381,932 <sup>1</sup> | 381,932 <sup>1</sup> | 381,932 <sup>1</sup> | 381,932 <sup>1</sup> |
| Nova Scotia.....          | 661,841 <sup>1</sup> | 644,250 <sup>1</sup> | 653,048 <sup>1</sup> | 653,048 <sup>1</sup> | 653,048 <sup>1</sup> | 653,048 <sup>1</sup> |
| New Brunswick.....        | 693,040 <sup>1</sup> | 693,040 <sup>1</sup> | 693,040 <sup>1</sup> | 693,040 <sup>1</sup> | 693,040 <sup>1</sup> | 693,040 <sup>1</sup> |
| Quebec.....               | 2,592,014            | 2,592,014            | 2,592,014            | 2,592,014            | 2,592,014            | 2,592,014            |
| Ontario.....              | 2,941,424            | 2,941,424            | 2,941,424            | 2,941,424            | 2,941,424            | 2,941,424            |
| Manitoba.....             | 1,694,195            | 1,694,195            | 1,705,340            | 1,715,484            | 1,716,484            | 1,703,022            |
| Saskatchewan.....         | 2,112,803            | 2,112,803            | 2,123,839            | 2,144,975            | 2,144,975            | 2,120,084            |
| Alberta.....              | 1,743,159            | 1,743,159            | 1,757,317            | 1,771,475            | 1,771,475            | 1,776,071            |
| British Columbia.....     | 874,561              | 874,561              | 874,561              | 874,561 <sup>1</sup> | 874,561 <sup>1</sup> | 874,561 <sup>1</sup> |
| Totals.....               | 13,694,970           | 13,677,384           | 13,727,565           | 13,768,953           | 13,768,953           | 13,735,196           |

<sup>1</sup> Additional special grants, not included in above table, are paid to Prince Edward Island, Nova Scotia, New Brunswick, and British Columbia. The amounts of such special grants voted in 1937 are stated in the text immediately preceding this table.

## 15.—Total of Subsidy Allowances to Provincial Governments, from July 1, 1867, to Mar. 31, 1937.

| Province.                 | Allowances for Government. | Allowances on Basis of Population. | Special Grants. <sup>1</sup> | Interest on Debt Allowances. <sup>2</sup> | Total.                  |
|---------------------------|----------------------------|------------------------------------|------------------------------|---|-------------------------|
|                           | \$                         | \$                                 | \$                           | \$  | \$                      |
| Prince Edward Island..... | 4,020,000                  | 5,467,229                          | 5,131,944                    | 2,680,424                                 | 17,319,597 <sup>3</sup> |
| Nova Scotia.....          | 8,100,000                  | 24,542,840                         | 826,980                      | 3,341,023                                 | 36,310,843 <sup>3</sup> |
| New Brunswick.....        | 7,460,000                  | 19,757,802                         | 10,259,000                   | 1,477,030                                 | 37,824,832 <sup>3</sup> |
| Quebec.....               | 10,000,000                 | 89,105,132                         | Nil                          | 5,570,174                                 | 104,554,306             |
| Ontario.....              | 10,400,000                 | 109,756,017                        | Nil                          | 5,313,348                                 | 125,469,365             |
| Manitoba.....             | 7,305,000                  | 18,482,324                         | 21,581,733                   | 14,495,372                                | 61,864,429              |
| Saskatchewan.....         | 6,156,667                  | 17,537,522                         | 19,281,250                   | 12,972,000                                | 55,997,439              |
| Alberta.....              | 5,726,667                  | 13,791,038                         | 16,781,250                   | 12,972,000                                | 49,270,955              |
| British Columbia.....     | 6,700,000                  | 13,843,508                         | 7,600,000                    | 1,933,754                                 | 30,077,352 <sup>3</sup> |
| Totals.....               | 65,868,334                 | 311,353,562                        | 81,153,157                   | 60,764,125                                | 579,119,178             |

<sup>1</sup> Compensation for lands and allowances for buildings. <sup>2</sup> Allowances in lieu of debt.

<sup>3</sup> Does not include special grants paid to Maritime Provinces and British Columbia.

**Loans to Provinces.**—All of the provincial loans recently advanced by the Dominion have been made to the western provinces under the authority of relief legislation beginning with the Unemployment and Farm Relief Act, 1931, and these have been secured by interest-bearing treasury bills of the respective provinces, the rate being 3 p.c. since July 1, 1936. The sum total of such loans outstanding as at Mar. 31, 1938, was \$148,288,254.

In addition to these, however, there were also outstanding at that date \$3,308,000 of housing loans, being the balance of loans made to the provinces in the years following the Great War, on the authority of Orders in Council passed in 1918 and 1919, and of the Appropriation Acts of 1920 and 1921. Upon these loans the province of Ontario repaid the whole of the advances in 1928, and the other provinces concerned have in most cases reduced their indebtedness from year to year.

Table 16 gives details of the loans made by the Dominion Government to the provinces concerned on account of relief expenditures, and Table 17 shows the amounts outstanding as at Mar. 31, of each of the years 1920-38, on account of loans made for housing.

**16.—Loans to Provincial Governments Under the Relief Acts, by Provinces, fiscal years ended Mar. 31, 1934-38.**

| Province and Item.  | 1934.             | 1935.             | 1936.              | 1937.              | 1938.              |
|---|-------------------|-------------------|--------------------|--------------------|--------------------|
|   | \$                | \$                | \$                 | \$                 | \$                 |
| <b>Manitoba—</b>  |                   |                   |                    |                    |                    |
| Loans during year.....  | 2,384,000         | 4,127,000         | 4,720,655          | 4,627,000          | 2,982,000          |
| Less cash repayments and credits of Dominion's share of expenditures..... | 110,717           | 1,252,369         | 2,324,429          | 1,000              | 22,812             |
| Net loans for year.....   | 2,273,283         | 2,874,631         | 2,396,226          | 4,626,000          | 2,959,188          |
| Net loans outstanding at beginning of year..                              | 7,960,716         | 10,233,999        | 13,108,630         | 15,504,856         | 20,130,856         |
| <b>Totals Outstanding Mar. 31.....</b>                                    | <b>10,233,999</b> | <b>13,108,630</b> | <b>15,504,856</b>  | <b>20,130,856</b>  | <b>23,090,044</b>  |
| <b>Saskatchewan—</b>  |                   |                   |                    |                    |                    |
| Loans during year.....  | 6,960,060         | 11,434,811        | 14,291,043         | 6,059,461          | 11,604,787         |
| Less cash repayments and credits of Dominion's share of expenditures..... | 1,400,826         | 1,293,797         | 45,565             | 582                | -                  |
| Net loans for year.....   | 5,469,240         | 10,141,014        | 14,245,478         | 6,058,879          | 11,604,787         |
| Net loans outstanding at beginning of year..                              | 18,512,896        | 23,982,137        | 34,123,151         | 48,368,629         | 54,427,508         |
| <b>Totals Outstanding Mar. 31.....</b>                                    | <b>23,982,136</b> | <b>34,123,151</b> | <b>48,368,629</b>  | <b>54,427,508</b>  | <b>66,032,295</b>  |
| <b>Alberta—</b>   |                   |                   |                    |                    |                    |
| Loans during year.....  | 4,068,524         | 3,895,000         | 13,117,000         | 974,450            | 200,000            |
| Less cash repayments and credits of Dominion's share of expenditures..... | 17,781            | 1,068,524         | 13,000             | 169,252            | 7,000              |
| Net loans for year.....   | 4,050,743         | 1,926,476         | 13,104,000         | 805,198            | 193,000            |
| Net loans outstanding at beginning of year..                              | 5,999,781         | 10,060,524        | 11,977,000         | 25,081,000         | 25,886,198         |
| <b>Totals Outstanding Mar. 31.....</b>                                    | <b>10,050,524</b> | <b>11,977,000</b> | <b>25,081,000</b>  | <b>25,886,198</b>  | <b>26,079,198</b>  |
| <b>British Columbia—</b>  |                   |                   |                    |                    |                    |
| Loans during year.....  | 3,535,000         | 8,225,000         | 12,566,000         | 4,044,000          | 2,000,000          |
| Less cash repayments and credits of Dominion's share of expenditures..... | 2,213,240         | 258,286           | 7,554              | 71,600             | 458,863            |
| Net loans for year.....   | 1,321,760         | 7,966,714         | 12,558,446         | 3,972,400          | 1,541,137          |
| Net loans outstanding at beginning of year..                              | 5,725,760         | 7,047,520         | 15,014,234         | 27,872,680         | 31,545,080         |
| <b>Totals Outstanding Mar. 31.....</b>                                    | <b>7,047,520</b>  | <b>15,014,234</b> | <b>27,572,680</b>  | <b>31,845,080</b>  | <b>33,086,217</b>  |
| <b>Grand Totals.....</b>  | <b>51,314,179</b> | <b>74,223,015</b> | <b>116,527,165</b> | <b>131,989,642</b> | <b>148,288,254</b> |

<sup>1</sup> Less write-offs as follows: Manitoba, \$804,897; Saskatchewan, \$17,682,158; leaving net loans outstanding \$129,801,199.

**17.—Loans to Provincial Governments Outstanding, on Account of Housing, by Provinces, as at Mar. 31, 1930-38.**

| Fiscal Year. | Prince Edward Island. | Nova Scotia. | New Brunswick. | Quebec.   | Ontario.  | Manitoba. | British Columbia. | Total.     |
|--------------|-----------------------|--------------|----------------|-----------|-----------|-----------|-------------------|------------|
|              | \$                    | \$           | \$             | \$        | \$        | \$        | \$                | \$         |
| 1920.....    | Nil                   | Nil          | 600,000        | 60,000    | 8,750,000 | 1,550,000 | 750,000           | 11,740,000 |
| 1921.....    | Nil                   | 600,000      | 1,220,000      | 1,146,700 | 8,750,000 | 1,580,000 | 1,361,500         | 14,658,200 |
| 1922.....    | Nil                   | 1,100,000    | 1,525,000      | 2,312,835 | 8,750,000 | 1,975,000 | 1,701,500         | 17,364,335 |
| 1923.....    | 50,000                | 1,537,000    | 1,525,000      | 4,391,617 | 9,350,000 | 1,975,000 | 1,701,500         | 20,530,117 |
| 1924.....    | 50,000                | 1,537,000    | 1,525,000      | 7,359,590 | 9,350,000 | 1,975,000 | 1,701,500         | 23,498,090 |
| 1925.....    | 50,000                | 1,537,000    | 1,525,000      | 7,355,305 | 9,350,000 | 1,975,000 | 1,701,500         | 23,493,805 |
| 1926.....    | 50,000                | 1,537,000    | 1,462,000      | 7,352,018 | 9,350,000 | 1,975,000 | 1,701,500         | 23,427,518 |
| 1927.....    | 50,000                | 1,537,000    | 1,308,000      | 7,337,843 | 9,350,000 | 1,925,000 | 1,701,500         | 23,109,343 |
| 1928.....    | 50,000                | 1,592,000    | 1,250,000      | 7,317,403 | Nil       | 1,660,000 | 1,701,500         | 13,340,903 |
| 1929.....    | 50,000                | 1,212,000    | 1,198,000      | 7,304,203 | Nil       | 1,650,000 | 1,701,500         | 13,065,703 |
| 1930.....    | 50,000                | 1,077,000    | 1,136,000      | 5,796,703 | Nil       | 1,550,000 | 1,701,500         | 11,311,203 |
| 1931.....    | 38,500                | 1,017,000    | 1,057,000      | 5,384,688 | Nil       | 1,475,000 | 1,701,500         | 10,671,688 |
| 1932.....    | 35,000                | 937,000      | 988,000        | 5,384,688 | Nil       | 1,475,000 | 1,701,500         | 10,521,188 |
| 1933.....    | 34,000                | 877,000      | 910,000        | 5,384,688 | Nil       | 1,475,000 | 1,701,500         | 10,382,188 |
| 1934.....    | 33,000                | 822,000      | 860,500        | 5,384,688 | Nil       | 1,367,000 | 1,701,500         | 10,168,688 |
| 1935.....    | 33,000                | 757,000      | 800,000        | 5,384,688 | Nil       | 1,065,000 | 1,701,500         | 9,771,188  |
| 1936.....    | 31,500                | 682,000      | 648,700        | 2,600,688 | Nil       | 1,065,000 | 1,701,500         | 6,768,388  |
| 1937.....    | 30,500                | 607,000      | 588,700        | 730,688   | Nil       | 1,072,000 | 1,701,500         | 4,730,388  |
| 1938.....    | 29,500                | 537,000      | Nil            | Nil       | Nil       | 1,040,000 | 1,701,500         | 3,308,000  |

## Subsection 6.—The National Debt.

The gross national debt of Canada on Mar. 31, 1914, was \$544,391,369, as against assets of \$208,394,519, leaving a net debt of \$335,996,850. Comparatively small as was this debt, it was a debt incurred almost altogether either for public works of general utility which, like the Intercolonial and transcontinental railways and the canal system, remained assets, though perhaps not realizable assets of the nation, or was expended as subsidies to enterprises, which, like the Canadian Pacific Railway, though not government-owned, assisted greatly in extending the area of settlement as well as the productive and, therefore, the taxable capacity of the country. Broadly speaking, it was a debt incurred for productive purposes. Also, it was mainly held outside the country, the principal of the Dominion funded debt payable in London being \$302,842,485 on Mar. 31, 1914, as against only \$717,453 payable in Canada.

The great changes brought about in our national debt during the 22 years from 1914 to 1937 have been: (1) the enormous increase in net debt from \$335,996,850 to \$3,083,952,202; (2) the gross debt, having been largely incurred for war purposes is not represented by corresponding assets; (3) the debt is now mainly held in Canada, \$2,478,491,235 being payable in Canada at Mar. 31, 1937.

**Recent Funded Debt Operations.**—Conversions and other national debt operations carried out between 1931 and 1934 are dealt with at pp. 905-907 of the 1934-35 Year Book, those of the fiscal year 1935 on pp. 845-846 of the 1936 Year Book, those of the fiscal year 1937 on p. 837 of the 1937 Year Book and those between 1914 and 1930 at pp. 842-843 of the 1933 Year Book. The following review carries the summary down to Mar. 31, 1938.

On May 5, 1937, an issue of \$113,500,000 was made in Canada for the purpose of converting a part of the \$236,299,800 5½ p.c. Victory Loan due Dec. 1, 1937. This issue was a conversion operation only, no cash applications being accepted. The new issue was comprised of three maturities, 1 p.c. two-year bonds due June 1, 1939, 2 p.c. five-year bonds due June 1, 1942, and 3½ p.c. twelve-year bonds due June 1, 1949, yielding 1.38 p.c., 2.375 p.c., and 3.35 p.c., respectively, to the purchaser.

To provide a part of the funds to pay off the unconverted portion of the 5½ p.c. Victory Loan Bonds, an issue of \$100,000,000 was made in Canada on Nov. 3, 1937. This issue was also in three maturities, 1 p.c. one and one-half-year bonds due June 1, 1939, 2½ p.c. seven-year bonds due Nov. 15, 1944, and 3½ p.c. fourteen-year bonds due Nov. 15, 1951, yielding 1.59 p.c., 2.74 p.c., and 3.34 p.c., respectively. The \$33,293,000 4 p.c. school land debentures due July 1, 1937, and held by the provinces of Manitoba, Saskatchewan, and Alberta, were renewed for a further period of one year at an interest rate of 4 p.c.

In the past four years a market for short-term treasury bills has been built up in Canada which has proven highly satisfactory. Each issue has, with two exceptions (where the bills were sold direct to the Bank of Canada), been offered for public tender. A complete list of treasury bills sold by public tender for the period



**19.—Funded Debt and Treasury Bills of the Dominion, Interest Payable Thereon, Date of Maturity, Rates of Interest, and Centres at Which Loans are Payable, as at Mar. 31, 1937—concluded.**

| Date of Maturity.   | Name of Loan.                         | Rate.  | Where Payable. | Amount of Loan Outstanding. | Annual Interest Charges. |
|---|---------------------------------------|--------|----------------|-----------------------------|--------------------------|
|   |                                       |        |                | \$                          | cts.                     |
| 1940—Mar. 1   | Loan of 1935.....                     | p.e. 3 | Canada.....    | 115,013,636 82              | 3,450,409 10             |
| June 1  | Loan of 1936.....                     | 1½     | Canada.....    | 80,000,000 00               | 1,200,000 00             |
| Sept. 1   | Refunding Loan, 1925.....             | 4½     | Canada.....    | 75,000,000 00               | 3,375,000 00             |
| 1941—Mar. 15  | Four and One-half Year Notes.....     | 1      | Canada.....    | 45,000,000 00               | 450,000 00               |
| Nov. 15   | National Service Loan, 1931.....      | 5      | Canada.....    | 141,663,000 00              | 7,083,150 00             |
| 1942—Oct. 15  | Refunding Loan, 1934.....             | 3      | Canada.....    | 40,409,000 00               | 1,212,270 00             |
| 1943—June 1   | Loan of 1935.....                     | 2½     | Canada.....    | 20,000,000 00               | 500,000 00               |
| Oct. 15   | Refunding Loan, 1926.....             | 5      | Canada.....    | 147,000,100 00              | 7,350,005 00             |
| 1944—Jan. 15  | Loan of 1937.....                     | 2½     | New York.....  | 30,000,000 00               | 675,000 00               |
| Oct. 15   | Refunding Loan, 1924.....             | 4½     | Canada.....    | 50,000,000 00               | 2,250,000 00             |
| 1945—Aug. 15  | Loan of 1935.....                     | 2½     | New York.....  | 76,000,000 00               | 1,900,000 00             |
| Oct. 15   | Refunding Loan, 1933.....             | 4      | Canada.....    | 88,337,500 00               | 3,533,500 00             |
| 1946—Feb. 1   | Refunding Loan, 1926.....             | 4½     | Canada.....    | 45,000,000 00               | 2,025,000 00             |
| 1947—Oct. 1   | Loan of 1937—£1,004,421-14-2.....     | 2½     | London.....    | 4,888,185 84                | 122,204 64               |
| 1948—Oct. 15  | Refunding Loan, 1934.....             | 3½     | Canada.....    | 188,322,000 00              | 4,841,270 00             |
| 1950—July 1   | Loan of 1930-50—£28,192,775-11-0..... | 3½     | London.....    | 137,055,841 00              | 4,797,059 43             |
| 1952—May 1  | Loan of 1923.....                     | 5      | New York.....  | 100,000,000 00              | 5,000,000 00             |
| Oct. 15   | Loan of 1932.....                     | 4      | Canada.....    | 56,191,000 00               | 2,247,640 00             |
| 1955—May 1  | Loan of 1934—£10,000,000-0-0.....     | 3½     | London.....    | 48,606,666 67               | 1,581,666 67             |
| June 1  | Loan of 1935 dated June 1.....        | 3      | Canada.....    | 40,000,000 00               | 1,200,000 00             |
| June 1  | Loan of 1935 dated Nov. 15.....       | 3      | Canada.....    | 55,000,000 00               | 1,650,000 00             |
| 1956—Nov. 1   | Conversion Loan, 1931.....            | 4½     | Canada.....    | 43,125,700 00               | 1,940,856 50             |
| 1957—Nov. 1   | Conversion Loan, 1931.....            | 4½     | Canada.....    | 37,623,200 00               | 1,688,544 00             |
| 1958—Sept. 1  | Loan of 1935—£15,000,000-0-0.....     | 4      | London.....    | 73,000,000 00               | 2,920,000 00             |
| Nov. 1  | Conversion Loan, 1931.....            | 4½     | Canada.....    | 276,687,600 00              | 12,450,942 00            |
| 1959—Nov. 1   | Conversion Loan, 1931.....            | 4½     | Canada.....    | 280,693,300 00              | 13,036,186 50            |
| 1960—Oct. 1   | Loan of 1940-60—£10,300,000-0-0.....  | 4      | London.....    | 93,923,666 56               | 3,757,066 67             |
| Oct. 15   | Loan of 1930.....                     | 4      | New York.....  | 100,000,000 00              | 4,000,000 00             |
| 1961—Jan. 15  | Loan of 1936.....                     | 3½     | New York.....  | 48,000,000 00               | 1,560,000 00             |
| June 15   | Loan of 1936.....                     | 3½     | Canada.....    | 54,703,000 00               | 1,777,847 50             |
| Sept. 15  | Perpetual Loan of 1936.....           | 3      | Canada.....    | 55,000,000 00               | 1,650,000 00             |
| 1967—Jan. 15  | Loan of 1937.....                     | 3      | New York.....  | 25,000,000 00               | 1,250,000 00             |
| 1937—Apr. 1   | Treasury Bills.....                   | 745    | Canada.....    | 25,000,000 00               | 180,250 00               |
| Apr. 15   | Treasury Bills.....                   | 747    | Canada.....    | 25,000,000 00               | 180,750 00               |
| May 1   | Treasury Bills.....                   | 758    | Canada.....    | 30,000,000 00               | 227,400 00               |
| May 15  | Treasury Bills.....                   | 770    | Canada.....    | 25,000,000 00               | 194,000 00               |
| June 1  | Treasury Bills.....                   | 794    | Canada.....    | 20,000,000 00               | 158,800 00               |
| June 15   | Treasury Bills.....                   | 804    | Canada.....    | 25,000,000 00               | 201,000 00               |
| Demand  | Dominion Stock, Issue A.....          | 6      | Canada.....    | 4,000 00                    | 240 00                   |
|   | Dominion Stock, Issue B.....          | 3½     | Canada.....    | 10,000 00                   | 371 00                   |
|   | Compensation to Seigneurs.....        | 6      | Canada.....    | 11,827 40                   | 709 64                   |
| <b>Recapitulation—</b>  |                                       |        |                | 3,337,358,831 89            | 125,093,380 61           |
| Payable in Canada.....  |                                       |        |                | 2,478,491,235 07            | 94,685,286 07            |
| Payable in New York.....  |                                       |        |                | 440,000,000 00              | 15,585,000 00            |
| Payable in London.....  |                                       |        |                | 409,867,596 79              | 14,823,094 54            |
|   |                                       |        |                | 3,337,358,831 89            | 125,093,380 61           |
| Less bonds and stocks of the above loans held as sinking funds..... |                                       |        |                | 61,815,007 93               |                          |
| <b>Net Funded Debt and Treasury Bills.....</b>                      |                                       |        |                | <b>3,275,543,823 93</b>     |                          |

<sup>1</sup> Subject to redemption as a whole on or after Jan. 15, 1943, on 30 days' notice. <sup>2</sup> Subject to redemption in whole or in part on Aug. 15, 1943, or on any subsequent interest date on 30 days' notice.

<sup>3</sup> Subject to redemption as a whole on Oct. 15, 1943, or on any subsequent interest date on 60 days' notice. <sup>4</sup> Subject to redemption as a whole on Oct. 15, 1944, or on any subsequent interest date on 60 days' notice.

<sup>5</sup> Subject to redemption on or after July 1, 1930, on 6 months' notice. <sup>6</sup> Subject to redemption as a whole on or after May 1, 1942, on 60 days' notice.

<sup>7</sup> Subject to redemption as a whole on Oct. 15, 1947, or on any subsequent interest date on 60 days' notice. <sup>8</sup> Subject to redemption in whole or in part on or after May 1, 1950, on 3 months' notice. <sup>9</sup> Subject to redemption as a whole on June 1, 1950, or on any subsequent interest date on 60 days' notice.

<sup>10</sup> Subject to redemption as a whole on Nov. 1, 1940, or on any subsequent interest date on 60 days' notice. <sup>11</sup> Subject to redemption as a whole on Nov. 1, 1947, or on any subsequent interest date on 60 days' notice.

<sup>12</sup> Subject to redemption in whole or in part on or after Sept. 1, 1953, on 3 months' notice. <sup>13</sup> Subject to redemption as a whole on Nov. 1, 1948, or on any subsequent interest date on 60 days' notice.

<sup>14</sup> Subject to redemption as a whole on Nov. 1, 1949, or on any subsequent interest date on 60 days' notice. <sup>15</sup> Subject to redemption in whole or in part on or after Oct. 1, 1940, on 3 months' notice.

<sup>16</sup> Subject to redemption as a whole on Oct. 1, 1950, or on any subsequent interest date on 60 days' notice. <sup>17</sup> Subject to redemption in whole or in part on Jan. 15, 1956, or on any subsequent interest date on 30 days' notice.

<sup>18</sup> Subject to redemption as a whole on June 1, 1956, or on any subsequent interest date on 60 days' notice. <sup>19</sup> Subject to redemption in whole or in part on or after Sept. 15, 1966, on 60 days' notice.

<sup>20</sup> Subject to redemption in whole or in part on any interest date on 60 days' notice as follows: to and including Jan. 15, 1942, at 105 p.e.; thereafter to and including Jan. 15, 1947, at 104 p.e.; thereafter to and including Jan. 15, 1953, at 103 p.e.; thereafter to and including Jan. 15, 1957, at 102 p.e.; thereafter to and including Jan. 15, 1962, at 101 p.e.; thereafter at 100 p.e.

**The Interest-Bearing Debt of Canada.**—Something of the extent of the burden of national debt being carried by the Canadian people may be realized from the fact that, for the fiscal year ended Mar. 31, 1937, the interest charges on the total interest-bearing debt amounted to about 35 p.c. of the total receipts from taxation and nearly 30 p.c. of the receipts from all sources.

Before the Great War, interest rates were comparatively moderate, but the unprecedented expenditure of the world's capital in that gigantic struggle led, in all the participating countries, to the raising of enormous loans at comparatively high rates of interest, which in many cases still have to be paid until refunding becomes possible under the terms of the contracts made between the nations and their creditors. Thus, in Canada, the average rate of interest paid upon the direct interest-bearing obligations of the nation, which was only 3.368 p.c. at Mar. 31, 1913, rose to 5.164 p.c. at Mar. 31, 1922, and fell gradually to 3.759 p.c. at Mar. 31, 1937. Details of the interest-bearing debt of Canada, and the interest charges thereon, as at Mar. 31 of the years from 1913 to 1937 are given in Table 20.

**20.—The Interest-Bearing Debt, the Annual Interest Charge Thereon and the Average Rate of Interest, as at Mar. 31, 1913-37.**

| Fiscal Year. | Bonds, Debentures and Treasury Bills. | Annual Interest Charges on Bonds, Debentures and Treasury Bills. | Average Interest Rate on Bonds, Debentures and Treasury Bills. | Savings Bank Deposits, Trust and Other Funds. | Annual Interest on Savings Bank Deposits and Other Funds. | Total Interest-Bearing Debt. <sup>1</sup> | Annual Interest Charge. | Average Rate of Interest. |
|--------------|---------------------------------------|--|--|---|---|---|-------------------------|---------------------------|
|              | \$                                    | \$   | p.c.   | \$  | \$  | \$  | \$                      | p.c.                      |
| 1913...      | 260,860,037                           | 8,973,746  | 3.439  | 91,735,123                                    | 2,904,257   | 352,604,160                               | 11,878,033              | 3.368                     |
| 1914...      | 311,833,272                           | 11,162,047   | 3.579  | 93,031,928                                    | 2,957,544   | 404,865,200                               | 14,119,591              | 3.487                     |
| 1915...      | 358,659,032                           | 13,075,447   | 3.645  | 91,910,510                                    | 2,935,881   | 450,570,442                               | 16,011,328              | 3.554                     |
| 1916...      | 508,000,366                           | 20,490,696   | 4.035  | 92,240,955                                    | 2,960,002   | 600,241,321                               | 23,450,698              | 3.906                     |
| 1917...      | 893,208,877                           | 39,098,579   | 4.376  | 96,885,192                                    | 3,114,315   | 990,094,069                               | 42,212,894              | 4.263                     |
| 1918...      | 1,472,098,008                         | 71,121,368   | 4.831  | 95,796,899                                    | 3,096,532   | 1,567,895,507                             | 74,217,900              | 4.733                     |
| 1919...      | 2,035,218,007                         | 102,218,489  | 5.022  | 100,636,102                                   | 3,441,893   | 2,135,854,199                             | 105,660,292             | 4.947                     |
| 1920...      | 2,566,816,821                         | 134,559,802  | 5.181  | 107,038,317                                   | 4,276,480   | 2,703,855,138                             | 138,834,782             | 5.134                     |
| 1921...      | 2,620,997,021                         | 130,416,007  | 5.175  | 107,545,348                                   | 4,429,362   | 2,628,542,369                             | 134,845,309             | 5.130                     |
| 1922...      | 2,564,587,671                         | 133,482,113  | 5.204  | 105,379,439                                   | 4,399,661   | 2,669,967,110                             | 137,881,774             | 5.164                     |
| 1923...      | 2,547,105,821                         | 131,476,611  | 5.161  | 106,763,391                                   | 4,531,156   | 2,653,869,212                             | 136,007,667             | 5.125                     |
| 1924...      | 2,504,033,820                         | 128,571,337  | 5.134  | 110,113,766                                   | 4,626,715   | 2,614,147,586                             | 133,198,052             | 5.092                     |
| 1925...      | 2,503,763,169                         | 125,928,071  | 5.029  | 113,943,282                                   | 4,758,789   | 2,617,706,451                             | 130,686,851             | 4.992                     |
| 1926...      | 2,434,410,336                         | 125,108,738  | 5.035  | 119,205,393                                   | 4,977,889   | 2,603,615,729                             | 130,086,627             | 4.996                     |
| 1927...      | 2,439,340,736                         | 123,309,911  | 5.058  | 126,310,527                                   | 5,274,429   | 2,565,651,263                             | 128,574,340             | 5.015                     |
| 1928...      | 2,377,581,086                         | 119,479,400  | 5.025  | 136,485,482                                   | 5,721,330   | 2,514,066,568                             | 125,200,730             | 4.980                     |
| 1929...      | 2,325,413,956                         | 116,845,934  | 5.024  | 145,780,369                                   | 6,156,036   | 2,471,194,355                             | 122,999,970             | 4.977                     |
| 1930...      | 2,250,897,286                         | 112,942,215  | 5.017  | 154,997,435                                   | 6,572,018   | 2,406,894,721                             | 119,514,233             | 4.967                     |
| 1931...      | 2,320,832,286                         | 115,491,955  | 4.976  | 163,994,443                                   | 6,969,151   | 2,484,826,729                             | 122,461,100             | 4.928                     |
| 1932...      | 2,579,233,724                         | 128,188,969  | 4.970  | 136,358,977                                   | 5,522,579   | 2,715,595,701                             | 133,711,548             | 4.923                     |
| 1933...      | 2,715,977,874                         | 132,866,543  | 4.892  | 144,176,675                                   | 5,358,850   | 2,860,154,549                             | 138,725,393             | 4.850                     |
| 1934...      | 2,858,624,524                         | 132,354,806  | 4.630  | 154,137,868                                   | 6,093,937   | 3,012,762,392                             | 138,448,743             | 4.595                     |
| 1935...      | 3,061,955,821                         | 127,074,870  | 4.150  | 171,554,967                                   | 6,683,560   | 3,233,510,778                             | 133,758,430             | 4.136                     |
| 1936...      | 3,265,314,332                         | 128,598,908  | 3.938  | 196,197,897                                   | 7,679,255   | 3,461,512,229                             | 136,278,193             | 3.937                     |
| 1937...      | 3,337,358,832                         | 125,093,851  | 3.748  | 224,157,683                                   | 8,798,557   | 3,561,516,514                             | 133,891,938             | 3.759                     |

<sup>1</sup> The total of interest-bearing debt, as here given, includes bonds purchased and held by the Treasury for sinking funds. <sup>2</sup> In 1936 an amount of \$11,827, being compensation to seigneurs, previously included under Savings Bank Deposits, Trust and Other Funds, was transferred to Bonds, Debentures and Treasury Bills.

**Guaranteed Debt of the Dominion.**—Besides the direct debt of the Dominion, already dealt with, there are also large indirect obligations, arising mainly out of the guarantee of securities, by the Dominion, of the railway lines which now form the Canadian National Railways, and the subsequent extensions thereof. Together with these are other smaller indirect obligations, originating in the Government's guarantees of the bonds of the Canadian National Steamship services and of the bonds of its Harbour Commissions, issued in the main for harbour improvements. Since 1932 guarantees of certain bank loans have been made under the various Relief Acts. With the commencement of business of the Bank of Canada on Mar. 11, 1935, the guarantee, authorized by Sec. 27 (6) of the Bank of Canada Act, of the deposit required to be maintained by every chartered bank in the Bank of Canada, came into force. This guarantee will require to be implemented "in the event of the property and assets of the Bank being insufficient to pay its liabilities, and if the Bank suspends payment of any of its liabilities". Under the terms of the Home Improvement Loans Guarantee Act, 1937, the Government guarantees chartered banks and other approved lending institutions against losses up to 15 p.c. of the aggregate value of loans made by each such institution for the financing of repairs, alterations, and improvements to rural and urban dwellings. The Act provides that the aggregate amount of loans to be guaranteed shall not exceed \$50,000,000 and therefore the limit of the Government's guarantee is \$7,500,000. Statistics showing the growth of these indirect obligations since 1914 are given in Table 21, while Table 22 shows the obligations as they existed on Mar. 31, 1937.

**21.—Securities Guaranteed by the Dominion Government (Amounts Held by the Public), as at Mar. 31, 1914-37.**

*Note.*—Dashes in this table indicate that there were no guarantees of the type shown, for the corresponding years.

| Fiscal Year. | Railways,<br>Guaranteed<br>as to<br>Principal<br>and Inter-<br>est. | Railways,<br>Guaranteed<br>as to Inter-<br>est only. | Canadian<br>National<br>Steam-<br>ships. | Harbour<br>Com-<br>missions. | Other<br>Guarantees.    | Bank of<br>Canada. | Total.                     |
|--------------|---|--|--|------------------------------|-------------------------|--------------------|----------------------------|
|              | \$  | \$   | \$                                       | \$                           | \$                      | \$                 | \$                         |
| 1914.....    | 94,738,584  | -  | -  | -                            | -                       | -                  | 94,738,584                 |
| 1915.....    | 114,644,310   | -  | -  | -                            | -                       | -                  | 114,644,310                |
| 1916.....    | 135,546,098   | -  | -  | -                            | -                       | -                  | 135,546,098                |
| 1917.....    | 135,546,098   | -  | -  | -                            | -                       | -                  | 135,546,098                |
| 1918.....    | 135,546,098   | -  | -  | -                            | -                       | -                  | 135,546,098                |
| 1919.....    | 130,436,098   | -  | -  | -                            | -                       | -                  | 130,436,098                |
| 1920.....    | 130,436,098   | -  | -  | -                            | -                       | -                  | 130,436,098                |
| 1921.....    | 197,545,125   | -  | -  | -                            | -                       | -                  | 197,545,125                |
| 1922.....    | 248,987,780   | -  | -  | -                            | -                       | -                  | 248,987,780                |
| 1923.....    | 237,878,762   | 216,207,142  | -  | -                            | -                       | -                  | 454,085,904                |
| 1924.....    | 309,625,762   | 216,207,142  | -  | -                            | -                       | -                  | 525,835,904                |
| 1925.....    | 365,915,762   | 216,207,142  | -  | -                            | -                       | -                  | 582,122,904                |
| 1926.....    | 364,415,762   | 216,207,142  | -  | -                            | -                       | -                  | 580,622,904                |
| 1927.....    | 397,795,002   | 216,207,142  | -  | 4,000,000                    | -                       | -                  | 618,002,142                |
| 1928.....    | 440,224,180   | 216,207,142  | 828,789                                  | 9,467,165                    | -                       | -                  | 666,727,282                |
| 1929.....    | 472,709,509   | 216,207,142  | 7,936,486                                | 17,355,118                   | -                       | -                  | 714,208,255                |
| 1930.....    | 590,091,292   | 216,207,142  | 9,400,000                                | 21,335,118                   | -                       | -                  | 837,033,552                |
| 1931.....    | 707,474,852   | 216,207,142  | 9,400,000                                | 21,835,118                   | -                       | -                  | 954,917,112                |
| 1932.....    | 753,089,146   | 216,207,142  | 9,400,000                                | 21,835,118                   | -                       | -                  | 1,000,522,406 <sup>1</sup> |
| 1933.....    | 748,874,259   | 216,207,142  | 9,400,000                                | 21,070,472                   | 28,272,301 <sup>1</sup> | -                  | 1,024,424,154 <sup>1</sup> |
| 1934.....    | 746,035,434   | 216,207,142  | 9,400,000                                | 21,634,472                   | 93,296,073 <sup>1</sup> | -                  | 1,086,573,121 <sup>1</sup> |
| 1935.....    | 740,117,976   | 216,207,142  | 9,400,000                                | 21,601,481                   | 104,525,890             | 149,028,902        | 1,240,881,361              |
| 1936.....    | 747,366,632   | 216,207,142  | 9,400,000                                | 21,576,481                   | 96,044,370              | 188,202,917        | 1,278,797,542              |
| 1937.....    | 756,163,072   | 216,207,142  | 9,400,000                                | 21,565,595                   | 14,836,167              | 194,275,314        | 1,212,447,290              |

<sup>1</sup> Unstated advances re wheat marketing are not included.

## 22.—Securities Guaranteed by the Dominion Government, as at Mar. 31, 1937.

| Security.  | Amount of Guarantee Authorized. | Amount Outstanding and Held by the Public as at Mar. 31, 1937. | Where Payable.                |
|--|---------------------------------|--|-------------------------------|
|  | \$                              | \$   |                               |
| <b>Railway Securities Guaranteed as to Principal and Interest—</b>                       |                                 |  |                               |
| 1. Canadian Northern Rly. Co., 3 p.c. deb. stock, due 1953, £1,923,287-0-0.....          | 9,359,997                       | 9,359,997  | London.                       |
| 2. Canadian Northern Rly. Co., 3½ p.c. deb. stock, due 1958, £1,622,586-19-9.....        | 7,896,590                       | 7,896,546  | 1                             |
| 3. Canadian Northern Ontario Rly. Co., 3½ p.c. deb. stock, due 1961, £7,350,000-0-0..... | 35,770,000                      | 34,229,997   | London.                       |
| 4. Canadian Northern Alberta Rly. Co., 3½ p.c. deb. stock, due 1960, £647,200-5-6.....   | 3,150,000                       | 3,149,999  | London.                       |
| 5. Grand Trunk Pacific Rly. Co., 3 p.c. bonds, due 1962, £14,000,000-0-0.....            | 68,040,000                      | 34,992,000   | London, New York, and Canada. |
| 6. Canadian Northern Alberta Rly. Co., 3½ p.c. deb. stock, due 1962, £733,561-12-10..... | 3,570,000                       | -  | London and Canada.            |
| 7. Grand Trunk Pacific Rly. Co., 4 p.c. bonds, due 1962, £3,280,000-0-0.....             | 15,940,800                      | 8,440,848  | London, New York, and Canada. |
| 8. Canadian Northern Rly. Co., 6½ p.c. bonds, due 1940.....                              | 25,000,000                      | 24,238,000   | New York.                     |
| 9. Canadian National Rly. Co., 5 p.c. serial equipment bonds, 1923-38.....               | 22,500,000                      | 2,250,000  | Canada.                       |
| 10. Canadian National Rly. Co., 5 p.c. bonds, due 1954                                   | 50,000,000                      | 50,000,000   | Canada.                       |
| 11. Canadian National Rly. Co., 1927, 2 p.c. guar. deb. stock, £7,176,801-0-0.....       | 34,927,098                      | 24,205,688   | London.                       |
| 12. Canadian National Rly. Co., 4½ p.c. gold bonds, due 1957.....                        | 65,000,000                      | 65,000,000   | New York and Canada.          |
| 13. Canadian National Rly. Co., 5 p.c. gold bonds, due July 1, 1969.....                 | 60,000,000                      | 60,000,000   | London, New York, and Canada. |
| 14. Canadian National Rly. Co., 5 p.c. gold bonds, due Oct. 1, 1969.....                 | 60,000,000                      | 60,000,000   | London, New York, and Canada. |
| 15. Canadian National Rly. Co., 5 p.c. gold bonds, due 1970.....                         | 18,000,000                      | 18,000,000   | London, New York, and Canada. |
| 16. Canadian National Rly. Co., 4½ p.c. gold bonds, due 1955.....                        | 50,000,000                      | 50,000,000   | London, New York, and Canada. |
| 17. Canadian National Rly. Co., 4½ p.c. gold bonds, due 1956.....                        | 70,000,000                      | 70,000,000   | London, New York, and Canada. |
| 18. Canadian National Rly. Co., 4½ p.c. gold bonds, due 1951.....                        | 50,000,000                      | 50,000,000   | London, New York, and Canada. |
| 19. Canadian National Rly. Co., 3 p.c. bonds, due 1950                                   | 20,500,000                      | 20,500,000   | Canada.                       |
| 20. Canadian National Rly. Co., 2 p.c. bonds, due 1938                                   | 13,400,000                      | 13,400,000   | Canada.                       |
| 21. Canadian National Rly. Co., 3 p.c. bonds, due 1944                                   | 35,000,000                      | 35,000,000   | Canada.                       |
| 22. Canadian National Rly. Co., 2 p.c. bonds, due 1943                                   | 55,000,000                      | 55,000,000   | Canada.                       |
| 23. Canadian National Rly. Co., 3 p.c. bonds, due 1953                                   | 25,000,000                      | 25,000,000   | Canada.                       |
| 24. Canadian National Rly. Co., 2½ p.c. bonds, due 1944.....                             | 15,500,000                      | 15,500,000   | Canada.                       |
| 25. Canadian National Rly. Co., 3 p.c. bonds, due 1952                                   | 20,000,000                      | 20,000,000   | Canada.                       |
| <b>Totals.....</b>   | <b>833,554,485</b>              | <b>756,163,972</b>   |                               |

<sup>1</sup> Part of this issue is payable in Canada, part in London, and the balance in London and Canada.

<sup>2</sup> Additional railway securities guaranteed as to principal and interest to the value of \$45,657,952 were held by the Minister of Finance as at Mar. 31, 1937, but these are not outstanding in the same sense as those in the hands of the public.

23.—Securities Guaranteed by the Dominion Government, as at Mar. 31, 1937—  
concluded.

| Security.  | Amount of<br>Guarantee<br>Authorized. | Amount<br>Outstanding<br>and Held<br>by the<br>Public as<br>at Mar. 31,<br>1937. | Where Payable.   |
|--|---------------------------------------|--|--|
|  | \$                                    | \$   |  |
| <b>Railway Securities Guaranteed as to Interest Only—</b>  |                                       |  |  |
| 26. Grand Trunk Rly., Acquisition Guarantees—  |                                       |  |  |
| Grand Trunk 4 p.c. perp. guar. stock, £12,500,000  | 60,833,333                            | 60,833,333   | London.  |
| Grand Trunk 5 p.c. perp. deb. stock, £4,270,375  | 20,782,492                            | 20,782,492   | London.  |
| Great Western 5 p.c. perp. deb. stock, £2,723,050  | 13,252,323                            | 13,252,323   | London.  |
| Grand Trunk 4 p.c. perp. deb. stock, £24,024,455   | 119,839,014                           | 119,839,014  | London.  |
| Northern Rly. of Canada, 4 p.c. perp. deb.<br>stock, £308,215  | 1,499,980                             | 1,499,980  | London.  |
| Totals   | 216,207,142                           | 216,207,142  |  |
| <b>Other Securities Guaranteed as to Principal and Interest—</b>   |                                       |  |  |
| 27. Harbour Commissioners of Montreal, Montreal<br>South Shore Bridge 5 p.c. bonds due 1969                                      | 19,500,000                            | 19,000,000   | London, New York, and<br>Canada.   |
| 28. Canadian National (West Indies) Steamships<br>Ltd., 5 p.c. bonds, due 1955   | 10,000,000                            | 9,400,000  | London, New York, and<br>Canada.   |
| 29. Saint John Harbour Commission—   |                                       |  |  |
| (a) Bonded indebtedness of the city of Saint<br>John, assumed by the Commission  | 1,467,165                             | 1,197,642  | \$219,000 payable in Lon-<br>don, New York, and<br>Canada; balance in<br>Canada. |
| (b) Debentures of the Commission issued to<br>the city of Saint John, due 1952   | 667,953                               | 667,953  | Canada.  |
| 30. New Westminster Harbour Commissioners 42<br>p.c. debentures due 1948   | 700,000                               | 700,000  | New York and Canada.   |
| Totals   | 32,335,118                            | 30,965,595   |  |
| <b>Other Guarantees—</b>   |                                       |  |  |
| 31. Bank advances, re Province of Manitoba Savings<br>Office   | 12,442,400                            | 7,062,958  | Canada.  |
| 32. Bank advances, re Government of Newfoundland   | 625,000                               | 625,000  | Canada.  |
| 33. Bank advances, re Dominion Steel and Coal Cor-<br>poration (order for steel rails)   | 1,100,000                             | 142,965  | Canada.  |
| 34. Province of British Columbia Treasury Bills  | 626,534                               | 626,534  | Canada.  |
| 35. Province of Manitoba Treasury Bills  | 5,894,127                             | 5,628,764  | Canada.  |
| 36. Loans made by approved lending institutions<br>under the Home Improvement Loans Guar-<br>antee Act                           | 7,500,000                             | 360,803  | Canada.  |
| 37. Bank advances, re Grain Marketing—   |                                       |  |  |
| Canadian Co-operative Wheat Producers, Ltd.<br>(Saskatchewan Onts Acct.)   | —                                     | 389,114  | Canada.  |
| The Canadian Wheat Board   | 60,000,000                            | —  |  |
| 38. Winnipeg Grain and Produce Clearing Association<br>Ltd. Day to day margins of the Canadian<br>Wheat Board (closed out daily) | Unstated.                             | —  | Canada.  |
| <b>Bank of Canada—</b>   |                                       |  |  |
| 39. Deposits maintained by the chartered banks in<br>Bank of Canada  | Unstated.                             | 194,275,314  | Canada.  |

## Section 2.—Provincial Public Finance.\*

Provincial Governments in Canada are in the position, under Sec. 118 of the British North America Act, 1867 (30 and 31 Vict., c. 3), and the British North America Act, 1907 (7 Edw. VII, c. 11), of having a considerable assured income in subsidies from the Dominion Treasury. Details of these payments are given for recent years at pp. 855-857 of this chapter. In addition, through their retention of ownership of their lands, minerals, and other natural resources, those provinces that, by the voluntary action of their previously existing governments, entered Confederation, raise considerable revenues through land sales, sales of timber, mining royalties, leases of water powers, etc., while the Prairie Provinces, though having controlled their own natural resources since 1930, formerly received from the Dominion special grants in lieu of land revenues. Further, under Sec. 92 of the British North America Act, Provincial Legislatures are given authority to impose direct taxation within the province for provincial purposes and to borrow money on the sole credit of the province. The total revenues received by Provincial Governments for their fiscal years ended 1936 are analysed by source in Table 23.

Prior to the opening of the present century, provincial receipts and expenditures were generally moderate, as may be seen, both for individual provinces and for the provinces collectively, from Tables 25 and 26. The demand, more especially in Ontario and the West, for increased services from governments, particularly in respect of education, sanitation, and public ownership and operation of public utilities, and the performance of these functions, necessitated increased revenues, which had in the main to be raised by taxation. Among the chief methods of taxation to be employed has been the taxation of corporations and estates, succession duties showing a considerably increased yield even within the comparatively short period of twenty years from 1916 to 1936 covered by the statements compiled by the Finance Branch of the Bureau of Statistics.† The fact that provincial government is cheaper per head in the eastern provinces (although both Ontario and Nova Scotia have shown large per capita increases in recent years) is evident from Table 26, which gives the per capita ordinary revenue and expenditure for various fiscal years, from 1871 to 1936. This, however, is not to be taken as evidence that the larger services rendered to the public are not worth what is being paid for them.

For the half-century subsequent to Confederation, the provincial accounts, published by each Government according to its own system of accounting, were quite incomparable as among the provinces, a fact much regretted by students of provincial public finance. Upon the creation of the Dominion Bureau of Statistics in 1918, its Finance Branch undertook the work of placing the various provincial public accounts on a comparable basis, correlating, for example, the revenue derived from succession duties, taxation of corporations, sales of public lands, royalties on forest, mineral and fisheries products, as well as the expenditures on such services as agriculture, civil government, education, and public works. As the result of the Bureau's exhaustive analysis of the provincial public accounts, a summary statement of the ordinary receipts and expenditures of the Provincial Governments appeared for the first time in the 1919 Year Book. The various items of receipts

\*Revised by Col. J. R. Munro, Chief of the Finance Branch of the Dominion Bureau of Statistics. This Branch issues detailed statements on Provincial Finance which may be obtained from the Dominion Statistician. For a list of these publications see Section 1 of Chapter XXIX.

†The succession duties collected by the provinces in 1936 amounted in the aggregate to \$19,948,365, as compared with \$1,020,972 as recently as 1904, or an increase of more than 19-fold in 32 years. The aggregate revenue raised by taxation of corporations, land, income and miscellaneous (exclusive of gasoline taxes, succession duties and amusement taxes), increased from \$7,217,548 in 1916 to \$39,325,639 in 1936, an increase of 552 p.c. in 20 years.

and expenditures were classified under appropriate headings and a uniform terminology was adopted. From these statements it is possible to ascertain the amounts received and expended in each year under the respective headings for each province, as well as for the provinces collectively. The figures for the years 1916 to 1920 will be found on pp. 680-685 of the 1921 Year Book, those for 1921 on pp. 786-791 of the 1922-23 Year Book and those for 1922 to 1926 on pp. 836-841 of the 1927-28 Year Book.

The Bureau now makes more extensive analyses of the finances of the provinces, including capital and trust accounts as well as ordinary revenue and expenditure. These analyses are based on a uniform classification adopted at a conference held in 1933 between provincial treasury officials and the Dominion Bureau of Statistics.

Data for 1936 are given on the new uniform basis in Tables 23 and 24.

#### Subsection 1.—Provincial Revenues and Expenditures.

**Ordinary Revenues and Expenditures.**—The total ordinary revenues and expenditures of the provinces for their individual fiscal years are shown in Table 25, pp. 874-875, for the census years 1871-1911 and for each year from 1916-36. Tables 23 and 24 on pp. 870-873 show detailed ordinary revenues and expenditures for 1936. While revenues have grown very rapidly over the period covered in Table 25, expenditures have more than kept pace.

Some explanation is perhaps necessary in regard to the Capital Receipts and Expenditures and the Trust and Public Charities Funds Receipts and Expenditures shown in the lower parts of Tables 23 and 24. In regard to the former, receipts represent the proceeds of loans and borrowings in the form of bonds, debentures, and treasury bills and are largely offset by capital payments for debt retirements; there are, however, receipts from the Dominion Government in regard to old age pensions and unemployment relief which are regarded as capital receipts. Finally, refunds of capital expenditures, made earlier in the form of advances or loans, are also included under this heading.

With regard to the Trust and Public Charities Funds accounts, these, as will be noted, relate chiefly to the province of Quebec where, under the Public Charities Act, parts of the revenues derived from Liquor Commission profits, taxes on amusements and race tracks, and the hospital tax on meals are transferred to the Public Charities Fund for the benefit of hospitals, sanatoria, refuges, and other charitable institutions. In Quebec and Manitoba there are also judicial deposits in connection with appeals, sales by the sheriff, etc., which are made to the Trust Funds accounts, and Prince Edward Island shows small Trust Fund receipts. Since 1916, *i.e.*, in the short space of 20 years, while total revenues of all provinces have shown an increase of 365 p.c., ordinary expenditures have increased 361 p.c.

**The Growth of Provincial Taxation.**—Whereas in earlier years the Dominion subsidies, together with the revenues arising out of the natural resources of the provinces and from fees for specific services rendered to the citizens, nearly sufficed to cover the whole expenses of government and rendered a resort to taxation for provincial purposes practically unnecessary in most of the provinces, the great increase in the functions of government since the commencement of the present

century has put an end to this state of affairs. The aggregate amount of taxation for provincial purposes in the fiscal years prior to 1916 is unfortunately not available. Since that time provincial taxation has increased, according to the recently amended classification made in the Dominion Bureau of Statistics, from \$12,521,816 in 1916 to \$95,826,440 in 1936, exclusive of motor vehicle licences, liquor traffic profits, and other licences and permits, etc., an almost eight-fold increase in 20 years.

The increase in the use of automobiles, both for commercial purposes and pleasure, is clearly demonstrated by the growing revenues from licences and permits issued by the Provincial Governments. In 1921 the total revenue of all provinces from automobile licensing alone amounted to \$7,857,751. It has since fluctuated considerably, reaching \$21,735,827 in 1929 but declining to \$19,952,575 in 1931. The revenue from this source in 1936 was \$22,854,410.

The gasoline tax is now generally adopted as a means of increasing provincial receipts and has proved to be a lucrative source of revenue. In 1923 only Manitoba and Alberta showed gasoline-tax revenue, the total being \$280,404. In 1924 the five provinces of Prince Edward Island, Quebec, Manitoba, Alberta, and British Columbia collected such revenue to the amount of \$559,543, while in 1925 the same provinces, with Ontario added, collected \$3,521,388. In 1926 all provinces, except Saskatchewan, collected gasoline taxes to the amount of \$6,104,716, in 1927 to \$7,615,907, and in 1928 to \$9,151,735; thereafter, gasoline taxes were collected in all provinces and amounted to \$17,237,017 in 1929, \$20,956,590 in 1930, \$23,859,067 in 1931, \$24,987,273 in 1932, \$25,931,480 in 1933, \$26,812,275 in 1934, \$20,474,977\* in 1935, and in 1936 to \$32,310,353. The higher yields in recent years, however, were due partly to higher rates of taxation.

The provincial revenues from the liquor traffic increased considerably between 1925 and 1930, but subsequently declined until 1934, again increasing in 1936. The adoption of government control of the sale of liquor in one province after another, until now it exists in all but Prince Edward Island where prohibition is still in force, has resulted in trading profits, licensing revenues, and permit fees, all of which have swelled the provincial revenues. Prior to the adoption of government control, such revenues were not available to the provinces. In 1925 the total revenue collected by all provinces from the liquor traffic was \$8,964,824; in 1926 it was \$11,609,392, increasing to \$27,599,687 by 1929. In 1933 such revenue amounted to \$16,160,980, in 1934 to \$12,814,120, in 1935 to \$12,886,197, and in 1936 to \$19,338,366. The figures shown in Table 23 include liquor permits and licences amounting to \$2,217,307 and other items amounting to \$11,166, the corresponding amounts being shown under "Licences and Permits" in former years. The method of control varies somewhat as between the provinces. In the majority of cases there are independent commissions or boards to administer the provincial Liquor Traffic Acts, but the accounting and trading profits are shown somewhat differently in the various provincial public accounts reports.†

**Fiscal Years of the Provinces.**—The fiscal years of the provinces are as follows: P.E.I., Dec. 31; N.S., Sept. 30 prior to 1935 and Nov. 30 thereafter; N.B., Oct. 31; Que., June 30; Ont., Oct. 31 prior to 1935 and Mar. 31 thereafter; Man. and Sask., Apr. 30; Alta. and B.C., Mar. 31.

\* The wide difference between the figure for 1935 and the one for 1936 is accounted for largely by the change in the fiscal year for the province of Ontario from Oct. 31 to Mar. 31, so that the Ontario figures for 1935 included in the 1935 total were for five months only.

† See Chapter XVII, pp. 626-629, and also the report of the Dominion Bureau of Statistics on "The Control and Sale of Liquor in Canada".



## 23.—Ordinary, Capital, and Trust and Charity Revenues of

(AMENDED UNIFORM

NOTE.—For information as to when the fiscal years

| Item.   | Prince<br>Edward<br>Island. | Nova<br>Scotia.   | New<br>Brunswick. | Quebec.           | Ontario.           |
|---|-----------------------------|-------------------|-------------------|-------------------|--------------------|
|   | \$                          | \$                | \$                | \$                | \$                 |
| <b>Ordinary Revenues—</b>                                     |                             |                   |                   |                   |                    |
| Subventions and grants.....                                   | 845,954                     | 3,723,302         | 1,022,928         | 2,685,036         | 3,073,635          |
| Taxation.....   | 654,342                     | 4,052,371         | 2,485,053         | 17,423,207        | 39,017,490         |
| Royalties, duties and dues.....                               | Nil                         | 641,878           | 422,316           | 4,900,470         | 2,213,473          |
| Licences and permits.....                                     | 114,917                     | 1,263,028         | 1,137,810         | 6,753,156         | 9,885,862          |
| Fees.....   | 35,527                      | 294,806           | 121,362           | 1,295,032         | 1,979,364          |
| Liquor traffic control.....                                   | 40,000                      | 1,119,771         | 782,742           | 3,898,899         | 8,335,000          |
| Fines and penalties.....                                      | 2,281                       | 15,877            | 9,204             | 372,878           | 124,783            |
| Profits from trading activities.....                          | Nil                         | 68,814            | 31,048            | Nil               | Nil                |
| Interest.....   | Nil                         | 939,684           | 130,723           | 1,041,790         | 11,372,186         |
| Refunds of expenditure.....                                   | 897                         | Nil               | 3,582             | 601,855           | 10,550,536         |
| Agriculture and public domain.....                            | 1,282                       | 84,785            | Nil               | 1,185,496         | 670,142            |
| Institutional revenue.....                                    | 12,152                      | 502,779           | 262,306           | 102,150           | 1,937,644          |
| Other.....  | 11,114                      | 74,171            | 20,168            | 27,047            | 531,775            |
| <b>Totals, Ordinary Revenues.</b>                             | <b>1,718,466</b>            | <b>12,841,266</b> | <b>7,330,142</b>  | <b>40,497,931</b> | <b>90,321,896</b>  |
| <b>Capital Receipts—</b>                                      |                             |                   |                   |                   |                    |
| Proceeds of loans and borrowings.....                         | 775,000                     | 8,211,038         | 13,123,433        | 72,928,000        | 101,709,354        |
| Sinking funds and investments (earnings, sale of, etc.).....  | 261,799                     | 770,735           | 23,468            | Nil               | 1,832,390          |
| Provincial Savings Office.....                                | Nil                         | Nil               | Nil               | Nil               | 15,739,721         |
| Dominion Government.....                                      | 281,005                     | 1,323,244         | 1,176,802         | 8,623,613         | 13,292,930         |
| Sale of property or other capital assets.....                 | Nil                         | 16,964            | Nil               | Nil               | 213,308            |
| Refunds of expenditure or repayment of advances or loans..... | 2,467                       | 729,874           | 90,151            | 5,516,049         | 22,506,934         |
| Agriculture and public domain.....                            | Nil                         | Nil               | Nil               | Nil               | 100,911            |
| Other.....  | Nil                         | Nil               | 52,500            | 928               | 454,109            |
| <b>Totals, Capital Receipts...</b>                            | <b>1,260,871</b>            | <b>11,057,855</b> | <b>14,466,354</b> | <b>87,068,590</b> | <b>155,849,663</b> |
| <b>Trust and Public Charities Funds Receipts—</b>             |                             |                   |                   |                   |                    |
| Marriage licences.....  | Nil                         | -                 | -                 | 12,108            | -                  |
| Public charities fund.....                                    | Nil                         | -                 | -                 | 4,488,050         | -                  |
| Fund for promotion of health.....                             | Nil                         | -                 | -                 | Nil               | -                  |
| Deposits, guarantees, etc.....                                | Nil                         | -                 | -                 | 3,509,655         | -                  |
| Other.....  | 23,517                      | -                 | -                 | 3,432,990         | -                  |
| <b>Totals, Trust and Public Charities Funds Receipts</b>      | <b>23,517</b>               | <b>Nil</b>        | <b>Nil</b>        | <b>11,442,812</b> | <b>Nil</b>         |

## Provincial Governments for their respective fiscal years ended 1936.

## CLASSIFICATION.)

of the various provinces end, see text at foot of p. 869.

| Item.   | Manitoba.         | Saskatchewan.     | Alberta.          | British Columbia. | Total.             |
|---|-------------------|-------------------|-------------------|-------------------|--------------------|
|   | \$                | \$                | \$                | \$                | \$                 |
| <b>Ordinary Revenues—</b>                                     |                   |                   |                   |                   |                    |
| Subventions and grants.....                                   | 3,913,332         | 4,679,901         | 3,460,138         | 2,316,389         | 27,620,565         |
| Taxation.....   | 7,008,170         | 5,627,755         | 5,501,108         | 13,456,938        | 95,826,440         |
| Royalties, duties and dues.....                               | 306,457           | 294,356           | 669,632           | 2,216,483         | 11,765,071         |
| Licences and permits.....                                     | 1,129,727         | 1,604,106         | 1,703,094         | 3,430,434         | 27,052,133         |
| Fees.....   | 456,556           | 724,799           | 974,634           | 784,790           | 6,666,870          |
| Liquor traffic control.....                                   | 1,204,686         | 1,280,345         | 1,843,589         | 3,061,808         | 21,566,840         |
| Fines and penalties.....                                      | 52,436            | 39,083            | 43,743            | 76,669            | 736,954            |
| Profits from trading activities.....                          | 2,711             | 45,533            | 5,280             | 23,969            | 178,255            |
| Interest.....   | 1,965,953         | 2,544,104         | 944,844           | 425,620           | 19,364,904         |
| Refunds of expenditure.....                                   | 59,553            | 171,664           | 861,343           | 702,203           | 12,981,633         |
| Agricultural and public domain.....                           | 56,868            | 222,431           | 88,972            | 643,874           | 2,953,850          |
| Institutional revenue.....                                    | 222,625           | 127,257           | 302,700           | 752,276           | 4,431,968          |
| Other.....  | 36,919            | 477,359           | 177,515           | 124,641           | 1,480,709          |
| <b>Totals, Ordinary Revenues.</b>                             | <b>16,415,993</b> | <b>17,838,692</b> | <b>16,636,632</b> | <b>29,016,644</b> | <b>232,616,182</b> |
| <b>Capital Receipts—</b>                                      |                   |                   |                   |                   |                    |
| Proceeds of loans and borrowings.....                         | 7,726,995         | 70,240,052        | 29,018,947        | 25,022,600        | 329,365,719        |
| Sinking funds and investments (earnings, sale of, etc.).....  | 526,051           | 2,000             | 2,731,297         | Nil               | 6,093,746          |
| Provincial Savings Office.....                                | Nil               | Nil               | Nil               | Nil               | 15,739,721         |
| Dominion Government.....                                      | 3,293,911         | 2,944,312         | 1,811,867         | 2,250,911         | 84,999,195         |
| Sale of property or other capital assets.....                 | Nil               | 760               | 14,564            | Nil               | 245,596            |
| Refunds of expenditure or repayment of advances or loans..... | 2,905,826         | 2,727,856         | 1,578,784         | 911               | 36,058,852         |
| Agriculture and public domain.....                            | 30,299            | Nil               | Nil               | Nil               | 131,210            |
| Other.....  | 5,422,760         | 1,533,497         | 29,929            | Nil               | 7,493,693          |
| <b>Totals, Capital Receipts....</b>                           | <b>19,965,842</b> | <b>77,418,417</b> | <b>35,185,358</b> | <b>27,874,722</b> | <b>439,117,732</b> |
| <b>Trust and Public Charities Funds Receipts—</b>             |                   |                   |                   |                   |                    |
| Marriage licences.....  | Nil               | -                 | -                 | -                 | 12,108             |
| Public charities fund.....                                    | Nil               | -                 | -                 | -                 | 4,488,050          |
| Fund for promotion of health.....                             | Nil               | -                 | -                 | -                 | Nil                |
| Deposits, guarantees, etc.....                                | 274,398           | -                 | -                 | -                 | 3,784,053          |
| Other.....  | 143,733           | -                 | -                 | -                 | 3,600,249          |
| <b>Totals, Trust and Public Charities Funds Receipts</b>      | <b>418,131</b>    | <b>Nil</b>        | <b>Nil</b>        | <b>Nil</b>        | <b>11,884,160</b>  |

## 24.—Ordinary, Capital, and Trust and Charity Expenditures of

(AMENDED UNIFORM

NOTE.—For information as to when the fiscal years

| Item.  | Prince<br>Edward<br>Island. | Nova<br>Scotia.   | New<br>Brunswick. | Quebec.           | Ontario.           |
|--|-----------------------------|-------------------|-------------------|-------------------|--------------------|
|  | \$                          | \$                | \$                | \$                | \$                 |
| <b>Ordinary Expenditures—</b>                                |                             |                   |                   |                   |                    |
| Debt charges.....  | 414,555                     | 4,061,260         | 3,417,617         | 9,517,359         | 32,492,548         |
| Legislation.....   | 18,804                      | 60,741            | 76,911            | 1,029,641         | 322,238            |
| Administration and general government.....                   | 168,596                     | 629,423           | 436,429           | 5,131,154         | 5,754,383          |
| Education.....   | 329,664                     | 1,308,263         | 712,540           | 4,329,381         | 9,771,883          |
| Legal and judicial administration.....                       | 65,272                      | 152,348           | 179,861           | 3,953,728         | 2,070,980          |
| Transportation and communications.....                       | 255,103                     | 1,946,739         | 1,164,350         | 8,049,692         | 5,489,377          |
| Agriculture and public domain.....                           | 28,952                      | 545,745           | 525,640           | 6,704,806         | 2,860,705          |
| Public welfare.....  | 435,074                     | 3,888,766         | 1,237,211         | 2,772,858         | 44,800,855         |
| Other.....   | 27,100                      | 96,263            | 4,552             | 931,588           | 101,633            |
| <b>Totals, Ordinary Expenditures</b>                         | <b>1,742,120</b>            | <b>12,689,548</b> | <b>7,755,111</b>  | <b>42,420,207</b> | <b>103,664,602</b> |
| <b>Capital Payments—</b>                                     |                             |                   |                   |                   |                    |
| Public debt retirement.....                                  | 775,000                     | 1,975,785         | 5,973,667         | 49,228,400        | 100,810,768        |
| Loans and advances, realizable assets.....                   | 33,765                      | 108,999           | 891,915           | 274,937           | 939,505            |
| Administration and general government.....                   | 24,197                      | 724,503           | 21,000            | 970,379           | 881,581            |
| Education.....   | Nil                         | 7,786             | Nil               | 1,210             | 65,979             |
| Administration of Justice building.....                      | Nil                         | Nil               | Nil               | 3,435             | Nil                |
| Transportation and communications.....                       | 54,892                      | 5,667,743         | 6,040,052         | 8,488,973         | 7,221,570          |
| Agriculture and public domain.....                           | 22,072                      | 62,906            | Nil               | 173,170           | 345,227            |
| Public welfare.....  | 531,734                     | 2,605,481         | 837,752           | 23,694,469        | 24,079,413         |
| Other.....   | 10,169                      | Nil               | 701,968           | Nil               | 161,343            |
| <b>Totals, Capital Payments</b>                              | <b>1,451,739</b>            | <b>11,153,293</b> | <b>14,466,354</b> | <b>82,834,993</b> | <b>135,195,386</b> |
| <b>Trust and Public Charities Funds Payments—</b>            |                             |                   |                   |                   |                    |
| Sinking funds, municipal, school corporations and banks..... | Nil                         | -                 | -                 | 2,971,226         | -                  |
| Education.....   | Nil                         | -                 | -                 | 12,184            | -                  |
| Public welfare.....  | Nil                         | -                 | -                 | 6,631,237         | -                  |
| Deposits, judicial and other.....                            | Nil                         | -                 | -                 | 1,965,823         | -                  |
| Other.....   | 10,062                      | -                 | -                 | 100,343           | -                  |
| <b>Totals, Trust and Public Charities Funds Payments</b>     | <b>10,062</b>               | <b>Nil</b>        | <b>Nil</b>        | <b>11,680,513</b> | <b>Nil</b>         |

## Provincial Governments for their respective fiscal years ended 1936.

(CLASSIFICATION.)

of the various provinces end, see text at foot of p. 869.

| Item.   | Manitoba.         | Saskatchewan.     | Alberta.          | British Columbia. | Total.             |
|---|-------------------|-------------------|-------------------|-------------------|--------------------|
|   | \$                | \$                | \$                | \$                | \$                 |
| <b>Ordinary Expenditures—</b>                                 |                   |                   |                   |                   |                    |
| Debt charges.....   | 6,702,758         | 6,900,590         | 7,338,568         | 8,957,828         | 79,893,083         |
| Legislation.....  | 133,850           | 178,405           | 356,120           | 161,923           | 2,338,633          |
| Administration and general government                         | 774,526           | 1,588,255         | 1,426,582         | 2,221,277         | 18,130,625         |
| Education.....  | 1,731,313         | 3,117,762         | 2,578,938         | 3,628,719         | 27,508,463         |
| Legal and judicial administration.....                        | 757,342           | 902,507           | 838,681           | 1,524,295         | 10,445,074         |
| Transportation and communications...                          | 661,076           | 807,105           | 726,054           | 2,091,625         | 21,101,781         |
| Agriculture and public domain.....                            | 702,317           | 631,459           | 677,000           | 1,846,183         | 14,522,867         |
| Public welfare.....   | 4,707,155         | 4,702,510         | 4,167,238         | 5,980,075         | 72,961,751         |
| Other.....  | 33,387            | 61,885            | 178,209           | 14,944            | 1,449,531          |
| <b>Totals, Ordinary Expenditures</b>                          | <b>16,294,294</b> | <b>18,890,607</b> | <b>18,287,450</b> | <b>26,396,869</b> | <b>248,141,868</b> |
| <b>Capital Payments—</b>                                      |                   |                   |                   |                   |                    |
| Public debt retirement.....                                   | 6,199,331         | 54,005,687        | 20,892,343        | 7,996,000         | 247,856,981        |
| Loans and advances, realizable assets..                       | 1,540,407         | 918,595           | 4,842,125         | 130,000           | 9,680,338          |
| Administration and general government                         | 4,861             | Nil               | 10,277            | Nil               | 2,645,798          |
| Education.....  | Nil               | Nil               | 5,996             | Nil               | 80,971             |
| Administration of Justice building.....                       | Nil               | Nil               | 4,202             | Nil               | 7,637              |
| Transportation and communications...                          | 96,684            | 748,644           | 1,405,453         | 513,817           | 30,237,738         |
| Agriculture and public domain.....                            | 3,639             | Nil               | 130,130           | Nil               | 737,144            |
| Public welfare.....   | 6,643,151         | 20,270,102        | 4,511,083         | 10,640,323        | 94,413,478         |
| Other.....  | 5,179,657         | 1,505,419         | 1,987,169         | Nil               | 9,545,725          |
| <b>Totals, Capital Payments.....</b>                          | <b>19,667,820</b> | <b>77,448,447</b> | <b>33,797,728</b> | <b>19,280,140</b> | <b>395,205,810</b> |
| <b>Trust and Public Charities Funds Payments—</b>             |                   |                   |                   |                   |                    |
| Sinking funds, municipal, school corporations and banks.....  | 74,437            | -                 | -                 | -                 | 3,045,663          |
| Education.....  | Nil               | -                 | -                 | -                 | 12,184             |
| Public welfare.....   | Nil               | -                 | -                 | -                 | 6,631,237          |
| Deposits, judicial and other.....                             | 153,425           | -                 | -                 | -                 | 2,119,248          |
| Other.....  | 103,363           | -                 | -                 | -                 | 213,768            |
| <b>Totals, Trust and Public Charities Funds Payments.....</b> | <b>331,225</b>    | <b>Nil</b>        | <b>Nil</b>        | <b>Nil</b>        | <b>12,022,100</b>  |

### 25.—Ordinary Revenues and Expenditures of the Provincial Governments for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916-36.

NOTE.—For provincial ordinary revenues and expenditures in all other provincial fiscal years since Confederation, see 1932 Year Book, pp. 734-736.

| Fiscal Year. | Prince Edward Island. |                           | Nova Scotia. |              | New Brunswick. |              | Quebec.    |              |
|--------------|-----------------------|---------------------------|--------------|--------------|----------------|--------------|------------|--------------|
|              | Revenue.              | Expenditure. <sup>1</sup> | Revenue.     | Expenditure. | Revenue.       | Expenditure. | Revenue.   | Expenditure. |
|              | \$                    | \$                        | \$           | \$           | \$             | \$           | \$         | \$           |
| 1871.....    | 385,014               | 406,238                   | 525,824      | 600,344      | 451,070        | 438,407      | 1,632,032  | 1,575,545    |
| 1881.....    | 275,380               | 261,279                   | 476,445      | 494,582      | 607,445        | 598,844      | 3,191,779  | 3,569,612    |
| 1891.....    | 274,047               | 304,489                   | 661,541      | 692,538      | 612,762        | 680,813      | 3,467,144  | 4,095,520    |
| 1901.....    | 309,445               | 315,326                   | 1,000,230    | 1,088,927    | 1,031,267      | 910,346      | 4,563,432  | 4,516,554    |
| 1911.....    | 374,798               | 398,490                   | 1,625,653    | 1,790,778    | 1,347,077      | 1,403,547    | 7,032,745  | 6,424,908    |
| 1916.....    | 508,455               | 453,151                   | 2,165,338    | 2,152,773    | 1,580,419      | 1,668,340    | 9,647,984  | 9,436,687    |
| 1917.....    | 496,053               | 487,113                   | 2,118,620    | 2,344,009    | 1,572,814      | 2,106,904    | 10,441,114 | 9,907,672    |
| 1918.....    | 514,475               | 484,416                   | 2,332,634    | 2,573,797    | 2,357,909      | 2,399,062    | 13,806,392 | 11,671,830   |
| 1919.....    | 501,615               | 465,409                   | 3,380,313    | 3,280,232    | 2,152,420      | 2,598,937    | 12,006,352 | 12,371,311   |
| 1920.....    | 740,872               | 666,774                   | 3,870,010    | 3,618,848    | 3,100,892      | 2,969,323    | 14,418,357 | 13,520,740   |
| 1921.....    | 769,719               | 694,042                   | 4,586,840    | 4,678,146    | 2,892,905      | 3,432,512    | 15,914,321 | 14,624,088   |
| 1922.....    | 748,888               | 687,241                   | 4,701,208    | 4,791,093    | 3,226,727      | 2,985,577    | 21,000,396 | 15,575,977   |
| 1923.....    | 654,303               | 790,040                   | 5,317,335    | 5,220,178    | 3,479,733      | 3,648,273    | 21,634,042 | 19,930,276   |
| 1924.....    | 738,431               | 715,882                   | 5,461,383    | 5,579,525    | 3,725,285      | 3,835,522    | 23,170,733 | 21,567,293   |
| 1925.....    | 740,076               | 745,338                   | 4,467,484    | 5,060,544    | 3,556,330      | 4,112,569    | 25,021,329 | 23,629,390   |
| 1926.....    | 832,551               | 756,114                   | 5,744,575    | 6,327,043    | 4,206,853      | 4,078,775    | 27,206,335 | 26,401,480   |
| 1927.....    | 856,748               | 870,427                   | 6,517,073    | 6,566,143    | 5,096,446      | 4,636,157    | 30,924,997 | 29,078,703   |
| 1928.....    | 1,034,782             | 943,548                   | 6,933,630    | 7,543,078    | 5,290,098      | 5,393,784    | 34,807,783 | 32,821,226   |
| 1929.....    | 1,083,571             | 1,038,313                 | 7,390,410    | 7,288,486    | 5,991,375      | 6,521,575    | 39,976,283 | 35,964,487   |
| 1930.....    | 1,148,749             | 1,133,866                 | 7,682,096    | 7,900,987    | 6,583,726      | 7,218,566    | 43,585,142 | 39,374,910   |
| 1931.....    | 1,149,570             | 1,453,191                 | 8,104,062    | 8,194,592    | 5,980,914      | 6,761,420    | 41,530,620 | 40,854,245   |
| 1932.....    | 1,206,026             | 1,277,011                 | 8,874,095    | 9,037,199    | 6,495,573      | 6,898,263    | 39,349,193 | 39,933,901   |
| 1933.....    | 1,213,083             | 1,392,275                 | 9,013,469    | 9,633,347    | 5,691,135      | 5,770,207    | 33,324,700 | 40,165,958   |
| 1934.....    | 1,355,777             | 1,556,624                 | 9,569,595    | 10,168,838   | 6,899,975      | 6,434,095    | 35,937,612 | 41,618,816   |
| 1935.....    | 1,535,709             | 1,912,006                 | 13,642,410   | 14,540,013   | 6,486,481      | 7,189,598    | 35,195,570 | 40,134,814   |
| 1936.....    | 1,718,466             | 1,743,120                 | 12,642,260   | 12,689,548   | 7,330,142      | 7,755,111    | 40,497,031 | 42,420,207   |

| Fiscal Year. | Ontario.   |              | Manitoba.  |              | Saskatchewan. |              |
|--------------|------------|--------------|------------|--------------|---------------|--------------|
|              | Revenue.   | Expenditure. | Revenue.   | Expenditure. | Revenue.      | Expenditure. |
|              | \$         | \$           | \$         | \$           | \$            | \$           |
| 1871.....    | 2,333,180  | 1,816,784    | -          | -            | -             | -            |
| 1881.....    | 2,788,747  | 2,562,800    | 121,867    | 226,808      | -             | -            |
| 1891.....    | 4,138,589  | 4,158,460    | 590,484    | 664,432      | -             | -            |
| 1901.....    | 4,406,944  | 4,038,834    | 1,008,653  | 888,251      | -             | -            |
| 1911.....    | 9,970,334  | 9,916,934    | 4,454,190  | 4,002,826    | 2,699,603     | 2,575,145    |
| 1916.....    | 13,841,339 | 12,706,333   | 5,897,807  | 6,147,780    | 4,801,064     | 5,258,765    |
| 1917.....    | 18,260,967 | 16,518,223   | 6,292,986  | 6,890,355    | 5,631,910     | 5,553,966    |
| 1918.....    | 19,270,122 | 17,460,404   | 6,723,013  | 7,307,727    | 7,797,153     | 6,828,596    |
| 1919.....    | 20,692,160 | 21,464,575   | 8,613,364  | 8,497,942    | 8,333,759     | 8,125,203    |
| 1920.....    | 25,981,517 | 25,880,843   | 9,870,710  | 10,602,955   | 9,903,885     | 8,707,833    |
| 1921.....    | 30,411,396 | 28,579,688   | 9,258,956  | 10,063,139   | 11,789,920    | 12,151,665   |
| 1922.....    | 39,725,370 | 37,458,395   | 7,940,457  | 8,381,667    | 11,801,804    | 13,322,120   |
| 1923.....    | 34,818,720 | 49,305,439   | 10,078,730 | 10,616,567   | 12,576,763    | 12,886,544   |
| 1924.....    | 41,721,961 | 48,866,569   | 10,926,634 | 10,455,187   | 12,520,411    | 12,449,150   |
| 1925.....    | 48,013,852 | 51,462,178   | 7,866,519  | 6,524,155    | 12,378,755    | 12,498,933   |
| 1926.....    | 52,039,855 | 51,251,781   | 10,832,537 | 10,431,652   | 13,317,398    | 13,212,483   |
| 1927.....    | 56,306,225 | 55,763,689   | 11,592,768 | 10,446,285   | 13,050,217    | 12,962,217   |
| 1928.....    | 58,426,983 | 55,198,746   | 10,903,317 | 11,108,109   | 13,664,388    | 13,449,632   |
| 1929.....    | 64,549,713 | 61,906,324   | 12,150,490 | 12,244,439   | 16,096,666    | 15,371,231   |
| 1930.....    | 57,343,291 | 57,969,353   | 13,922,135 | 13,637,397   | 16,561,827    | 17,079,469   |
| 1931.....    | 54,390,092 | 54,846,994   | 13,842,511 | 14,491,673   | 14,406,100    | 18,202,677   |
| 1932.....    | 68,999,855 | 71,060,654   | 15,726,641 | 15,726,641   | 13,254,371    | 19,075,161   |
| 1933.....    | 67,800,543 | 67,324,117   | 13,838,339 | 15,783,904   | 10,177,784    | 16,756,421   |
| 1934.....    | 61,426,934 | 103,578,686  | 13,966,921 | 14,003,533   | 15,585,918    | 16,079,911   |
| 1935.....    | 30,941,953 | 41,382,625   | 16,092,546 | 15,933,111   | 15,278,905    | 18,115,533   |
| 1936.....    | 90,321,896 | 103,604,602  | 16,415,993 | 16,204,294   | 17,338,692    | 18,890,607   |

<sup>1</sup> Includes expenditure on capital account, except for 1901. <sup>2</sup> Revised since the publication of the 1937 Year Book. <sup>3</sup> For fourteen months. <sup>4</sup> Includes capital revenue for lands, which cannot be separated.

<sup>5</sup> Exclusive of interest paid by Hydro and other commissions. <sup>6</sup> For eight months. <sup>7</sup> Certain minor items amounting to about \$500,000, shown in previous years as ordinary receipts and expenditures, have been transferred to the extraordinary classification in the 1930 Provincial Accounts Report. <sup>8</sup> This figure is taken from the Public Accounts of Ontario.

<sup>9</sup> For five months.

## 25.—Ordinary Revenues and Expenditures of the Provincial Governments for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916-36—concluded.

| Fiscal Year. | Alberta.                |                         | British Columbia.    |                         | Totals for All Provinces. <sup>1</sup> |                          |
|--------------|-------------------------|-------------------------|----------------------|-------------------------|--|--------------------------|
|              | Revenue.                | Expenditure.            | Revenue.             | Expenditure.            | Revenue.                               | Expenditure.             |
|              | \$                      | \$                      | \$                   | \$                      | \$                                     | \$                       |
| 1871.....    | -                       | -                       | 191,820 <sup>2</sup> | 97,692 <sup>2</sup>     | 5,518,946                              | 4,935,008                |
| 1881.....    | -                       | -                       | 397,035              | 378,779                 | 7,858,098                              | 8,119,701                |
| 1891.....    | -                       | -                       | 959,248              | 1,032,104               | 10,638,815                             | 11,028,353               |
| 1901.....    | -                       | -                       | 1,605,920            | 2,287,821               | 14,074,501                             | 14,146,059               |
| 1911.....    | 3,309,156 <sup>3</sup>  | 3,437,088               | 10,492,892           | 8,194,803               | 40,708,948                             | 38,144,411               |
| 1916.....    | 5,381,695               | 6,018,894               | 6,291,174            | 10,083,505              | 50,015,795                             | 53,395,219               |
| 1917.....    | 6,200,106               | 6,752,504               | 6,906,784            | 9,581,740               | 57,889,984                             | 60,122,455               |
| 1918.....    | 7,560,762               | 8,303,808               | 8,882,845            | 9,023,209               | 69,345,305                             | 66,082,900               |
| 1919.....    | 9,642,739               | 9,835,749               | 10,931,279           | 9,387,745               | 76,844,307                             | 76,402,973               |
| 1920.....    | 10,919,776              | 10,423,356              | 13,801,603           | 11,568,003              | 92,655,023                             | 88,250,675               |
| 1921.....    | 11,086,937              | 13,109,304              | 15,219,264           | 15,236,931              | 102,080,458                            | 102,589,515              |
| 1922.....    | 9,324,890               | 11,235,192              | 16,987,869           | 17,436,487              | 116,158,699                            | 112,874,954              |
| 1923.....    | 10,419,146              | 10,990,830              | 18,758,864           | 19,273,942 <sup>4</sup> | 117,738,245                            | 132,671,095              |
| 1924.....    | 10,506,027              | 11,174,090              | 19,124,580           | 20,515,367 <sup>4</sup> | 127,896,072                            | 131,159,315              |
| 1925.....    | 11,531,098              | 11,249,433              | 18,828,853           | 20,156,703 <sup>4</sup> | 132,395,720                            | 136,648,242              |
| 1926.....    | 11,912,128              | 11,894,328              | 20,608,672           | 19,829,522 <sup>4</sup> | 146,450,904                            | 144,183,178              |
| 1927.....    | 12,263,401              | 12,479,381              | 20,257,016           | 19,408,881 <sup>4</sup> | 156,845,780                            | 152,211,883              |
| 1928.....    | 16,149,896 <sup>4</sup> | 15,870,133 <sup>4</sup> | 20,939,123           | 20,215,655 <sup>4</sup> | 168,100,505                            | 165,538,910              |
| 1929.....    | 15,265,034              | 13,686,261              | 21,094,427           | 22,325,504              | 183,598,024                            | 177,542,192              |
| 1930.....    | 15,820,805              | 15,402,885              | 25,498,409           | 25,060,980 <sup>4</sup> | 188,154,910                            | 184,804,203              |
| 1931.....    | 18,710,962              | 18,017,544              | 23,988,199           | 27,981,866 <sup>4</sup> | 179,143,480                            | 190,784,202              |
| 1932.....    | 13,492,430              | 18,645,451              | 25,682,892           | 32,734,453              | 108,081,570 <sup>4</sup>               | 114,889,154 <sup>4</sup> |
| 1933.....    | 15,426,205              | 17,538,786              | 23,353,115           | 26,189,492              | 184,888,470 <sup>4</sup>               | 200,527,219 <sup>4</sup> |
| 1934.....    | 15,178,097              | 17,056,639              | 22,618,367           | 22,392,344              | 175,897,349 <sup>4</sup>               | 229,483,726 <sup>4</sup> |
| 1935.....    | 15,700,170              | 17,528,221              | 25,603,942           | 24,439,787              | 160,567,995                            | 181,175,685              |
| 1936.....    | 16,636,552              | 18,287,450              | 29,016,044           | 26,396,869              | 232,616,182                            | 248,141,808              |

<sup>1</sup> See footnotes to figures for individual provinces when using these figures. <sup>2</sup> Six months.  
<sup>3</sup> Includes small sums of capital revenue and expenditure which cannot be separated. <sup>4</sup> Includes small sums of capital expenditure (expenditure out of income). <sup>5</sup> Fifteen months ended Mar. 31, 1928.  
<sup>6</sup> Revised since the publication of the 1937 Year Book.

## 26.—Ordinary Revenues and Expenditures of Provincial Governments per Head of Population for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916-36.

NOTE.—Per capita figures are calculated on the basis of the population figures given on p. 155.

## ORDINARY REVENUES.

| Fiscal Year. | Prince Edward Island. | Nova Scotia.        | New Brunswick.     | Quebec. | Ontario.           | Manitoba.          | Saskatchewan.      | Alberta.           | British Columbia. | Average for All Provinces. |
|--------------|-----------------------|---------------------|--------------------|---------|--------------------|--------------------|--------------------|--------------------|-------------------|----------------------------|
|              | \$                    | \$                  | \$                 | \$      | \$                 | \$                 | \$                 | \$                 | \$                | \$                         |
| 1871.....    | 4.10                  | 1.36                | 1.68               | 1.37    | 1.44               | -                  | -                  | -                  | 5.31 <sup>1</sup> | 1.50                       |
| 1881.....    | 2.53                  | 1.10                | 1.90               | 2.35    | 1.45               | 1.97               | -                  | -                  | 8.10              | 1.82                       |
| 1891.....    | 2.61                  | 1.49                | 1.91               | 2.32    | 1.96               | 3.86               | -                  | -                  | 9.79              | 2.21                       |
| 1901.....    | 3.00                  | 2.37                | 3.12               | 2.77    | 2.05               | 9.06               | 5.49               | 8.85 <sup>2</sup>  | 8.97              | 2.62                       |
| 1911.....    | 3.00                  | 5.30                | 3.83               | 3.51    | 3.71               | 9.06               | 7.41               | 10.65              | 13.80             | 6.25                       |
| 1916.....    | 6.53                  | 4.29                | 4.48               | 5.10    | 10.65              | 11.28              | 8.61               | 12.32              | 14.88             | 7.19                       |
| 1917.....    | 5.51                  | 4.21                | 4.27               | 4.81    | 6.71               | 11.90              | 11.50              | 14.67              | 18.74             | 8.51                       |
| 1918.....    | 5.78                  | 4.65                | 6.39               | 6.30    | 7.02               | 14.93              | 11.91              | 17.82              | 22.40             | 9.25                       |
| 1919.....    | 5.64                  | 6.47                | 5.85               | 5.67    | 7.42 <sup>3</sup>  | 16.62              | 13.59              | 19.33              | 27.34             | 10.83                      |
| 1920.....    | 8.33                  | 7.37                | 8.14               | 8.30    | 9.07 <sup>3</sup>  | 15.24              | 15.87              | 18.85              | 28.99             | 11.61                      |
| 1921.....    | 8.65                  | 8.75                | 7.46               | 6.74    | 10.37 <sup>3</sup> | 12.89              | 15.35              | 15.75              | 31.40             | 13.02                      |
| 1922.....    | 8.41                  | 9.18                | 8.29               | 9.00    | 13.33 <sup>3</sup> | 16.23              | 19.17              | 17.67              | 33.80             | 13.07                      |
| 1923.....    | 9.07                  | 10.27               | 8.65               | 14.48   | 15.85 <sup>3</sup> | 17.48              | 15.83              | 17.60              | 33.40             | 13.99                      |
| 1924.....    | 8.50                  | 10.58               | 9.53               | 9.29    | 13.64 <sup>3</sup> | 12.45 <sup>4</sup> | 15.36              | 19.15              | 32.01             | 14.25                      |
| 1925.....    | 8.61                  | 8.67                | 9.05               | 9.82    | 15.43 <sup>3</sup> | 16.56              | 16.22              | 19.59              | 34.01             | 15.50                      |
| 1926.....    | 9.57                  | 11.15               | 10.62              | 10.45   | 16.45 <sup>3</sup> | 17.81              | 15.52              | 19.37              | 32.52             | 16.28                      |
| 1927.....    | 9.62                  | 12.65               | 12.81              | 11.64   | 17.49              | 16.51              | 15.74              | 24.54 <sup>4</sup> | 32.67             | 17.09                      |
| 1928.....    | 11.70                 | 13.46               | 14.19              | 12.82   | 17.82              | 17.05              | 18.23              | 22.32              | 32.01             | 18.31                      |
| 1929.....    | 12.31                 | 14.35               | 14.63              | 14.42   | 19.36              | 20.21              | 18.34 <sup>4</sup> | 22.36              | 37.72             | 18.43                      |
| 1930.....    | 13.05                 | 14.95               | 10.22              | 14.43   | 16.94 <sup>4</sup> | 19.77              | 15.56              | 21.46              | 34.66             | 17.37                      |
| 1931.....    | 13.07                 | 15.80               | 14.66              | 14.48   | 15.85 <sup>4</sup> | 22.18              | 14.21              | 18.23              | 36.48             | 18.13                      |
| 1932.....    | 13.55                 | 17.10               | 15.73 <sup>5</sup> | 13.62   | 19.86 <sup>5</sup> | 19.49              | 17.36              | 20.62              | 32.77             | 17.31                      |
| 1933.....    | 14.19                 | 15.35               | 13.55 <sup>5</sup> | 11.22   | 19.02              | 19.64              | 16.72              | 20.08              | 31.20             | 16.22                      |
| 1934.....    | 15.57                 | 16.91               | 13.67 <sup>5</sup> | 10.28   | 16.93              | 22.63              | 16.41              | 20.67              | 34.84             | 14.88                      |
| 1935.....    | 17.26                 | 25.89 <sup>10</sup> | 15.12              | 11.49   | 8.42 <sup>11</sup> | 23.09              | 19.16              | 21.55              | 38.69             | 21.06                      |
| 1936.....    | 18.58                 | 23.91               | 16.35              | 13.08   | 24.48              |                    |                    |                    |                   |                            |

<sup>1</sup> For six months. <sup>2</sup> Includes small sums of capital revenue and expenditure which cannot be separated.  
<sup>3</sup> Includes capital revenue for lands, which cannot be separated. <sup>4</sup> For eight months.  
<sup>5</sup> For fifteen months ended Mar. 31, 1928. <sup>6</sup> Exclusive of interest paid by Hydro and other commissions.  
<sup>7</sup> Certain minor items, amounting to about \$600,000, shown in previous years as ordinary receipts and expenditures, have been transferred to the extraordinary classification in the 1930 Provincial Accounts Report.  
<sup>8</sup> Revised since the publication of the 1937 Year Book. <sup>9</sup> Thirteen figure is taken from the Public Accounts of Ontario. <sup>10</sup> Fourteen months. <sup>11</sup> Five months.

**26.—Ordinary Revenues and Expenditures of Provincial Governments per Head of Population for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916-36—concluded.**

**ORDINARY EXPENDITURES.**

| Fiscal Year. | Prince<br>Edward<br>Island. | Nova<br>Scotia.     | New<br>Brunswick.  | Quebec. | Ontario.            | Mani-<br>toba.     | Saskat-<br>chewan. | Alberta.           | British<br>Colum-<br>bia. | Average<br>for All<br>Pro-<br>vinces. |
|--------------|-----------------------------|---------------------|--------------------|---------|---------------------|--------------------|--------------------|--------------------|---------------------------|---------------------------------------|
|              | \$                          | \$                  | \$                 | \$      | \$                  | \$                 | \$                 | \$                 | \$                        | \$                                    |
| 1871.....    | 4.32                        | 1.55                | 1.53               | 1.32    | 1.12                | —                  | —                  | —                  | 2.69 <sup>1</sup>         | 1.34                                  |
| 1881.....    | 2.40                        | 1.12                | 1.87               | 4.47    | 1.35                | 3.66               | —                  | —                  | 7.71                      | 1.89                                  |
| 1891.....    | 2.79                        | 1.54                | 2.12               | 2.75    | 1.97                | 4.34               | —                  | —                  | 10.53                     | 2.41                                  |
| 1901.....    | 3.06                        | 2.37                | 2.75               | 2.74    | 1.85                | 3.85               | —                  | —                  | 12.78                     | 2.63                                  |
| 1911.....    | 4.24                        | 3.64                | 3.69               | 2.20    | 1.92                | 3.68               | 5.23               | 9.10               | 20.35                     | 5.29                                  |
| 1916.....    | 4.93                        | 4.26                | 4.26               | 4.38    | 4.68                | 11.10              | 8.12               | 12.13              | 22.11                     | 6.73                                  |
| 1917.....    | 5.41                        | 4.66                | 5.89               | 4.57    | 6.06                | 12.29              | 8.30               | 13.29              | 20.54                     | 7.46                                  |
| 1918.....    | 5.44                        | 5.13                | 6.50               | 5.33    | 6.36                | 12.93              | 10.07              | 15.61              | 10.04                     | 8.11                                  |
| 1919.....    | 7.36                        | 6.47                | 6.96               | 5.54    | 7.70                | 14.73              | 11.61              | 17.61              | 20.26                     | 9.19                                  |
| 1920.....    | 7.42                        | 7.59                | 7.79               | 5.88    | 9.04                | 17.85              | 11.94              | 18.45              | 22.82                     | 10.31                                 |
| 1921.....    | 7.80                        | 8.93                | 8.85               | 6.10    | 9.74                | 16.50              | 16.05              | 22.29              | 29.02                     | 11.67                                 |
| 1922.....    | 7.72                        | 9.13                | 7.68               | 6.83    | 12.57 <sup>2</sup>  | 13.61              | 17.32              | 18.98              | 32.23                     | 12.66                                 |
| 1923.....    | 9.08                        | 10.09               | 9.38               | 8.15    | 16.36               | 17.15              | 15.56              | 18.59              | 34.73 <sup>3</sup>        | 14.72                                 |
| 1924.....    | 8.32                        | 10.81               | 9.81               | 8.64    | 15.97               | 16.73              | 15.74              | 18.72              | 35.03 <sup>3</sup>        | 14.78                                 |
| 1925.....    | 8.67                        | 11.59               | 10.46              | 9.27    | 16.54               | 10.80 <sup>4</sup> | 15.51              | 18.69              | 34.29 <sup>5</sup>        | 14.70                                 |
| 1926.....    | 8.69                        | 12.29               | 10.30              | 10.14   | 16.20               | 16.32              | 10.09              | 19.55              | 32.72 <sup>5</sup>        | 15.26                                 |
| 1927.....    | 10.00                       | 12.75               | 11.65              | 10.94   | 17.32               | 16.05              | 15.41              | 19.71              | 31.15 <sup>5</sup>        | 15.80                                 |
| 1928.....    | 10.72                       | 14.65               | 13.45              | 12.09   | 17.75               | 16.72              | 15.60              | 24.12 <sup>5</sup> | 31.54 <sup>5</sup>        | 16.83                                 |
| 1929.....    | 11.74                       | 14.16               | 16.14              | 13.00   | 18.57               | 18.23              | 18.00              | 20.01              | 34.04 <sup>5</sup>        | 17.70                                 |
| 1930.....    | 12.83                       | 15.37               | 17.78              | 13.94   | 17.13 <sup>6</sup>  | 19.79              | 18.01 <sup>7</sup> | 21.75              | 27.08 <sup>8</sup>        | 19.10                                 |
| 1931.....    | 16.51                       | 15.97               | 16.57              | 14.22   | 15.98 <sup>6</sup>  | 20.70              | 19.74              | 24.61              | 40.25 <sup>8</sup>        | 18.38                                 |
| 1932.....    | 14.35                       | 17.41               | 16.70              | 13.72   | 20.45 <sup>9</sup>  | 22.18              | 20.44              | 25.20              | 46.50                     | 19.77                                 |
| 1933.....    | 15.64                       | 18.45               | 13.74              | 13.52   | 18.80               | 22.23              | 17.98              | 23.44              | 36.75                     | 18.77                                 |
| 1934.....    | 18.62                       | 19.37 <sup>8</sup>  | 15.14 <sup>8</sup> | 12.13   | 28.54 <sup>8</sup>  | 19.70              | 15.22              | 22.56              | 31.71                     | 20.11                                 |
| 1935.....    | 21.48                       | 27.59 <sup>10</sup> | 16.76              | 13.11   | 11.27 <sup>11</sup> | 22.41              | 19.46              | 22.64              | 38.25                     | 16.67                                 |
| 1936.....    | 18.95                       | 23.63               | 17.83              | 13.70   | 28.09               | 22.92              | 20.29              | 23.69              | 35.20                     | 22.50                                 |

<sup>1</sup> For six months.

<sup>2</sup> Includes capital expenditure which cannot be separated.

<sup>3</sup> Includes sinking fund taken from capital expenditure (expenditure out of income).

<sup>4</sup> For eight months.

<sup>5</sup> For fifteen months ended Mar. 31, 1928.

<sup>6</sup> Exclusive of interest paid by Hydro and other commissions.

<sup>7</sup> Certain minor items, amounting to about \$600,000, shown in previous years as ordinary receipts and expenditures, have been transferred to the extraordinary classification in the 1930 Provincial Accounts Report.

<sup>8</sup> Revised since the publication of the 1937 Year Book.

<sup>9</sup> This figure is taken from the Public Accounts of Ontario.

<sup>10</sup> For fourteen months.

<sup>11</sup> For five months.

**Subsection 2.—Provincial Debts and Assets.**

**Bonded Indebtedness of the Provinces.**—Of the total liabilities of the provinces the major part is represented by bonded debt owing to the public in Canada and abroad. The total gross bonded debt amounted to \$1,426,293,679 in 1936 as compared with only \$218,875,927 in 1916, an increase of over \$1,200,000,000 in the 20 years. In addition to this bonded debt there were treasury bills outstanding on provincial accounts amounting to \$232,928,298\* for 1936. Figures of bonded debt for this and previous years to 1916 are given in Table 27. The rapid rise in the bonded debt of the provinces from \$218,875,927 in 1916 is accounted for largely by the development of public ownership of utilities (such as the "Hydro" in Ontario), the extension of the highways and surfaced roads systems in all provinces (highway debentures outstanding in 1936 accounting for \$508,000,000 of the provincial debt), and the requirements for the promotion of industrial activities and public and social welfare. These demanded heavy expenditures which could not easily be met out of current revenue. The borrowings, while increasing the public debt, are in the main considered justifiable, as the public utilities are in most cases meeting from their revenues the interest on indebtedness incurred in their construction, and the provincial assets generally are sound enough to take care of capital investment for other services which are necessary to develop the country.

\*Including \$600,000 which the province of New Brunswick considered a current liability.

27.—Gross Bonded Debt (Exclusive of Treasury Bills) of Provincial Governments, by Provinces, fiscal years 1916-36.

| Fiscal Year. | Prince<br>Edward<br>Island. | Nova<br>Scotia.         | New<br>Brunswick. | Quebec.              | Ontario.      |
|--------------|-----------------------------|-------------------------|-------------------|----------------------|---------------|
|              | \$                          | \$                      | \$                | \$                   | \$            |
| 1916.....    | 733,000                     | 13,443,087              | 9,100,647         | 38,346,128           | 52,411,401    |
| 1917.....    | 733,000                     | 13,362,707              | 15,809,856        | 39,462,996           | 55,301,501    |
| 1918.....    | 733,000                     | 14,490,813              | 17,163,089        | 39,827,770           | 60,526,501    |
| 1919.....    | 733,000                     | 14,614,893              | 18,585,760        | 39,706,614           | 81,026,501    |
| 1920.....    | 733,000                     | 17,202,647              | 20,683,236        | 40,708,114           | 109,180,000   |
| 1921.....    | 858,000                     | 20,678,267              | 23,573,432        | 51,652,113           | 194,693,420   |
| 1922.....    | 1,033,000                   | 24,608,347              | 26,628,432        | 55,604,926           | 222,351,338   |
| 1923.....    | 1,183,000                   | 27,134,507              | 28,583,932        | 60,605,226           | 255,587,757   |
| 1924.....    | 1,683,000                   | 31,458,640              | 30,737,909        | 75,605,226           | 292,845,257   |
| 1925.....    | 1,833,000                   | 36,000,928              | 32,345,909        | 81,944,926           | 277,045,257   |
| 1926.....    | 1,873,000                   | 35,986,324              | 35,325,909        | 78,004,926           | 280,559,094   |
| 1927.....    | 1,933,000                   | 40,708,457              | 36,554,409        | 79,212,226           | 293,365,094   |
| 1928.....    | 2,185,000                   | 34,824,713              | 37,845,303        | 80,731,877           | 322,365,844   |
| 1929.....    | 2,109,000                   | 46,395,847              | 34,760,603        | 80,334,792           | 350,563,844   |
| 1930.....    | 2,329,000                   | 55,483,480              | 41,211,096        | 76,735,292           | 395,821,344   |
| 1931.....    | 2,104,000                   | 60,325,613              | 45,858,996        | 84,235,292           | 455,375,344   |
| 1932.....    | 3,504,000                   | 61,740,747              | 58,739,663        | 91,087,692           | 499,686,011   |
| 1933.....    | 3,754,000                   | 66,439,880              | 61,935,163        | 110,237,892          | 522,687,345   |
| 1934.....    | 4,554,000                   | 73,476,013              | 63,570,920        | 126,518,007          | 600,454,102   |
| 1935.....    | 5,754,000                   | 85,866,647              | 67,562,920        | 149,748,007          | 594,088,188   |
| 1936.....    | 6,020,000                   | 86,974,113              | 74,049,920        | 164,747,607          | 602,027,288   |
| Fiscal Year. | Manitoba.                   | Saskat-<br>chewan.      | Alberta.          | British<br>Columbia. | Total.        |
|              | \$                          | \$                      | \$                | \$                   | \$            |
| 1916.....    | 30,396,274                  | 24,292,044              | 29,000,200        | 21,153,146           | 218,875,927   |
| 1917.....    | 31,196,870                  | 25,439,187              | 30,595,200        | 23,153,146           | 235,054,463   |
| 1918.....    | 33,890,870                  | 28,019,387              | 31,500,200        | 23,071,936           | 255,228,566   |
| 1919.....    | 36,897,870                  | 29,963,410              | 34,635,200        | 27,571,936           | 283,735,184   |
| 1920.....    | 49,700,870                  | 35,237,170              | 41,989,900        | 34,071,936           | 349,513,773   |
| 1921.....    | 61,929,870                  | 41,785,436              | 59,010,257        | 46,511,436           | 490,692,231   |
| 1922.....    | 66,331,121                  | 49,685,476              | 67,373,279        | 61,851,436           | 575,477,355   |
| 1923.....    | 67,914,085                  | 52,807,876              | 78,522,279        | 65,851,436           | 635,100,108   |
| 1924.....    | 69,637,085                  | 52,492,956              | 78,594,760        | 68,851,436           | 701,906,279   |
| 1925.....    | 66,558,595                  | 50,493,376              | 81,459,407        | 76,443,736           | 704,225,134   |
| 1926.....    | 64,433,598                  | 54,114,176 <sup>1</sup> | 86,894,666        | 71,485,736           | 708,677,426   |
| 1927.....    | 67,293,825                  | 56,944,576              | 90,890,458        | 75,485,736           | 742,388,684   |
| 1928.....    | 69,822,828                  | 58,309,256              | 90,899,816        | 72,275,736           | 769,260,373   |
| 1929.....    | 71,465,161                  | 58,275,776              | 96,532,443        | 77,482,736           | 817,940,202   |
| 1930.....    | 76,641,161                  | 73,667,316              | 106,888,380       | 87,365,236           | 919,142,905   |
| 1931.....    | 81,381,908                  | 85,141,205              | 106,896,573       | 95,358,236           | 1,016,647,165 |
| 1932.....    | 89,630,906                  | 101,831,236             | 123,970,593       | 111,932,236          | 1,148,323,084 |
| 1933.....    | 90,938,906                  | 109,209,642             | 133,837,260       | 125,332,736          | 1,224,372,524 |
| 1934.....    | 90,024,906                  | 112,868,207             | 129,055,260       | 129,163,236          | 1,320,684,651 |
| 1935.....    | 92,136,606                  | 121,109,740             | 129,744,260       | 127,311,236          | 1,373,321,604 |
| 1936.....    | 95,480,881                  | 124,446,374             | 128,140,260       | 144,395,236          | 1,426,293,679 |

<sup>1</sup> Liabilities statement is for Apr. 30; this amount includes \$500,000 due May 1.

**Total Provincial Public Debt.**—Table 28 gives a classified analysis of the public debt of Provincial Governments at the close of their fiscal years in 1935 and 1936.



23.—Debt of Provincial Governments at the ends of their respective fiscal years in 1935 and 1936, showing Bonded Debt with offsetting Sinking Funds, Treasury Bills, Other Direct Liabilities, Available Assets offsetting Direct Liabilities, and Indirect Liabilities.

NOTE.—For dates on which the fiscal years of the provinces end, see text on p. 589.

| Year and Province.                | Direct Liabilities.                |                    |                      |                                |                      |                    |  |
|-----------------------------------|------------------------------------|--------------------|----------------------|--------------------------------|----------------------|--------------------|--|
|                                   | Bonded Debt.                       |                    |                      | Funded Debt.                   |                      |                    |  |
|                                   | Total Gross Bonded or Direct Debt. |                    |                      | Treasury Bills.                |                      |                    | Total Direct Liabilities (less sinking funds). |
|                                   | \$                                 | \$                 | \$                   | \$                             | \$                   | \$                 |  |
| <b>1935.</b>                      |                                    |                    |                      |                                |                      |                    |  |
| Prince Edward Island.....         | 5,754,000                          | 1,114,033          | 4,639,967            | Nil                            | 4,639,967            | 1,520,832          | 6,160,849                                      |
| Nova Scotia.....                  | 88,866,647                         | 5,757,759          | 89,098,858           | Nil                            | 80,068,858           | 6,253,841          | 86,357,729                                     |
| New Brunswick.....                | 67,542,020                         | 8,044,866          | 59,518,054           | 300,000 <sup>1</sup>           | 59,518,054           | 4,300,316          | 64,124,370                                     |
| Quebec.....                       | 149,748,007                        | 17,605,505         | 132,142,502          | 14,000,000                     | 146,512,502          | 44,988,034         | 181,130,536                                    |
| Ontario.....                      | 594,068,153                        | 6,890,845          | 587,197,343          | 49,000,000                     | 637,917,343          | 37,294,574         | 625,211,917                                    |
| Manitoba.....                     | 32,136,906                         | 8,595,056          | 23,541,850           | Nil                            | 23,541,850           | 977,358,077        | 236,900,159                                    |
| Saskatchewan.....                 | 127,109,410                        | 1,134,658          | 126,000,000          | 28,308,846                     | 154,308,846          | 15,143,566         | 171,452,412                                    |
| Alberta.....                      | 126,709,637                        | 6,431,223          | 119,819,037          | 16,303,750                     | 136,122,787          | 19,878,944         | 156,531,001                                    |
| British Columbia.....             | 127,311,266                        | 29,519,751         | 97,791,485           | 20,835,141                     | 118,616,626          | 10,795,149         | 129,411,775                                    |
| <b>Totals, 1935.....</b>          | <b>1,373,321,604</b>               | <b>95,816,799</b>  | <b>1,277,404,805</b> | <b>185,332,114<sup>1</sup></b> | <b>1,462,736,919</b> | <b>138,716,717</b> | <b>1,621,453,636</b>                           |
| <b>1936.</b>                      |                                    |                    |                      |                                |                      |                    |  |
| Prince Edward Island.....         | 6,029,000                          | 1,315,832          | 4,713,168            | Nil                            | 4,713,168            | 1,676,459          | 6,389,627                                      |
| Nova Scotia.....                  | 86,974,113                         | 5,822,665          | 81,151,448           | Nil                            | 81,151,448           | 7,927,050          | 89,078,498                                     |
| New Brunswick.....                | 74,049,920                         | 8,816,471          | 65,233,449           | 600,000 <sup>2</sup>           | 65,833,449           | 3,634,394          | 69,467,753                                     |
| Quebec.....                       | 164,737,007                        | 21,112,125         | 143,624,882          | 26,570,000                     | 170,210,432          | 47,138,092         | 217,348,484                                    |
| Ontario.....                      | 602,027,283                        | 7,014,333          | 595,112,955          | 60,000,000                     | 644,112,955          | 45,445,369         | 639,558,324                                    |
| Manitoba.....                     | 37,450,251                         | 9,855,351          | 27,594,900           | 28,153,335                     | 55,748,235           | 15,445,369         | 73,193,604                                     |
| Saskatchewan.....                 | 130,400,000                        | 1,134,658          | 129,265,342          | 25,326,750                     | 154,592,092          | 21,464,744         | 150,756,836                                    |
| Alberta.....                      | 128,140,260                        | 10,633,979         | 117,514,281          | 25,426,750                     | 142,941,031          | 21,558,709         | 164,299,740                                    |
| British Columbia.....             | 144,388,256                        | 31,055,955         | 113,339,375          | 33,513,587                     | 146,852,965          | 18,966,319         | 165,821,184                                    |
| <b>Totals, 1936.....</b>          | <b>1,426,293,679</b>               | <b>106,402,435</b> | <b>1,320,691,244</b> | <b>232,928,298<sup>1</sup></b> | <b>1,553,619,542</b> | <b>189,160,165</b> | <b>1,733,719,707</b>                           |
| <b>Totals, 1935 and 1936.....</b> | <b>2,799,615,283</b>               | <b>202,219,234</b> | <b>2,597,396,049</b> | <b>418,260,412</b>             | <b>3,016,356,461</b> | <b>327,876,882</b> | <b>3,344,233,347</b>                           |

<sup>1</sup> In addition to the available assets shown most of the provinces had partially secured loans and advances in connection with unemployment relief, while Alberta had partially secured loans and advances, and sale of contracts for School Lands Fund amounting to over \$1,000,000 for 1935 and \$2,000,000 for 1936; British Columbia had partially secured loans and advances amounting to over \$400,000 for 1935 and \$600,000 for 1936; Saskatchewan had partially secured loans and advances amounting to over \$1,000,000 for 1935 and \$1,000,000 for 1936; Manitoba had partially secured loans and advances amounting to over \$1,000,000 for 1935 and \$1,000,000 for 1936; Ontario does not include Treasury Bills in its Debt. <sup>2</sup> Includes \$1,000,000 of the School Fund, Quebec Unemployment, and Public, Live Stock and Equipment, 'available assets'. <sup>3</sup> Including Treasury Bills regarded as current debt by New Brunswick.

**Interest Payments and Receipts of the Provinces.**—The current burden of a debt in the case of a continuing organization is represented by interest payments, which may be offset in whole or in part by interest received on loans either to provincially-owned public utilities or to corporations or individual citizens. In a country where provincial public policy varies widely with regard to public ownership, it appears desirable to include a statement showing, for each province, the gross interest payments, the interest receipts and the net interest payments. This information is given below for the provincial fiscal years ended in 1936.

| Province.                 | Gross<br>Interest<br>Paid. | Interest<br>Received. | Net<br>Interest<br>Paid. | Net Interest<br>Paid per<br>Capita. <sup>1</sup> |
|---------------------------|----------------------------|-----------------------|--------------------------|--|
|                           | \$                         | \$                    | \$                       | \$   |
| Prince Edward Island..... | 268,367                    | Nil                   | 268,367                  | 2.02   |
| Nova Scotia.....          | 3,563,430                  | 984,959               | 2,628,471                | 4.01   |
| New Brunswick.....        | 3,085,198                  | 124,224               | 2,960,974                | 6.81   |
| Quebec.....               | 6,087,053                  | 1,041,790             | 5,045,263                | 1.63   |
| Ontario.....              | 30,260,845                 | 11,372,166            | 18,888,679               | 5.12   |
| Manitoba.....             | 5,925,940                  | 1,965,953             | 3,959,987                | 5.57   |
| Saskatchewan.....         | 6,571,594                  | 2,544,104             | 4,027,490                | 4.33   |
| Alberta.....              | 6,566,932                  | 944,785               | 5,622,147                | 7.28   |
| British Columbia.....     | 8,279,605                  | 425,620               | 7,853,985                | 10.47  |

<sup>1</sup> Estimates of population on which these figures are based are given on p. 155.

### Section 3.—Municipal Public Finance.\*

The existence of local self-governing units has always been characteristic of democratic societies, and nowhere more so than in Canada. The struggle for responsible government was naturally accompanied by an agitation for local self-government in the cities and towns of Canada and, after responsible government had been conceded, a complete system of municipalities was established throughout the old Province of Canada by the Municipal Act of 1849.† Under the division of powers made by the British North America Act between the Dominion and the Provincial Governments, legislation regarding municipal government, being a local matter, was naturally assigned to the provinces, which differ considerably with regard to their types of municipal organization. Thus, in Prince Edward Island the only incorporated municipalities are the city of Charlottetown and seven incorporated towns. In British Columbia seven of the 33 cities have fewer than 1,000 people, while there are no towns at all and only 17 villages; again, in the same province the rural districts are mainly administered from the provincial capital, there being only 28 rural municipalities. Finally, in Saskatchewan and Alberta there exist local improvement districts, areas which have not as yet been organized

\* Revised by Col. J. R. Munro, Chief of the Finance Branch of the Dominion Bureau of Statistics. This Branch issues statements on "Financial Statistics of Urban Municipalities of 10,000 Population and Over", on "Bonded Indebtedness of Municipalities" and on "Assessment Valuations of Municipalities". For a list of publications see Chapter XXIX, Section 1, under "Finance".

† For a brief outline of the rise of the municipal system of Ontario, see 1922-23 Year Book, p. 103.

into rural municipalities, where the taxes are levied, collected, and expended by the Provincial Governments. Such districts, however, may be regarded as on the way to becoming self-governing rural municipalities. Their statistics are therefore included in Table 29 which gives statistics of the numbers and types of municipalities in 1935.

29.—Numbers of Municipalities, by Provinces and Classes, 1935.

| Province.          | Cities.    | Towns.          | Villages.    | Counties.       | Other Rural Municipalities. | Local Improvement Districts. | Suburban Municipalities. | Total.       |
|--------------------|------------|-----------------|--------------|-----------------|-----------------------------|------------------------------|--------------------------|--------------|
| P.E. Island.....   | 1          | 7               | Nil          | Nil             | Nil                         | Nil                          | Nil                      | 8            |
| Nova Scotia.....   | 2          | 43              | Nil          | 1               | 24                          | Nil                          | Nil                      | 69           |
| New Brunswick...   | 3          | 20              | 2            | 15              | Nil                         | Nil                          | Nil                      | 40           |
| Quebec.....        | 25         | 102             | 304          | 75              | 1,026                       | Nil                          | Nil                      | 1,532        |
| Ontario.....       | 27         | 145             | 156          | 38 <sup>2</sup> | 571 <sup>3</sup>            | Nil                          | Nil                      | 937          |
| Manitoba.....      | 4          | 31 <sup>4</sup> | 22           | Nil             | 112                         | Nil                          | 5                        | 174          |
| Saskatchewan.....  | 8          | 80              | 355          | Nil             | 302                         | 85                           | Nil                      | 860          |
| Alberta.....       | 7          | 53              | 146          | Nil             | 162                         | 250                          | Nil                      | 648          |
| British Columbia.  | 33         | Nil             | 17           | Nil             | 28                          | Nil                          | Nil                      | 78           |
| <b>Totals.....</b> | <b>110</b> | <b>481</b>      | <b>1,032</b> | <b>128</b>      | <b>2,225</b>                | <b>365</b>                   | <b>5</b>                 | <b>4,346</b> |

<sup>1</sup> Nova Scotia has 18 counties, some of which are 'municipalities', while others are divided into 'municipalities'. <sup>2</sup> There are 43 counties in all, geographically, but a number are united for municipal purposes. <sup>3</sup> Officially known as 'townships'. <sup>4</sup> Includes Finlon Municipal District.

**Municipal Revenue from Taxation.**—As a result of accumulated borrowings to meet conditions peculiar to the depression, the relentless advance of interest charges against realizable taxation has brought about a condition in many municipalities where expenditures are out of all proportion to receipts, in spite of the fact that the trend of interest rates has been definitely downwards. It is natural under such conditions that the general subject of taxation should receive the increasing attention of the public and, of all forms of taxation, the imposition of municipal taxes—where the tax is applied broadly to assessed valuations placed on homes and other real property and on incomes and business—hits the ratepayer's pocket most directly.

In view of the wide public interest in municipal taxation, the Dominion Bureau of Statistics published a bulletin giving as complete a picture as is possible of tax levies and taxation receipts of municipalities, classified into cities, towns and rural municipalities, by provinces, for the years 1913-35.\* The following summary table, taken therefrom, gives figures of tax receipts for these years so far as they are available. Unfortunately, there are certain inconsistencies and omissions, as between provinces, which the footnotes to the table attempt to explain.

\*See the bulletin "Municipal Tax Levies and Receipts, by Provinces", obtainable from the Dominion Statistician.

## 30.—Tax Receipts of Municipalities in Canada, by Provinces, 1913-35.

| Year.  | P.E.I. <sup>1</sup> | N.S.      | N.B. <sup>2</sup> | Que.                    | Ont.        | Man.                    | Sask.      | Alta.      | B.C. <sup>3</sup>       |
|--------|---------------------|-----------|-------------------|-------------------------|-------------|-------------------------|------------|------------|-------------------------|
|        | \$                  | \$        | \$                | \$                      | \$          | \$                      | \$         | \$         | \$                      |
| 1913.. |                     |           |                   | 4                       |             |                         |            |            |                         |
| 1914.. |                     |           |                   | 33,288,115              |             |                         |            |            | 4                       |
| 1915.. |                     |           |                   |                         |             |                         |            |            |                         |
| 1916.. |                     |           |                   | 32,131,489              |             |                         |            |            |                         |
| 1917.. |                     |           |                   | 33,222,593              |             |                         |            |            | 9,382,099               |
| 1918.. |                     | 3,462,587 |                   | 36,628,407              | 4           |                         |            | 4          | 10,630,355              |
| 1919.. |                     | 3,443,681 |                   | 47,001,911              |             |                         |            |            | 14,096,799              |
| 1920.. |                     | 4,099,780 |                   | 53,929,349              |             |                         |            |            | 15,519,092              |
| 1921.. |                     | 4,727,730 |                   | 60,400,650              |             |                         | 22,278,621 |            | 14,664,292 <sup>4</sup> |
| 1922.. | 4                   | 5,229,302 | 4                 | 57,311,990              |             | 4                       | 27,314,503 |            | 14,627,777 <sup>5</sup> |
| 1923.. |                     | 6,347,966 |                   | 58,357,190              |             |                         | 26,079,908 |            | 14,506,982              |
| 1924.. |                     | 6,184,398 |                   | 64,236,251              | 94,526,271  |                         | 26,009,704 | 10,706,183 | 13,856,416              |
| 1925.. |                     | 6,012,030 |                   | 65,654,871              | 94,559,210  |                         | 27,245,639 | 9,094,632  | 14,748,216              |
| 1926.. |                     | 6,397,512 |                   | 67,779,258              | 96,703,171  |                         | 26,300,069 | 12,433,696 | 14,858,435              |
| 1927.. |                     | 6,576,609 |                   | 71,044,061              | 103,426,618 |                         | 26,241,923 | 10,572,853 | 15,208,181              |
| 1928.. |                     | 6,801,365 |                   | 62,619,679              | 107,449,970 |                         | 27,369,597 | 9,583,254  | 10,153,676              |
| 1929.. |                     | 6,813,918 |                   | 69,450,228              | 110,093,006 |                         | 26,512,220 | 11,063,241 | 17,345,523              |
| 1930.. |                     | 6,642,064 |                   | 73,337,620              | 120,637,896 |                         | 26,779,820 | 10,424,676 | 17,939,046              |
| 1931.. | 168,646             | 6,665,550 | 2,598,910         | 73,761,481              | 122,310,767 | 6,998,963 <sup>6</sup>  | 18,302,914 | 10,255,692 | 18,260,430              |
| 1932.. | 145,830             | 6,613,675 | 2,441,063         | 79,612,584              | 121,284,311 | 17,290,889 <sup>6</sup> | 17,616,414 | 12,032,471 | 17,089,972              |
| 1933.. | 156,136             | 6,440,471 | 2,295,247         | 79,471,242              | 116,920,000 | 17,104,553              | 15,822,643 | 11,661,595 | 17,521,554              |
| 1934.. | 164,158             | 7,108,035 | 2,207,230         | 59,729,973 <sup>6</sup> | 117,892,884 | 18,187,714              | 16,624,783 | 12,218,328 | 18,002,475              |
| 1935.. | 168,262             | 7,073,053 | 2,353,811         | 59,253,714 <sup>6</sup> | 122,108,912 | 16,622,464              | 16,769,993 | 10,900,409 | 17,185,917              |

<sup>1</sup> Statistics are for Charlottetown only. <sup>2</sup> Cities of Saint John, Moncton and Fredericton only, except for 1934 and 1935 figures which are for Saint John and Moncton only. <sup>3</sup> B.C. has no municipal organization of towns and provision was first made for villages in 1922. Statistics of tax receipts for cities and rural districts are shown from 1917-21, and those for cities, villages and rural districts from 1922. <sup>4</sup> Comparable figures not available. <sup>5</sup> The figures shown are for all municipalities except cities, whereas cities are included for other years. A comparable figure is not obtainable but receipts for Winnipeg were \$10,874,891, and the total tax imposition for the cities of Brandon, Portage la Prairie, and St. Boniface was \$1,682,241 in 1931. <sup>6</sup> Revenue for municipalities and receipts for schools. See also footnote 2, to Table 33, p. 884.

**Municipal Assessments.**—The chief basis of municipal tax revenue is the real estate within the limits of the municipalities; though, as indicated above, in certain provinces personal property, income, and business carried on are also taxed. General taxes are normally assessed at the rate of so many mills on the dollar of the assessed valuations. In the Prairie Provinces, the values of improvements made to real property are often rated at a very low figure, *e.g.*, in Saskatchewan, where the taxable valuations of buildings are about 12 p.c. of the taxable valuations of lands, and in Alberta, where they are about 30 p.c. of the taxable valuations of lands, as shown in Table 31.

There are various reasons for fluctuations in assessment valuations, due to differences in laws and varying practices with regard to assessment as among provinces, as among classes of municipalities, and as among municipalities of the same class from year to year. Such matters are more fully dealt with in the special report of the Dominion Bureau of Statistics on "Assessment Valuations by Provinces", obtainable from the Dominion Statistician.

Lands in the West, valuations for which in earlier years were somewhat inflated, have of late been assessed on a sounder basis, and in some provinces the Equalization Boards have placed a more equitable valuation on lands as among the various rural municipalities.

### 31.—Summary Statement Showing Total Assessment Valuations of Municipalities, by Provinces, 1931-35.

Note.—Corresponding figures for 1927 and 1928 will be found at p. 824 of the 1930 Year Book and for 1929 and 1930 at p. 874 of the 1936 Year Book. Data for earlier years will be found in previous editions.

| Province.      | Taxable Real Property.   |                             | Personal Property.      | Income.                | Total Taxable Valuations. <sup>1</sup> | Exempted Property.       |
|----------------|--------------------------|-----------------------------|-------------------------|------------------------|--|--------------------------|
|                | Land.                    | Total Land and Buildings.   |                         |                        |  |                          |
|                | \$                       | \$                          | \$                      | \$                     | \$                                     | \$                       |
| P.E.I.....1931 |                          | 32,595,794                  | 6,336,017               |                        | 39,302,440                             | 1,828,000                |
| 1932           |                          | 33,679,705                  | 5,350,022               |                        | 39,258,331                             | 1,826,000                |
| 1933           | "                        | 33,731,795                  | 6,307,809               | "                      | 40,220,965                             | 5,183,790                |
| 1934           |                          | 33,987,896                  | 6,217,767               |                        | 40,385,822                             | 5,187,040                |
| 1935           |                          | 34,065,474                  | 6,322,012               |                        | 40,888,551                             | 8,225,030                |
| N.S.....1931   |                          | 140,107,075 <sup>4</sup>    | 24,383,477 <sup>4</sup> | 1,522,600 <sup>4</sup> | 177,215,514 <sup>4</sup>               | 48,119,429               |
| 1932           |                          | 141,006,134 <sup>4</sup>    | 23,887,409 <sup>4</sup> | 2,091,162 <sup>4</sup> | 178,563,907 <sup>4</sup>               | 47,524,274               |
| 1933           | "                        | 139,323,274 <sup>4</sup>    | 22,616,603 <sup>4</sup> | 1,198,436 <sup>4</sup> | 174,180,358 <sup>4</sup>               | 45,513,267               |
| 1934           |                          | 137,808,458                 | 22,071,512 <sup>4</sup> | 1,681,482 <sup>4</sup> | 171,701,482 <sup>4</sup>               | 44,061,178               |
| 1935           |                          | 137,172,626                 | 22,298,204 <sup>4</sup> | 1,133,393 <sup>4</sup> | 171,345,143                            | 47,309,476               |
| N.B.....1931   |                          | 130,053,404                 | 23,511,406              |                        | 153,564,510                            |                          |
| 1932           |                          | 127,865,063                 | 20,592,746              |                        | 148,457,800                            |                          |
| 1933           | "                        | 129,634,462                 | 19,580,954              | "                      | 149,215,416                            | "                        |
| 1934           |                          | 129,366,539                 | 19,333,049              |                        | 145,699,588                            |                          |
| 1935           |                          | 123,570,899                 | 18,227,865              |                        | 141,798,764                            |                          |
| Que.....1931   |                          | 2,210,942,541               |                         |                        | 2,223,478,080                          | 705,797,801 <sup>6</sup> |
| 1932           |                          | 2,326,143,786               |                         |                        | 2,269,148,711                          | 726,626,880 <sup>6</sup> |
| 1933           | "                        | 2,192,446,982               | "                       | "                      | 2,240,825,176                          | 741,701,310 <sup>6</sup> |
| 1934           |                          | 2,184,398,606               |                         |                        | 2,233,063,702                          | 743,230,611 <sup>6</sup> |
| 1935           |                          | 2,173,591,043               |                         |                        | 2,224,089,302                          | 734,498,153 <sup>6</sup> |
| Ont.....1931   | 1,327,606,008            | 2,811,763,235               |                         | 131,335,748            | 3,183,152,415 <sup>7</sup>             | 536,538,708              |
| 1932           | 1,322,677,599            | 2,839,732,534               | "                       | 123,027,653            | 3,207,396,150 <sup>7</sup>             | 559,013,400              |
| 1933           | 1,298,794,671            | 2,817,352,141               | "                       | 105,838,712            | 3,103,733,491 <sup>7</sup>             | 578,130,065              |
| 1934           | 1,266,175,295            | 2,702,400,538               |                         | 89,005,072             | 3,025,010,441 <sup>7</sup>             | 587,889,203              |
| 1935           |                          | 2,685,249,332               |                         | 71,500,340             | 3,000,835,372 <sup>7</sup>             | 580,845,692              |
| Man.....1931   |                          | 530,012,367                 | 7,656,667               |                        | 557,193,129                            | 156,793,923              |
| 1932           |                          | 536,413,841                 | 5,989,568               |                        | 553,296,304                            | 158,858,317              |
| 1933           | "                        | 502,767,941                 | 5,709,755               | "                      | 517,628,197                            | 162,430,924              |
| 1934           |                          | 495,428,343                 | 5,695,233               |                        | 509,753,890                            | 162,235,639              |
| 1935           |                          | 471,645,105                 | 5,479,320               |                        | 487,829,469                            | 159,039,314              |
| Sask.....1931  | 972,490,470              | 1,089,729,394               |                         |                        | 1,134,400,775                          |                          |
| 1932           | 968,674,804              | 1,088,167,082               |                         |                        | 1,129,447,552                          |                          |
| 1933           | 959,838,291              | 1,070,520,091               | "                       |                        | 1,115,773,324                          | "                        |
| 1934           | 950,175,177              | 1,067,714,102               |                         |                        | 1,105,016,437                          |                          |
| 1935           | 941,489,766              | 1,058,009,449               |                         |                        | 1,096,091,102                          |                          |
| Alta.....1931  | 456,099,459 <sup>8</sup> | 579,960,105 <sup>8</sup>    |                         |                        | 598,745,117 <sup>8</sup>               |                          |
| 1932           | 446,925,085 <sup>8</sup> | 571,119,947 <sup>8</sup>    | "                       |                        | 599,424,209 <sup>8</sup>               | "                        |
| 1933           | 445,610,003 <sup>8</sup> | 567,608,428 <sup>8</sup>    | "                       |                        | 586,965,175 <sup>8</sup>               | "                        |
| 1934           | 437,678,242 <sup>8</sup> | 560,408,969 <sup>8</sup>    |                         |                        | 577,407,878 <sup>8</sup>               |                          |
| 1935           | 383,233,957 <sup>8</sup> | 501,630,807 <sup>8</sup>    |                         |                        | 518,180,053 <sup>8</sup>               |                          |
| B.C.....1931   | 303,667,022              | 688,098,083                 |                         |                        | 688,098,083                            | 140,274,900              |
| 1932           | 293,986,938              | 677,856,920                 | "                       |                        | 677,355,920                            | 151,520,124              |
| 1933           | 277,291,181              | 640,461,800                 | "                       |                        | 640,461,800                            | 145,988,409              |
| 1934           | 268,996,902              | 625,762,235                 |                         |                        | 625,762,235                            | 146,434,234              |
| 1935           | 243,225,000              | 588,756,323                 |                         |                        | 583,756,323                            | 146,685,827              |
| Totals....1931 |                          | 8,222,259,998 <sup>10</sup> |                         |                        | 8,782,118,963 <sup>10</sup>            |                          |
| 1932           |                          | 8,241,594,019 <sup>10</sup> | "                       | "                      | 8,791,319,010 <sup>10</sup>            | "                        |
| 1933           |                          | 8,699,845,904 <sup>10</sup> | "                       | "                      | 8,623,004,462 <sup>10</sup>            | "                        |
| 1934           |                          | 8,234,245,783 <sup>10</sup> |                         |                        | 8,432,328,925 <sup>10</sup>            |                          |
| 1935           |                          | 7,765,691,745 <sup>10</sup> |                         |                        | 8,264,234,584 <sup>10</sup>            |                          |

<sup>1</sup> Includes certain other taxable valuations.

<sup>2</sup> Not available.

<sup>3</sup> No assessment in this province.

<sup>4</sup> Includes exemptions for municipality of Cumberland, Nova Scotia. <sup>5</sup> In Nova Scotia personal property and income assessments for cities are for Sydney only.

<sup>6</sup> These amounts include property temporarily exempted. <sup>7</sup> In addition, assessments for schools only in Ontario were: townships \$4,456,630, towns and villages \$20,499,195, and cities \$93,816,472 in 1931; townships \$4,976,492, towns and villages \$18,240,670, and cities \$86,803,023 in 1932; townships \$3,456,026, towns and villages \$12,884,022, and cities \$86,638,940 in 1933; townships \$2,636,133, villages \$1,674,15, towns \$16,656,397, and cities \$86,657,415 in 1934; and cities \$84,204,218 in 1935. Assessments for school purposes only for other municipalities were not shown in the Ontario report for 1935.

<sup>8</sup> Local Improvement Districts not included for 1931 and later years. <sup>9</sup> Complete totals not available. <sup>10</sup> In interpreting these totals, footnotes on the constituent items should be noted.

**Bonded Indebtedness.**—Like other Canadian governing bodies the municipalities of the greater part of Canada borrowed rather freely during the boom period of 1900-12, and again during the nineteen-twenties. The bonded indebtedness of

Ontario municipalities rose from \$153,568,409 in 1913 to \$461,653,182 in 1935, while that of Quebec municipalities increased from \$173,720,141 in 1915 to \$574,883,119 in 1935, and a proportionate increase took place in other provinces. The recent growth in the bonded indebtedness of all classes of municipalities is shown by provinces in Table 32. The figures show that there was an increase in 1935 over 1934 in the provinces of Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Manitoba and British Columbia; the others showed a decrease. In Saskatchewan, net debenture debt is shown for all municipalities in 1919, while from 1920 the statistics represent gross debenture debt. In Alberta in the earlier years, figures represent principally net debenture debt but from 1929 gross debenture debt is shown. All other provinces give gross total debenture debt throughout.

### 32.—Total Bonded Indebtedness of All Classes of Municipalities, by Provinces, 1919-35.

NOTE.—Figures are for gross debenture debt unless otherwise indicated.

| Year.     | Prince<br>Edward<br>Island. <sup>1</sup> | Nova<br>Scotia. | New<br>Brunswick. <sup>2</sup> | Quebec.     | Ontario.    |
|-----------|--|-----------------|--------------------------------|-------------|-------------|
|           | \$                                       | \$              | \$                             | \$          | \$          |
| 1919..... | 970,100                                  | 17,863,881      | 11,188,467                     | 199,705,568 | 243,226,877 |
| 1920..... | 1,086,500                                | 19,192,402      | 10,841,406                     | 224,269,714 | 269,727,271 |
| 1921..... | 1,202,200                                | 22,451,743      | 7,578,507                      | 230,955,538 | 317,613,283 |
| 1922..... | 1,254,900                                | 23,541,759      | 10,025,633                     | 246,920,376 | 349,276,606 |
| 1923..... | 1,390,800                                | 24,248,782      | 7,974,362                      | 260,907,356 | 378,512,002 |
| 1924..... | 1,143,550                                | 25,348,664      | 17,350,225                     | 270,834,787 | 430,010,501 |
| 1925..... | 1,163,050                                | 25,722,635      | 10,660,863                     | 281,213,213 | 405,178,853 |
| 1926..... | 1,247,545                                | 26,281,152      | 17,091,550                     | 266,746,000 | 413,474,813 |
| 1927..... | 1,452,425                                | 28,381,616      | 15,707,699                     | 313,416,960 | 424,064,056 |
| 1928..... | 1,515,125                                | 29,049,412      | 19,594,335                     | 335,784,811 | 435,912,807 |
| 1929..... | 1,598,624                                | 29,026,110      | 21,343,890                     | 352,291,456 | 451,936,592 |
| 1930..... | 1,863,211                                | 30,132,204      | 20,942,938                     | 384,763,515 | 485,250,152 |
| 1931..... | 1,959,672                                | 31,836,025      | 22,165,501                     | 427,815,926 | 499,002,074 |
| 1932..... | 2,129,350                                | 31,606,140      | 24,752,873                     | 453,613,696 | 504,755,977 |
| 1933..... | 2,147,650                                | 32,772,717      | 24,667,900                     | 479,608,472 | 494,433,956 |
| 1934..... | 2,348,275                                | 33,818,115      | 26,495,037                     | 566,218,160 | 498,952,700 |
| 1935..... | 2,479,550                                | 33,866,013      | 27,538,898                     | 574,883,119 | 461,653,182 |

| Year.     | Manitoba.               | Saskat-<br>chewan. <sup>3</sup> | Alberta.                | British<br>Columbia. | Total. <sup>4</sup> |
|-----------|-------------------------|---------------------------------|-------------------------|----------------------|---------------------|
|           | \$                      | \$                              | \$                      | \$                   | \$                  |
| 1919..... | 55,562,788              | 39,585,388 <sup>5</sup>         | 66,870,464 <sup>6</sup> | 94,741,615           | 729,715,148         |
| 1920..... | 57,820,588              | 40,611,271                      | 57,205,275 <sup>6</sup> | 96,107,911           | 776,892,458         |
| 1921..... | 65,463,239              | 41,180,265                      | 53,429,558 <sup>6</sup> | 97,405,984           | 837,370,367         |
| 1922..... | 68,811,040              | 59,719,165                      | 60,832,650 <sup>6</sup> | 98,761,630           | 919,143,759         |
| 1923..... | 73,908,963              | 59,011,174                      | 70,999,611 <sup>6</sup> | 96,273,987           | 971,172,037         |
| 1924..... | 73,844,105              | 57,783,699                      | 65,414,317 <sup>6</sup> | 95,106,151           | 1,044,915,996       |
| 1925..... | 79,211,867              | 55,835,505                      | 57,908,503 <sup>6</sup> | 99,055,201           | 1,015,946,780       |
| 1926..... | 80,716,272              | 54,844,759                      | 56,950,712 <sup>6</sup> | 102,853,228          | 1,050,206,121       |
| 1927..... | 83,017,302              | 54,361,158                      | 62,414,660 <sup>6</sup> | 107,379,118          | 1,100,591,994       |
| 1928..... | 85,651,906              | 53,092,330                      | 63,428,853 <sup>6</sup> | 110,124,819          | 1,134,144,398       |
| 1929..... | 85,901,404              | 54,912,100                      | 78,473,392              | 118,483,618          | 1,193,971,105       |
| 1930..... | 84,879,707              | 59,000,183                      | 78,645,803              | 125,832,068          | 1,271,389,941       |
| 1931..... | 91,615,195              | 59,146,592                      | 78,679,571              | 129,913,890          | 1,341,684,440       |
| 1932..... | 92,471,256              | 59,238,281                      | 76,892,413              | 129,832,791          | 1,384,792,777       |
| 1933..... | 96,076,856 <sup>6</sup> | 57,286,400                      | 69,455,181              | 128,094,150          | 1,384,545,300       |
| 1934..... | 90,757,215              | 55,092,110                      | 67,886,011              | 127,172,942          | 1,452,850,505       |
| 1935..... | 95,557,149 <sup>7</sup> | 55,519,672                      | 67,251,233              | 127,370,560          | 1,446,120,276       |

<sup>1</sup> Municipalities included cannot be enumerated for the years 1919-23; figures represent Charlottetown and Kensington 1924-33; Montague for 1925-33; Summerside, Souris, Georgetown, and Alberton 1929-33; and Borden 1932-33. For later years the figures include all eight incorporated municipalities of the province.

<sup>2</sup> Municipalities included cannot be enumerated for the years 1919-23; figures are for 3 cities, 18 towns, 2 villages, and 15 counties in 1924; 3 cities, 13 towns, 2 villages, and 15 counties in 1925; 3 cities, 18 towns, 1 village, and 15 counties in 1926; 3 cities, 23 towns, 4 villages, and 15 counties in 1927, 1928 and 1929; 3 cities, 19 towns, 2 villages, and 15 counties in 1930; and 3 cities, 20 towns, 2 villages, and 15 counties from 1931.

<sup>3</sup> Statistics of school debt for villages and rural municipalities not included.

<sup>4</sup> Footnotes on constituent items should be noted in interpreting these totals.

<sup>5</sup> Includes deferred liabilities, not separable.

<sup>6</sup> Figures for this year are for net debenture debt.

<sup>7</sup> Includes schools.

### 33.—Principal Financial and Other Statistics of Canadian Cities and Towns with Populations of 10,000 or Over, 1935.

| Province and City.           | Area.  | Population as furnished by Municipality. | Total Assessed Value of Taxable Property. | Grand Total Receipts. | Grand Total Expenditures. | Total Assets. | Total Liabilities. |
|------------------------------|--------|--|---|-----------------------|---------------------------|---------------|--------------------|
|                              | acres. | No.                                      | \$  | \$                    | \$                        | \$            | \$                 |
| <b>Prince Edward Island—</b> |        |  |   |                       |                           |               |                    |
| Charlottetown.....           | 819    | 13,883                                   | 9,146,488                                 | 216,906               | 264,740                   | 3,102,252     | 2,355,877          |
| <b>Nova Scotia—</b>          |        |  |   |                       |                           |               |                    |
| Halifax.....                 | 4,403  | 59,275 <sup>1</sup>                      | 58,560,210                                | 3,380,309             | 3,380,309                 | 21,961,008    | 21,961,008         |
| Sydney.....                  | 3,730  | 25,000                                   | 12,013,260                                | 1,365,323             | 1,365,323                 | 5,784,681     | 5,784,681          |
| Glouce Bay.....              | 6,202  | 20,706 <sup>1</sup>                      | 5,120,000                                 | 687,367               | 685,807                   | 2,580,057     | 1,798,105          |
| <b>New Brunswick—</b>        |        |  |   |                       |                           |               |                    |
| Saint John.....              | 13,440 | 50,000                                   | 41,123,850                                | 2,921,512             | 2,699,037                 | 15,748,227    | 10,119,046         |
| Moncton.....                 | 2,093  | 21,039                                   | 22,109,005                                | 974,868               | 967,663                   | 7,848,761     | 7,318,113          |
| <b>Quebec—<sup>2</sup></b>   |        |  |   |                       |                           |               |                    |
| Montreal.....                | 32,254 | 850,000                                  | 977,401,355                               | 37,267,775            | 43,206,847                | 418,160,929   | 398,720,736        |
| Quebec.....                  | 5,754  | 145,000                                  | 128,411,719                               | 5,759,046             | 5,968,627                 | 52,446,036    | 48,545,987         |
| Verdun.....                  | 1,426  | 60,871                                   | 43,987,050                                | 2,044,296             | 2,051,567                 | 17,403,096    | 16,126,486         |
| Three Rivers.....            | 2,560  | 40,185                                   | 29,345,431                                | 1,997,466             | 2,022,486                 | 15,745,529    | 17,089,214         |
| Hull.....                    | 4,000  | 30,058                                   | 20,800,724                                | 1,290,395             | 1,401,478                 | 7,551,106     | 7,186,777          |
| Sherbrooke.....              | 3,104  | 29,512                                   | 27,524,485                                | 1,432,221             | 1,433,750                 | 13,503,036    | 8,800,874          |
| Outremont.....               | 975    | 29,300                                   | 43,554,576                                | 1,045,165             | 1,219,049                 | 9,828,157     | 9,073,158          |
| Westmount.....               | 976    | 26,000                                   | 67,397,492                                | 1,683,482             | 1,882,098                 | 15,472,576    | 14,065,364         |
| Lachine.....                 | 2,996  | 19,037                                   | 20,653,969                                | 873,889               | 833,543                   | 9,262,739     | 8,158,404          |
| Shawinigan Falls.....        | 1,610  | 16,485                                   | 25,771,619                                | 703,885               | 668,143                   | 7,882,608     | 6,470,663          |
| St. Hyacinthe.....           | 1,170  | 15,307                                   | 13,068,964                                | 412,798               | 444,317                   | 3,250,561     | 1,773,776          |
| Valleyfield.....             | 600    | 13,288                                   | 6,607,405                                 | 345,879               | 360,683                   | 1,642,889     | 1,684,415          |
| Chicoutimi.....              | 1,570  | 13,021                                   | 6,682,196                                 | 293,198               | 353,100                   | 3,403,352     | 2,464,789          |
| St. Jean.....                | 1,331  | 12,400                                   | 11,206,325                                | 320,045               | 306,868                   | 2,963,447     | 2,237,863          |
| Joliette.....                | 1,288  | 11,976                                   | 5,649,145                                 | 259,133               | 255,128                   | 2,511,018     | 1,581,247          |
| Lévis.....                   | 2,222  | 11,768                                   | 6,079,901                                 | 276,422               | 273,796                   | 2,328,870     | 1,515,522          |
| Groulx.....                  | 960    | 11,767                                   | 6,665,890                                 | 223,142               | 217,219                   | 1,707,006     | 1,207,747          |
| Jonquière.....               | 1,800  | 11,000                                   | 4,387,530                                 | 269,668               | 284,143                   | 2,773,618     | 2,617,942          |
| Sorel.....                   | 2,000  | 10,800                                   | 5,404,020                                 | 240,061               | 270,985                   | 1,744,467     | 1,748,281          |
| Thetford Mines.....          | 2,080  | 10,705                                   | 6,113,900                                 | 205,074               | 198,092                   | 1,510,974     | 549,831            |
| <b>Ontario—<sup>3</sup></b>  |        |  |   |                       |                           |               |                    |
| Toronto.....                 | 12,889 | 638,271                                  | 1,015,409,940                             |                       |                           |               |                    |
| Hamilton.....                | 9,273  | 154,020                                  | 168,787,850                               |                       |                           |               |                    |
| Ottawa.....                  | 2,962  | 140,316                                  | 156,480,054                               |                       |                           |               |                    |
| Windsor.....                 | 4,135  | 98,745                                   | 105,609,373                               |                       |                           |               |                    |
| London.....                  | 7,231  | 75,484                                   | 84,179,187                                |                       |                           |               |                    |
| Kitchener.....               | 2,953  | 31,933                                   | 26,254,770                                |                       |                           |               |                    |
| Brantford.....               | 1,709  | 31,212                                   | 28,149,325                                |                       |                           |               |                    |
| St. Catharines.....          | 1,860  | 26,571                                   | 24,909,324                                |                       |                           |               |                    |
| Port William.....            | 9,865  | 24,371                                   | 30,712,304                                |                       |                           |               |                    |
| Kingston.....                | 1,835  | 24,173                                   | 19,363,688                                |                       |                           |               |                    |
| Oshawa.....                  | 2,589  | 24,097                                   | 16,213,439                                |                       |                           |               |                    |
| Sault Ste. Marie.....        | 4,400  | 22,837                                   | 19,496,177                                |                       |                           |               |                    |
| Peterborough.....            | 1,898  | 22,973                                   | 27,444,975                                |                       |                           |               |                    |
| Guelph.....                  | 2,476  | 21,173                                   | 14,331,005                                |                       |                           |               |                    |
| Port Arthur.....             | 6,514  | 20,352                                   | 26,243,360                                |                       |                           |               |                    |
| Sudbury.....                 | 2,710  | 20,079                                   | 12,734,079                                |                       |                           |               |                    |
| Niagara Falls.....           | 1,278  | 18,527                                   | 18,434,030                                |                       |                           |               |                    |
| Sarnia.....                  | 1,375  | 18,064                                   | 17,994,928                                |                       |                           |               |                    |
| Stratford.....               | 2,123  | 17,043                                   | 14,752,560                                |                       |                           |               |                    |
| Timmins.....                 | 738    | 17,535                                   | 6,907,966                                 |                       |                           |               |                    |
| North Bay.....               | 2,100  | 16,594                                   | 9,663,104                                 |                       |                           |               |                    |
| St. Thomas.....              | 1,898  | 16,156                                   | 15,289,552                                |                       |                           |               |                    |
| Chatham.....                 | 1,005  | 15,957                                   | 14,566,094                                |                       |                           |               |                    |
| Belleville.....              | 1,800  | 14,411                                   | 10,596,880                                |                       |                           |               |                    |
| Galt.....                    | 1,406  | 13,958                                   | 11,153,355                                |                       |                           |               |                    |
| Owen Sound.....              | 2,909  | 13,139                                   | 8,684,087                                 |                       |                           |               |                    |
| Cornwall.....                | 700    | 12,507                                   | 9,495,270                                 |                       |                           |               |                    |
| Woodstock.....               | 1,525  | 10,936                                   | 7,577,867                                 |                       |                           |               |                    |
| Welland.....                 | 768    | 10,402                                   | 11,046,670                                |                       |                           |               |                    |
| Pembroke.....                | 1,323  | 10,173                                   | 5,387,288                                 |                       |                           |               |                    |

<sup>1</sup> Census of 1931.<sup>2</sup> Statistics of receipts, expenditures, assets, and liabilities are not strictly comparable with years previous to 1934 owing to modifications of provincial report in 1934.<sup>3</sup> Owing to a revision of the system of reporting municipal statistics, incomplete returns only are available for receipts, expenditures, assets, and liabilities.

### 33.—Principal Financial and Other Statistics of Canadian Cities and Towns with Populations of 10,000 or Over, 1935—concluded.

| Province and City.       | Area.  | Population as furnished by Municipality. | Total Assessed Value of Taxable Property. | Grand Total Receipts. | Grand Total Expenditures. | Total Assets.           | Total Liabilities. |
|--------------------------|--------|--|---|-----------------------|---------------------------|-------------------------|--------------------|
|                          | acres. | No.                                      | \$  | \$                    | \$                        | \$                      | \$                 |
| <b>Manitoba—</b>         |        |  |   |                       |                           |                         |                    |
| Winnipeg.....            | 15,287 | 224,998                                  | 209,745,251                               | 1                     | 1                         | 46,102,787 <sup>2</sup> | 78,603,140         |
| Brandon.....             | 5,427  | 17,082 <sup>1</sup>                      | 11,594,327                                | 1                     | 1                         | 3,868,232 <sup>2</sup>  | 4,739,013          |
| St. Boniface.....        | 11,642 | 16,306 <sup>2</sup>                      | 9,171,595                                 | 1                     | 1                         | 6,088,283 <sup>2</sup>  | 8,087,596          |
| <b>Saskatchewan—</b>     |        |  |   |                       |                           |                         |                    |
| Regina.....              | 8,936  | 53,750                                   | 42,554,530                                | 6,253,028             | 5,813,887                 | 28,010,739              | 18,673,171         |
| Saskatoon.....           | 8,000  | 42,250                                   | 34,113,870                                | 4,951,402             | 4,544,337                 | 20,818,536              | 17,731,285         |
| Moose Jaw.....           | 9,410  | 20,000                                   | 18,164,840                                | 1,891,942             | 1,607,761                 | 12,563,954              | 7,099,367          |
| Prince Albert.....       | 9,713  | 10,500                                   | 6,721,413                                 | 576,675               | 587,413                   | 4,965,627               | 3,764,184          |
| <b>Alberta—</b>          |        |  |   |                       |                           |                         |                    |
| Calgary.....             | 25,920 | 85,000                                   | 64,252,684                                | 5,305,971             | 5,387,721                 | 1                       | 25,751,034         |
| Edmonton.....            | 27,200 | 81,621                                   | 54,613,530                                | 7,847,268             | 8,077,405                 | 1                       | 38,469,502         |
| Lethbridge.....          | 6,944  | 14,000                                   | 10,113,155                                | 813,537               | 738,883                   | 1                       | 4,257,497          |
| Medicine Hat.....        | 10,880 | 10,300                                   | 7,291,095                                 | 703,040               | 650,047                   | 1                       | 2,959,984          |
| <b>British Columbia—</b> |        |  |   |                       |                           |                         |                    |
| Vancouver.....           | 27,965 | 240,593                                  | 313,460,102                               | 13,576,090            | 14,238,270                | 1                       | 85,087,867         |
| Victoria.....            | 4,637  | 39,082                                   | 48,475,650                                | 2,642,552             | 3,329,197                 | 1                       | 17,081,430         |
| New Westminster..        | 3,481  | 17,524                                   | 19,313,273                                | 1,155,604             | 1,297,473                 | 1                       | 7,074,905          |

<sup>1</sup> Not available.<sup>2</sup> Real property and public utility assets not included.<sup>3</sup> Census of 1931.

## Section 4.—National Wealth and Income.

### Subsection 1.—National Wealth.

The economic concept of national wealth is concrete and purely material since economics is not able to take cognizance of the immense field of intangible wealth created by churches, schools and other institutions, nor of such things as climate, location, health, etc., which promote individual and national welfare and are often referred to as wealth, but in a different sense from that meant here. Our national wealth, as here understood, is the sum total of our physical assets. It includes all farms, factories, equipment, merchandise in stock, and the thousand and one material things which Canada as a nation possesses. It does not include such things as stocks, bonds, mortgages, etc., which an individual regards as wealth but which, in reality, are mere evidences of ownership. From the point of view of the nation as a whole, all such claims and counter claims must be ruled out. There is, too, a large field of intangible wealth such as that represented by organizations for doing business of all kinds, the reputation of business firms, managerial experience, etc., of which no account can be taken in a statistical determination of wealth. Further, a distinction must be made between 'present' and 'potential' wealth. Canada has an immense potential wealth in forests, mines, etc., the present value of which it is impossible to estimate.

Notwithstanding the enormous statistical and economic difficulties inherent in any evaluation of the national wealth, the justification for such attempts lies in the importance of such information for an analysis of a nation's social and economic position. A general idea of the size and composition of the national wealth is essential for the intelligent consideration of many problems, both national and international, although, in view of the numerous elements of uncertainty in a calculation of this nature, the statistics must be regarded as indicative rather than strictly accurate; when carefully prepared they hold a very important place in a national statistical system.

There are several methods of computing national wealth, *i.e.*, the aggregate value of the public and private property within the nation apart from undeveloped



natural resources. Perhaps the most familiar of these methods is that of working back to capital values through income tax returns, but this can be applied only in countries where small as well as large incomes are assessed for income tax. A second method is that of estimation from probate returns, the value of the estates of deceased persons being regarded as representative. A third is that of a complete census, based upon a canvass of the individual. A fourth method, namely, the so-called 'inventory' method, is often employed.\* The estimate of Canada's wealth herein presented is based on the inventory principle, *i.e.*, an attempt is made to secure for the nation an approximation of the businessman's inventory of his possessions. This method consists in totalling the amounts known from various sources to be invested in agriculture, manufacturing, dwellings, etc. It does not include the value of undeveloped natural resources but only natural wealth which has been appropriated. For instance, it includes the value of the machinery and other capital equipment used in coal mining but not the unmined coal; the boats used in fishing but not the fish in the sea; the power plants and equipment used in developing water power but not the waterfalls themselves. In the case of forest wealth partial exception is made by the inclusion of accessible raw materials. When making comparison between the different provinces it should be remembered that this method tends to understate the wealth of any section of the country which is rich in mines, fisheries or water power.

Whatever method is used, difficulty arises when we try to reduce all the things which go to make up wealth (things which once created are not themselves subject to violent change) to a common denominator. Estimates of national wealth must always be expressed in terms of the national currency. Yet the purchasing power of the currency unit is always fluctuating and since 1929 had increased at one point (February, 1933) by more than 50 p.c. in terms of wholesale prices. Even in 1930, the average index number of wholesale prices was down by nearly 10 p.c. from 1929, while in December of that year the average index number of wholesale prices was 19 p.c. lower than in the same month of 1929.

The effect of such drastic reductions in values is first felt by the commodities which are being currently produced and, through these commodities, the dollar value of production is diminished and consequently the national income of a country where most people are producers. Ultimately, a persistent decline of this character affects the capital values of real estate, buildings, machinery, etc., and its influence is then felt in a reduction in the national wealth as stated in dollars.

The first official estimate of national wealth issued by the Dominion Bureau of Statistics was for 1921, being based on the census data of that year. The national wealth was then placed at \$22,195,000,000. Later estimates were \$25,673,000,000 for 1925 and \$27,668,000,000 for 1927. The estimates for 1921, 1925 and 1927 are not exactly comparable with those for 1929 and 1933 given below, but are sufficiently so for most purposes. The estimate for 1929 is \$31,276,000,000, and the 1933 estimate \$25,768,000,000. The former presents a picture at the peak of domestic prosperity, whereas that of 1933 reflects the writing down of values resulting from the depression. The 1933 estimate is the latest that has been published.

**Wealth of Canada by Items, 1929 and 1933.**—In the items showing the composition of the national wealth, as set out in Table 34, care has been taken to exclude duplication. In any consideration of the individual items it should be

\*An explanation of method and of the background of early estimates of national wealth as applied to Canada will be found in the article "The Wealth of Canada and Other Nations" by R. H. Coats, Dominion Statistician, published in the *Journal of the Canadian Bankers' Association*, October, 1919.

remembered that each item covers only the portion of wealth which is stated in the description attached thereto. For instance, the item "Fisheries" includes only capital invested in primary operations. Capital invested in fish-canning and -curing establishments is included with "Manufactures", though this also might be considered as part of the wealth connected with "Fisheries". Similarly, the items for "Manufactures" do not include lands and buildings in urban centres which are shown under the heading "Urban Real Property".\*

\* A fuller explanation of the composition of the separate items is contained in the bulletin "Canada's National Wealth", obtainable from the Dominion Statistician.

### 34.—Estimate of the National Wealth of Canada, with Percentage and Per Capita Distribution of Component Items, 1929 and 1933.

NOTE.—For discussion of these items, see p. 871 of the 1933 Year Book and the bulletin referred to above.

| Classification of Wealth.  | Aggregate Amounts. |                   | Percentages of Totals. |               | Average Amounts per Head of Population. <sup>1</sup> |                 |
|--|--------------------|-------------------|------------------------|---------------|--|-----------------|
|  | 1929.              | 1933.             | 1929.                  | 1933.         | 1929.  | 1933.           |
|  | \$'000             | \$'000            | p.c.                   | p.c.          | \$   | \$              |
| Form values (land, buildings, implements, machinery, and live stock).....  | 6,306,353          | 4,760,844         | 20.17                  | 18.48         | 629.01   | 445.78          |
| Agricultural products in the possession of farmers and traders.....  | 1,631,124          | 802,946           | 5.22                   | 3.11          | 162.04   | 75.17           |
| <b>Totals, Agricultural Wealth.....</b>  | <b>7,939,477</b>   | <b>5,563,790</b>  | <b>25.39</b>           | <b>21.59</b>  | <b>791.65</b>  | <b>520.90</b>   |
| Mines (capital employed).....  | 867,021            | 800,292           | 2.77                   | 3.10          | 86.45  | 74.93           |
| Forests (estimated value of accessible raw materials, pulpwood and capital invested in woods operations).....                                  | 2,299,903          | 2,090,821         | 7.35                   | 3.11          | 229.33   | 195.75          |
| Fisheries (capital invested in boats, gear, etc., in primary operations).....  | 33,935             | 25,380            | 0.11                   | 0.10          | 3.38   | 2.38            |
| Central electric stations (capital invested in lands and buildings other than office buildings and in equipment, materials, etc.)....          | 1,003,070          | 1,309,801         | 3.21                   | 5.08          | 100.02   | 122.63          |
| Manufactures (machinery and tools, and estimate for capital in rural lands and buildings, duplication excluded).....                           | 1,421,430          | 949,721           | 4.55                   | 3.09          | 141.73   | 88.92           |
| Manufactures (materials on hand and stocks in process, duplication excluded).....  | 837,805            | 368,070           | 2.66                   | 1.43          | 83.54  | 34.46           |
| Construction, custom and repair (estimate of capital invested in machinery and tools and materials on hand).....                               | 137,685            | 32,385            | 0.44                   | 0.13          | 13.73  | 3.03            |
| Trading establishments (estimate of the value of furniture and fixtures, equipment and materials on hand).....                                 | 1,039,584          | 708,043           | 3.32                   | 2.75          | 103.66   | 68.29           |
| Steam railways (investment in road and equipment).....   | 3,321,033          | 3,366,464         | 10.62                  | 13.06         | 331.14   | 315.09          |
| Electric railways (investment in road and equipment).....  | 240,111            | 223,704           | 0.77                   | 0.87          | 23.94  | 20.94           |
| Telephones (cost of property and equipment).....   | 291,559            | 330,491           | 0.93                   | 1.28          | 29.07  | 30.94           |
| Urban real property (assessed valuations and exempted property and estimate for under-valuation by assessors and for roads, sewers, etc.)..... | 8,251,011          | 6,913,530         | 26.38                  | 26.63         | 822.72   | 647.27          |
| Canals (amount expended on construction to Mar. 31, 1930).....   | 241,946            | 267,671           | 0.77                   | 1.04          | 24.13  | 25.06           |
| Harbours (approximate amount expended to Mar. 31, 1930).....   | 405,346            | 502,264           | 1.30                   | 1.95          | 40.42  | 47.02           |
| Shipping (including aircraft).....   | 150,827            | 135,506           | 0.48                   | 0.53          | 15.04  | 12.69           |
| Automobiles (estimate of the value of automobiles registered).....   | 690,039            | 392,211           | 2.21                   | 1.52          | 68.81  | 36.72           |
| Highways, etc.....   | 532,972            | 689,333           | 1.70                   | 2.68          | 53.14  | 64.54           |
| Household furnishings, clothing, etc. (value estimated from production and trade statistics).....  | 1,370,000          | 913,397           | 4.38                   | 3.54          | 136.60   | 85.52           |
| Specie, coin and other currency held by the Government, chartered banks and the general public.....  | 201,030            | 186,362           | 0.64                   | 0.72          | 20.04  | 17.45           |
| <b>Grand Totals.....</b>   | <b>31,276,814</b>  | <b>25,768,236</b> | <b>100.00</b>          | <b>100.00</b> | <b>3,118.54</b>                                      | <b>2,412.53</b> |

<sup>1</sup> These averages are based on the estimates of population as given in Table 35, p. 883.

**Aggregate and Per Capita Wealth, by Provinces, 1929 and 1933.**—As regards the provincial distribution of wealth in 1933, Ontario ranked first with an estimated aggregate wealth of \$8,796,000,000 or 34.14 p.c. of the total; Quebec second with \$6,738,000,000 or 26.15 p.c.; Saskatchewan third with \$2,527,000,000 or 9.81 p.c.; and British Columbia fourth with \$2,431,000,000 or 9.43 p.c. of the whole.

While Ontario and Quebec led in absolute wealth, the western provinces came first in per capita wealth. British Columbia held first rank with a per capita wealth of \$3,414, Alberta second with \$2,721, and Saskatchewan third with \$2,711. Ontario with a per capita wealth of \$2,468 was fourth, Quebec was fifth with \$2,269, and Manitoba sixth with \$2,201. The per capita wealth for the whole Dominion was estimated at \$2,413.

Further details, including revised figures for 1929, are shown in Table 35. In 1929 the provinces held the same relative places, both as regards aggregate and per capita wealth.

### 35.—Provincial Distribution of the National Wealth of Canada, with Percentage and Per Capita Analyses, 1929 and 1933.

*NOTE.*—Figures for 1921 and 1925 are given on pp. 849-850 of the 1927-28 Year Book, and for 1927 on p. 870 of the 1931 Year Book.

| Year and Province.        | Estimated<br>Wealth.  | Percentage<br>Distribution<br>of<br>Wealth. | Estimated<br>Population,<br>June 1. | Percentage<br>Distribution<br>of<br>Population. | Wealth<br>per<br>Capita. |
|---------------------------|-----------------------|---|-------------------------------------|---|--------------------------|
|                           | \$                    | p.c.  | No.                                 | p.c.  | \$                       |
| <b>1929.</b>              |                       |   |                                     |   |                          |
| Prince Edward Island..... | 167,117,000           | 0.54  | 88,000                              | 0.88  | 1,869                    |
| Nova Scotia.....          | 925,822,000           | 2.96  | 515,000                             | 5.14  | 1,798                    |
| New Brunswick.....        | 855,511,000           | 2.74  | 404,000                             | 4.03  | 2,118                    |
| Quebec.....               | 8,403,854,000         | 26.87                                       | 2,772,000                           | 27.64   | 3,032                    |
| Ontario.....              | 10,655,562,000        | 34.07                                       | 3,554,000                           | 35.24   | 3,196                    |
| Manitoba.....             | 1,979,141,000         | 6.33  | 677,000                             | 6.75  | 2,923                    |
| Saskatchewan.....         | 3,088,281,000         | 9.87  | 883,000                             | 8.80  | 3,497                    |
| Alberta.....              | 2,427,957,000         | 7.70  | 684,000                             | 6.82  | 3,550                    |
| British Columbia.....     | 2,756,844,000         | 8.81  | 659,000                             | 6.57  | 4,183 <sup>1</sup>       |
| Yukon.....                | 15,725,000            | 0.05  | 4,000                               | 0.04  |                          |
| <b>Totals.....</b>        | <b>31,275,814,000</b> | <b>100.00</b>                               | <b>10,029,000<sup>2</sup></b>       | <b>100.00<sup>2</sup></b>                       | <b>3,119</b>             |
| <b>1933.</b>              |                       |   |                                     |   |                          |
| Prince Edward Island..... | 138,699,000           | 0.54  | 80,000                              | 0.83  | 1,558                    |
| Nova Scotia.....          | 790,290,000           | 3.07  | 522,000                             | 4.89  | 1,514                    |
| New Brunswick.....        | 730,297,000           | 2.83  | 420,000                             | 3.93  | 1,739                    |
| Quebec.....               | 6,738,181,000         | 26.15                                       | 2,970,000                           | 27.81   | 2,269                    |
| Ontario.....              | 8,795,801,000         | 34.14                                       | 3,564,000                           | 32.09   | 2,468                    |
| Manitoba.....             | 1,562,421,000         | 6.06  | 710,000                             | 6.75  | 2,201                    |
| Saskatchewan.....         | 2,527,147,000         | 9.81  | 932,000                             | 8.90  | 2,711                    |
| Alberta.....              | 2,035,576,000         | 7.90  | 748,000                             | 7.09  | 2,721                    |
| British Columbia.....     | 2,430,890,000         | 9.43  | 712,000                             | 6.67  | 3,414 <sup>1</sup>       |
| Yukon.....                | 18,934,000            | 0.07  | 4,000                               | 0.04  |                          |
| <b>Totals.....</b>        | <b>32,568,236,000</b> | <b>100.00</b>                               | <b>10,681,000<sup>2</sup></b>       | <b>100.00<sup>2</sup></b>                       | <b>2,413</b>             |

<sup>1</sup> As the statistics for Yukon are uncertain, the per capita estimate of wealth is not shown. <sup>2</sup> Includes the population of the Northwest Territories: 9,000 in 1929 and 10,000 in 1933, 0.09 p.c. in both cases.

**Analyses of Itemized Wealth, by Provinces, 1929 and 1933.**—In Table 39 on pp. 882-883 of the 1936 Year Book detailed statistics of the wealth of each province by leading items were published. This information is not repeated in this edition.

**Subsection 2.—National Income\* and Income Tax Statistics.**

**Definition of National Income.**—"The annual labour of every nation is the fund which originally supplies it with all the necessities and conveniences of life which it annually consumes, and which consist always either in the immediate produce of that labour, or in what is purchased with that produce from other nations."—ADAM SMITH. This is perhaps the earliest modern definition of 'national income' and is still among the best, when it is interpreted in accordance with modern knowledge regarding the balance of international payments and the necessity of keeping productive equipment in running order. It must also be remembered that while the national income consists in goods and services of the most varied kinds, its total amount can be stated only in terms of money.

Following, is a statement of the nature of national income from the standpoint of the statistical technique used in its compilation, the description also being in line with present-day economic theory.

"Year in, year out, the people of this country, assisted by the stock of goods in their possession, render a vast volume of work toward the satisfaction of their wants. Some of this work eventuates in commodities, such as coal, steel, clothing, furniture, automobiles; other takes the form of direct personal services, such as are rendered by physicians, lawyers, government officials, domestic servants, and the like. Both types of activity involve an effort on the part of an individual and an expenditure of some part of the country's stock of goods. If all commodities produced and all personal services rendered during the year are added at their market value, and from the resulting total we subtract the value of that part of the nation's stock of goods which was expended (both as raw materials and as capital equipment) in producing this total, then the remainder constitutes the net product of the national economy during the year. It is referred to as national income produced, and may be defined briefly as that part of the economy's end-product which is attributable to the efforts of the individuals who comprise a nation."<sup>†</sup>

**Approaches to the Measurement of National Income.**—The statistical measurement of the national income is a matter of great difficulty, and the most unremitting research into all the relevant statistics, in order to establish a representative figure, must always leave an appreciable margin of error. Indeed, it is no easy matter even for an individual to establish an accurate money figure as representing his *total* income, especially where he has to include in that total income, besides his cash income, an allowance for the rental value of his (owned) house and his durable belongings therein, together with an allowance for the money value of the commodities produced and consumed within the household (such as eggs and garden produce), and of the services, ordinarily bought and sold but rendered gratis within the family circle. Yet this is the only logical way of obtaining the total income of the family. While such income, not received directly in money, but in commodities produced and services rendered, is not, except for house and furniture rent, an important percentage of the family income in most urban families, it con-

\*The subsection on national income has been revised by Sydney B. Smith, M.A., Dominion Bureau of Statistics.

†See *National Income 1920-32 and 1920-35*, U.S. Department of Commerce.

stitutes a very important part of the income of most rural families, who, to a much larger extent, consume the commodities which they themselves produce. For this reason, indeed, comparisons between the incomes of urban families and rural families are often misleading, through not allowing for the non-money income of the latter. Certainly most people never think of their non-money income as income at all, and would never consider putting the rental value of their owned homes into their income tax returns. Indeed, the income tax authorities of Canada do not expect them to do so.

Difficulties experienced in expressing the total income of an individual as a single figure are multiplied a thousand-fold in any attempt to express the total of the national income as a single figure. The individual and corporate incomes which are to be combined into this grand total *without duplication* are of such a heterogeneous character that any figure which may be given as the grand total of the national income must include some margin of error.

The computation of the national income involves research by two different avenues of approach.

(1) Statistical data on an annual basis is collected by the Bureau of Statistics for most of the groups engaged in commodity production, trade and leading branches of transportation. The gross revenue received by each of these groups is taken as the starting point. The cost of raw materials, process supplies, fuel and purchased electricity is the first deduction. It is necessary also to subtract the miscellaneous expenses including rent, insurance, taxes, etc. The collection of miscellaneous expenses by the census of industry was discontinued after 1921, but the relationships established in the first three years of the post-war period are proving valuable as a basis of estimate. A special questionnaire has also been distributed to obtain a sample of miscellaneous expenses for the years 1929, 1933, and 1936.

Having deducted the miscellaneous expenses, the residue may be called the 'gross national product'. The next step is to estimate depreciation and depletion as a percentage of the fixed capital employed by the several groups. The gross national product less depreciation and depletion is regarded as the national income. It is not feasible to apply this treatment to all industrial groups of the Bureau's classification, but a growing proportion of the field is amenable to the method. Under the heading of real estate in the finance group, an estimate of the imputed rent of owned houses is included. The international balance of dividend and long-term interest payments is also deducted as a final adjustment.

(2) A second approach is by a summation of payments made to individuals. The normal source of information for this method is the tabulation of income tax returns. Such information forms the basis of the excellent estimates of national income prepared for the United Kingdom and the United States. However, the considerable expense involved in tabulation has militated against such elaborately detailed presentation of this material in Canada.

The census of industry furnishes data of the amount of salaries and wages paid, and wage data for decennial census years are available through the population census for each of the main industrial groups. The indexes of wage rates published by the Department of Labour and the monthly survey of employment conducted by the

Bureau, are useful in estimating earnings for the intercensal years where specific information is not otherwise available (see p. 767). The numbers of persons working on own account and employers as reported by the decennial census is valuable for estimating the withdrawals of entrepreneurs. Volumes X and XI of the Census Reports present pertinent data regarding wholesale and retail trade and a portion of the service field.

A sample of dividend and bond interest payments may be compiled from an examination of company accounts. The net amount of dividends paid by privately-owned companies as well as by corporations with public investment interest is also available. It is possible to estimate from census data the total amount of net rentals paid on dwellings. The contribution of government to the national income consists of the net interest paid on the funded debt and the salaries and wages, service and social pensions, compensation payments, and relief.

The aggregate paid to individuals is adjusted for business gains or losses. The latter signify the additions to or deductions from surplus by business concerns. After making the adjustment, the result is an estimate of the national income which should conform closely to the total prepared by the alternate production method.

The Bureau's present solution is to make two independent estimates of the national income for each year. One estimate is derived from a study of the separate industrial fields in which the income originates, the second is mainly an aggregate of incomes received by individuals with an adjustment for business gains or losses.

The computation of the national income by the two-fold method outlined above is in process as the Year Book goes to press, but is not yet ready for publication and the estimates based on the Survey of Production appearing in the edition of 1937 are not being extended pending the revision.

**Income-Tax Assessment as a Measure of National Income.\***—In those countries of the world where an income tax has been established for a considerable time the figures of the assessed income have been generally accepted as furnishing a guide both to the amount and to the distribution of the total national income by classes. Estimates of the national income, based upon income tax statistics, have been published, for example, in the United Kingdom and in the United States.

The War introduced the income tax into Canada in 1917. Under the Income War Tax Act, the returns of the incomes of individuals and corporations are filed in the year following the earning of the incomes. Further, since the fiscal year ends on Mar. 31, the bulk of the receipts from the income tax usually comes in during the first two or three months of the next following fiscal year. Thus the income tax received in the fiscal year ended Mar. 31, 1937, represents, in the main, income tax collected on 1935 income, and the income tax collected in the fiscal year ended 1936 represents, in the main, 1934 income. It is important that these facts should be kept in mind when considering income assessed in different years. Further, the particular provisions of the income tax existing at any particular time, and the amendments extending or contracting the scope of the income tax by raising or

\* This material has been revised by the Income Tax Branch of the Department of National Revenue.

lowering the limit of taxable income, or increasing or lowering the allowances for children, etc., should also be borne in mind in the consideration of the following tables. Among these, Table 36 gives the grand total income of individuals and corporations assessed for the purpose of income war tax for the past seventeen years, while Table 37 gives this income by provinces for the past five years and Table 38 shows the amount of income tax collected by provinces in the past five years. Tables 39 and 40 analyse the payments of income tax in the past four years by size of income class and by occupation of the taxpayer, respectively.

**36.—Income Assessed for the Purposes of the Income War Tax, by Individuals and Corporations, fiscal years ended Mar. 31, 1921-37.**

| Fiscal Year. | Individuals. |                          | Corporations. |                   | Total<br>Income<br>Assessment. |
|--------------|--------------|--------------------------|---------------|-------------------|--------------------------------|
|              | No.          | Assessment.<br>\$        | No.           | Assessment.<br>\$ |                                |
| 1921.....    | 190,561      | 1,058,577,617            | 3,696         | 403,951,553       | 912,410,429                    |
| 1922.....    | 290,584      | 823,100,878              | 8,288         | 269,307,047       | 1,482,529,170                  |
| 1923.....    | 281,182      |                          | 6,010         |                   | 1,092,407,925                  |
| 1924.....    | 239,036      | 802,617,497              | 5,569         | 305,410,374       | 1,108,027,871                  |
| 1925.....    | 225,514      | 701,892,820              | 6,236         | 297,207,428       | 999,160,248                    |
| 1926.....    | 209,539      | 697,016,973              | 5,738         | 306,083,673       | 1,003,110,646                  |
| 1927.....    | 116,029      | 465,689,909 <sup>1</sup> | 5,777         | 278,494,991       | 744,184,891                    |
| 1928.....    | 122,026      | 604,786,116              | 6,121         | 435,496,832       | 1,040,282,948                  |
| 1929.....    | 129,663      | 608,687,536              | 7,488         | 526,714,731       | 1,195,402,267                  |
| 1930.....    | 142,154      | 781,174,030              | 7,957         | 544,019,414       | 1,325,193,444                  |
| 1931.....    | 143,601      | 815,714,084              | 7,603         | 555,763,956       | 1,371,478,040                  |
| 1932.....    | 135,621      | 600,107,257              | 6,010         | 382,468,963       | 982,606,220                    |
| 1933.....    | 166,972      | 685,543,980              | 6,483         | 259,547,584       | 944,091,564                    |
| 1934.....    | 203,957      | 617,717,251              | 8,913         | 211,614,313       | 829,331,564                    |
| 1935.....    | 184,105      | 655,350,912              | 10,458        | 273,174,118       | 928,555,030                    |
| 1936.....    | 199,102      | 714,333,602 <sup>2</sup> | 10,970        | 359,168,514       | 1,073,442,116 <sup>2</sup>     |
| 1937.....    | 217,049      | 728,013,754              | 12,146        | 352,846,376       | 1,080,860,070                  |

<sup>1</sup> Not segregated into individual and corporation groups for this year. <sup>2</sup> In 1927 the exemption limits were raised from \$2,000 to \$5,000 for married, and from \$1,000 to \$1,500 for single persons.

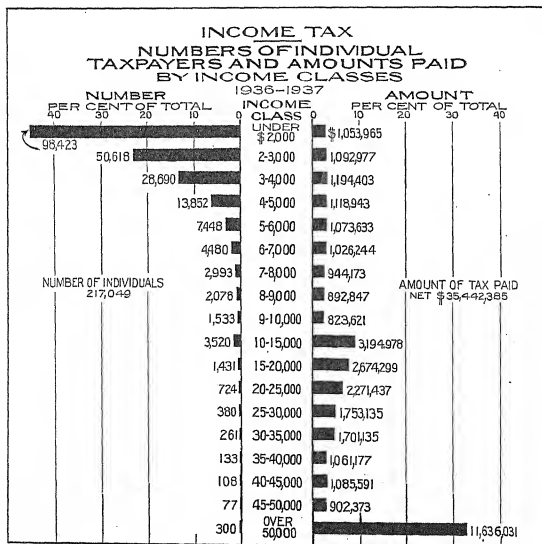
<sup>3</sup> Revised since the publication of the 1937 Year Book.

**37.—Income Assessed for the Purposes of the Income War Tax, by Provinces, fiscal years ended Mar. 31, 1933-37.**

| Province.                 | 1933.              | 1934.              | 1935.              | 1936.                | 1937.                |
|---------------------------|--------------------|--------------------|--------------------|----------------------|----------------------|
|                           | \$                 | \$                 | \$                 | \$                   | \$                   |
| Prince Edward Island..... | 2,015,664          | 2,072,019          | 2,256,109          | 4,579,652            | 4,440,050            |
| Nova Scotia.....          | 23,699,355         | 19,701,482         | 21,405,909         | 21,794,087           | 23,909,857           |
| New Brunswick.....        | 16,253,444         | 16,551,288         | 14,207,882         | 14,380,098           | 16,539,884           |
| Quebec.....               | 259,566,510        | 179,807,900        | 273,987,869        | 357,488,710          | 331,710,154          |
| Ontario.....              | 448,057,907        | 428,279,628        | 449,885,677        | 501,917,707          | 517,310,542          |
| Manitoba.....             | 53,808,386         | 45,049,397         | 47,188,764         | 46,760,697           | 48,430,521           |
| Saskatchewan.....         | 19,765,936         | 19,656,899         | 15,226,696         | 15,347,873           | 16,918,431           |
| Alberta.....              | 32,757,215         | 43,562,512         | 35,653,990         | 36,171,337           | 30,339,760           |
| British Columbia.....     | 87,124,464         | 73,972,698         | 67,822,116         | 74,959,621           | 83,771,834           |
| Yukon.....                | 1,042,677          | 1,187,641          | 920,657            | 1,034,724            | 958,431              |
| <b>Totals.....</b>        | <b>944,091,564</b> | <b>829,331,561</b> | <b>928,555,630</b> | <b>1,073,442,116</b> | <b>1,080,860,070</b> |

## 38.—Amounts of Income Tax Collected, by Provinces, fiscal years ended Mar. 31, 1933-37.

| Province.                 | 1933.             | 1934. <sup>1</sup> | 1935. <sup>1</sup> | 1936. <sup>1</sup> | 1937. <sup>1</sup> |
|---------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
|                           | \$                | \$                 | \$                 | \$                 | \$                 |
| Prince Edward Island..... | 84,860            | 128,932            | 329,067            | 426,893            | 872,985            |
| Nova Scotia.....          | 889,349           | 910,801            | 957,893            | 1,206,481          | 1,375,274          |
| New Brunswick.....        | 592,411           | 658,192            | 570,402            | 811,186            | 910,940            |
| Quebec.....               | 21,452,067        | 20,153,390         | 20,483,134         | 25,205,466         | 29,301,603         |
| Ontario.....              | 30,681,322        | 31,546,913         | 35,935,202         | 45,059,358         | 58,162,075         |
| Manitoba.....             | 2,134,393         | 1,921,908          | 1,922,323          | 2,204,596          | 2,484,464          |
| Saskatchewan.....         | 338,512           | 371,283            | 296,896            | 327,843            | 409,395            |
| Alberta.....              | 1,408,126         | 1,390,425          | 1,298,740          | 1,599,511          | 1,850,705          |
| British Columbia.....     | 4,082,526         | 3,872,376          | 4,526,254          | 5,512,408          | 6,738,966          |
| Yukon.....                | 11,092            | 26,504             | 16,073             | 17,850             | 23,519             |
| Head Office.....          | 392,029           | 418,448            | 470,792            | 338,211            | 235,296            |
| <b>Totals.....</b>        | <b>62,066,697</b> | <b>61,399,172</b>  | <b>66,808,066</b>  | <b>82,709,803</b>  | <b>102,365,212</b> |

<sup>1</sup> Includes the 5 p.c. tax on interest and dividends imposed in the 1933 fiscal year. (See p. 895-6.)



### 39.—Numbers of Individual and Corporate Taxpayers, by Size of Income and Amount of Taxes Paid under the Income War Tax Act, fiscal years ended Mar. 31, 1931-37.

| Income Class.             | 1934.              |                         | 1935.               |                         | 1936.               |                         | 1937.   |                         |
|---------------------------|--------------------|-------------------------|---------------------|-------------------------|---------------------|-------------------------|---------|-------------------------|
|                           | No.                | \$                      | No.                 | \$                      | No.                 | \$                      | No.     | \$                      |
| INDIVIDUALS.              |                    |                         |                     |                         |                     |                         |         |                         |
| Under \$2,000.....        | 93,316             | 989,063                 | 85,385              | 950,120                 | 89,724              | 967,387                 | 98,423  | 1,053,865               |
| \$ 2,000 to \$ 3,000...   | 46,207             | 1,015,153               | 41,918              | 938,923                 | 46,198              | 1,042,133               | 50,018  | 1,002,977               |
| \$ 3,000 to \$ 4,000...   | 27,778             | 1,066,121               | 24,127              | 1,023,170               | 26,894              | 1,125,428               | 28,990  | 1,194,403               |
| \$ 4,000 to \$ 5,000...   | 13,312             | 905,500                 | 11,072              | 957,367                 | 12,766              | 1,049,783               | 13,852  | 1,118,943               |
| \$ 5,000 to \$ 6,000...   | 6,670              | 874,915                 | 6,238               | 900,743                 | 6,759               | 976,905                 | 7,448   | 1,073,633               |
| \$ 6,000 to \$ 7,000...   | 4,082              | 810,922                 | 3,729               | 898,817                 | 4,267               | 948,549                 | 4,480   | 1,026,244               |
| \$ 7,000 to \$ 8,000...   | 2,770              | 771,434                 | 2,464               | 761,327                 | 2,818               | 878,003                 | 2,993   | 944,173                 |
| \$ 8,000 to \$ 9,000...   | 1,937              | 743,943                 | 1,777               | 757,751                 | 1,898               | 834,797                 | 2,078   | 892,847                 |
| \$ 9,000 to \$10,000...   | 1,445              | 718,510                 | 1,239               | 667,977                 | 1,422               | 767,668                 | 1,533   | 823,020                 |
| \$10,000 to \$15,000...   | 3,284              | 2,735,469               | 2,815               | 2,402,679               | 3,303               | 3,023,835               | 3,620   | 3,194,078               |
| \$15,000 to \$20,000...   | 1,254              | 2,032,264               | 1,198               | 1,982,438               | 1,290               | 2,357,044               | 1,431   | 2,674,299               |
| \$20,000 to \$25,000...   | 665                | 1,881,997               | 558                 | 1,645,480               | 654                 | 2,029,086               | 724     | 2,271,437               |
| \$25,000 to \$30,000...   | 349                | 1,439,868               | 329                 | 1,263,474               | 345                 | 1,548,875               | 380     | 1,753,135               |
| \$30,000 to \$35,000...   | 228                | 1,286,887               | 211                 | 1,124,562               | 236                 | 1,485,419               | 261     | 1,701,135               |
| \$35,000 to \$40,000...   | 102                | 1,114,983               | 132                 | 911,269                 | 137                 | 1,071,460               | 133     | 1,061,177               |
| \$40,000 to \$45,000...   | 110                | 947,111                 | 70                  | 651,415                 | 101                 | 996,045                 | 108     | 1,085,591               |
| \$45,000 to \$50,000...   | 75                 | 737,856                 | 84                  | 837,922                 | 78                  | 806,677                 | 77      | 902,873                 |
| \$50,000 or over.....     | 307                | 8,785,854               | 299                 | 6,458,127               | 304                 | 11,055,666              | 300     | 11,930,931              |
| Totals.....               | 293,957            | 29,000,900              | 184,195             | 25,073,614              | 199,102             | 33,057,550              | 217,049 | 35,500,961              |
| Unclassified amounts..... | —                  | 501,980                 | —                   | 450,950                 | —                   | 309,337                 | —       | 232,660                 |
| Refunds.....              | 293,957            | 29,502,880              | 184,195             | 25,524,564              | 199,102             | 33,366,887              | 217,049 | 35,733,620              |
|                           | —                  | 319,165                 | —                   | 323,172                 | —                   | 353,655                 | —       | 291,245                 |
| Net Totals...             | 293,957            | 29,183,715              | 184,195             | 25,201,392              | 199,102             | 33,033,232              | 217,049 | 35,442,385              |
| CORPORATIONS.             |                    |                         |                     |                         |                     |                         |         |                         |
| Under \$2,000.....        | 4,575              | 331,105                 | 6,167               | 479,820                 | 6,306               | 547,271                 | 6,671   | 659,781                 |
| \$ 2,000 to \$ 3,000...   | 1,040              | 200,587                 | 885                 | 280,660                 | 776                 | 309,947                 | 950     | 381,317                 |
| \$ 3,000 to \$ 4,000...   | 542                | 199,204                 | 482                 | 249,672                 | 479                 | 259,791                 | 558     | 328,084                 |
| \$ 4,000 to \$ 5,000...   | 337                | 185,218                 | 314                 | 226,180                 | 384                 | 271,588                 | 403     | 303,870                 |
| \$ 5,000 to \$ 6,000...   | 252                | 176,250                 | 251                 | 201,651                 | 289                 | 238,891                 | 298     | 284,199                 |
| \$ 6,000 to \$ 7,000...   | 188                | 166,840                 | 177                 | 175,257                 | 193                 | 199,553                 | 244     | 258,323                 |
| \$ 7,000 to \$ 8,000...   | 142                | 119,848                 | 169                 | 170,205                 | 179                 | 196,966                 | 191     | 237,978                 |
| \$ 8,000 to \$ 9,000...   | 131                | 150,980                 | 129                 | 170,530                 | 155                 | 214,176                 | 155     | 213,394                 |
| \$ 9,000 to \$10,000...   | 105                | 131,742                 | 113                 | 160,873                 | 114                 | 165,293                 | 165     | 241,772                 |
| \$10,000 to \$15,000...   | 364                | 567,791                 | 366                 | 677,924                 | 407                 | 774,018                 | 522     | 1,067,636               |
| \$15,000 to \$20,000...   | 204                | 493,391                 | 247                 | 575,808                 | 252                 | 651,499                 | 354     | 986,321                 |
| \$20,000 to \$25,000...   | 156                | 483,036                 | 155                 | 503,561                 | 188                 | 602,834                 | 199     | 737,521                 |
| \$25,000 to \$30,000...   | 97                 | 340,525                 | 118                 | 412,050                 | 151                 | 585,823                 | 169     | 688,609                 |
| \$30,000 to \$35,000...   | 91                 | 447,571                 | 98                  | 467,861                 | 105                 | 511,228                 | 120     | 651,375                 |
| \$35,000 to \$40,000...   | 61                 | 320,112                 | 58                  | 322,354                 | 79                  | 357,044                 | 105     | 605,808                 |
| \$40,000 to \$45,000...   | 50                 | 272,523                 | 63                  | 376,584                 | 69                  | 390,267                 | 64      | 449,998                 |
| \$45,000 to \$50,000...   | 54                 | 416,218                 | 43                  | 321,751                 | 67                  | 455,802                 | 90      | 629,706                 |
| \$50,000 or over.....     | 540                | 22,939,240              | 617                 | 30,590,016              | 773                 | 36,169,233              | 892     | 49,967,659              |
| Totals.....               | 8,913 <sup>1</sup> | 27,969,757 <sup>1</sup> | 10,458 <sup>2</sup> | 36,363,791 <sup>2</sup> | 10,970 <sup>3</sup> | 42,933,281 <sup>3</sup> | 12,116  | 58,690,403 <sup>4</sup> |
| Unclassified amounts..... | —                  | 18,869                  | —                   | 30,219                  | —                   | 28,874                  | —       | 2,627                   |
| Refunds.....              | 8,913 <sup>1</sup> | 27,988,626 <sup>1</sup> | 10,458 <sup>2</sup> | 36,394,013 <sup>2</sup> | 10,970 <sup>3</sup> | 42,962,155 <sup>3</sup> | 12,116  | 58,693,030 <sup>4</sup> |
|                           | —                  | 602,804                 | —                   | 603,774                 | —                   | 433,184                 | —       | 680,187                 |
| Net Totals...             | 8,913 <sup>1</sup> | 27,385,822 <sup>1</sup> | 10,458 <sup>2</sup> | 35,790,239 <sup>2</sup> | 10,970 <sup>3</sup> | 42,518,971 <sup>3</sup> | 12,116  | 58,012,843 <sup>4</sup> |

<sup>1</sup> Totals include 6 corporations paying \$6,664 in taxation, grouped to conceal net income and identity of taxpayers.

<sup>2</sup> Totals include 6 corporations paying \$1,022 in taxation, grouped to conceal net income and identity of taxpayers.

<sup>3</sup> Totals include 4 corporations paying \$2,058 in taxation, grouped to conceal net income and identity of taxpayers.

<sup>4</sup> Totals include corporations paying \$4,251 in taxation, grouped to conceal net income and identity of taxpayers.

40.—Income Tax Paid,<sup>1</sup> by Occupations of the Taxpayers, fiscal years ended Mar. 31, 1934-37.

| Occupation.                | 1934.          |                   | 1935.          |                   | 1936.          |                   | 1937.          |                   |
|----------------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|
|                            | No.            | \$                | No.            | \$                | No.            | \$                | No.            | \$                |
| <b>INDIVIDUALS.</b>        |                |                   |                |                   |                |                   |                |                   |
| Agrarians.....             | 262            | 22,334            | 416            | 24,083            | 694            | 46,609            | 921            | 76,395            |
| Professionals.....         | 5,941          | 2,008,471         | 5,800          | 1,609,621         | 6,579          | 1,967,035         | 6,992          | 1,903,221         |
| Employees.....             | 167,737        | 11,340,010        | 149,418        | 10,930,997        | 159,972        | 12,474,844        | 174,349        | 13,506,473        |
| Merchants, retail.....     | 4,960          | 527,093           | 5,104          | 552,256           | 6,417          | 745,783           | 7,400          | 807,710           |
| Merchants, whole-sale..... | 575            | 217,233           | 620            | 201,435           | 832            | 318,989           | 878            | 317,214           |
| Manufacturers.....         | 467            | 129,978           | 442            | 112,406           | 547            | 104,014           | 506            | 170,106           |
| Natural resources.....     | 77             | 11,514            | 99             | 39,819            | 155            | 41,559            | 161            | 32,561            |
| Financial.....             | 11,753         | 7,512,473         | 11,673         | 6,379,505         | 12,995         | 8,931,621         | 13,871         | 9,980,752         |
| Personal corporations..... | 618            | 2,768,092         | 584            | 2,351,883         | 538            | 4,433,134         | 541            | 4,502,616         |
| Family corporations.....   | 1,570          | 1,354,613         | 116            | 154,329           | 14             | 31,247            | Nil            | -                 |
| All others.....            | 9,991          | 3,107,589         | 9,923          | 2,717,220         | 10,350         | 3,899,717         | 11,340         | 4,143,823         |
| Unclassified.....          | -              | 601,980           | -              | 450,950           | -              | 309,327           | -              | 232,069           |
| <b>Totals.....</b>         | <b>203,957</b> | <b>29,502,880</b> | <b>184,195</b> | <b>25,524,564</b> | <b>199,102</b> | <b>33,366,887</b> | <b>217,049</b> | <b>35,733,630</b> |
| Refunds.....               | -              | 319,165           | -              | 323,172           | -              | 383,655           | -              | 291,245           |
| <b>Net Totals...</b>       | <b>203,957</b> | <b>29,183,715</b> | <b>184,195</b> | <b>25,201,392</b> | <b>199,102</b> | <b>32,983,232</b> | <b>217,049</b> | <b>35,442,385</b> |

**CORPORATIONS.**

|  |              |                   |               |                   |               |                   |               |                   |
|--|--------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|
| Agrarians.....                                       | 71           | 19,146            | 92            | 32,344            | 114           | 56,859            | 132           | 67,096            |
| Merchants, retail.....                               | 1,427        | 1,832,731         | 1,645         | 1,542,079         | 1,854         | 2,108,684         | 2,238         | 2,832,761         |
| Merchants, whole-sale.....                           | 874          | 1,491,913         | 1,086         | 2,057,735         | 1,150         | 2,418,014         | 1,308         | 3,029,043         |
| Manufacturers.....                                   | 1,897        | 11,840,040        | 2,250         | 15,079,937        | 2,727         | 21,264,270        | 3,069         | 26,613,505        |
| Natural resources.....                               | 198          | 3,017,750         | 186           | 7,848,415         | 214           | 4,317,700         | 258           | 10,543,396        |
| Financial.....                                       | 2,853        | 4,688,265         | 3,544         | 4,339,441         | 2,806         | 5,748,750         | 2,802         | 7,217,403         |
| Transportation and public utilities.....             | 434          | 3,607,251         | 463           | 3,685,881         | 555           | 5,114,318         | 586           | 6,071,188         |
| All others.....                                      | 1,150        | 1,963,601         | 1,192         | 1,767,368         | 1,550         | 1,909,874         | 1,702         | 2,510,410         |
| Unclassified.....                                    | -            | 18,809            | -             | 30,219            | -             | 28,874            | -             | 2,627             |
| <b>Totals.....</b>                                   | <b>8,913</b> | <b>27,988,626</b> | <b>10,458</b> | <b>36,394,012</b> | <b>10,970</b> | <b>42,962,155</b> | <b>12,146</b> | <b>58,693,030</b> |
| Refunds.....   | -            | 602,804           | -             | 603,774           | -             | 443,184           | -             | 680,187           |
| <b>Net Totals...</b>                                 | <b>8,913</b> | <b>27,385,822</b> | <b>10,458</b> | <b>35,790,239</b> | <b>10,970</b> | <b>42,518,971</b> | <b>12,146</b> | <b>58,012,843</b> |
| <b>Grand Totals, Individuals and Corporations...</b> | <b>-</b>     | <b>56,569,537</b> | <b>-</b>      | <b>60,991,631</b> | <b>-</b>      | <b>75,502,202</b> | <b>-</b>      | <b>93,455,223</b> |

<sup>1</sup> Exclusive of special 5 p.c. tax on interest and dividends; see text accompanying Table 41.

Table 41 shows the amount received from the special 5 p.c. tax of 1933 (c. 41, 1932-33) imposed at the source on interest (if paid solely in Canadian funds) and dividends paid by Canadian debtors to non-residents of Canada, and on interest and dividends received by Canadian residents by way of bearer coupons or cheques where such are payable by Canadian debtors, optionally or otherwise, in foreign currencies, and such coupons or cheques are cashed in a currency which is at a premium over Canadian funds. The receipts are classified by provinces, no further classification being available.

**41.—Amount Received from Special Five Per Cent Tax on Interest and Dividends,  
fiscal year ended Mar. 31, 1937.**

| Province.                 | Amount<br>of Tax<br>Received. | Percentage<br>of<br>Total. |
|---------------------------|-------------------------------|----------------------------|
|                           | \$                            | p.c.                       |
| Prince Edward Island..... | 502,316                       | 5.64                       |
| Nova Scotia.....          | 50,084                        | 0.56                       |
| New Brunswick.....        | 12,006                        | 0.13                       |
| Quebec.....               | 1,967,221                     | 22.08                      |
| Ontario.....              | 5,940,309                     | 66.66                      |
| Manitoba.....             | 56,821                        | 0.64                       |
| Saskatchewan.....         | 12,093                        | 0.14                       |
| Alberta.....              | 50,206                        | 0.57                       |
| British Columbia.....     | 318,958                       | 3.58                       |
| Yukon.....                | Nil                           | —                          |
| <b>Totals.....</b>        | <b>\$,910,014</b>             | <b>100.00</b>              |

**Subsection 3.—British and Foreign Capital Invested in Canada and  
Canadian Capital Invested Abroad.\***

Revised estimates of British and foreign investments in Canada and Canadian investments in other countries have been issued recently by the Internal Trade Branch of the Dominion Bureau of Statistics. As a result of continued investigations, more complete information has become available. Because of the great variety of forms these investments take and the difficulties inherent in arriving at satisfactory valuations, along with the continual changes in ownership in some cases, these estimates should be considered as approximations rather than exact representations. They are, however, indicative of the general proportions of the investments involved. In using these statistics it should be recognized that changes in value from one year to another do not always reflect actual capital movements between Canada and other countries as there are important changes in the value of 'equity' investments arising from internal operations, such as reinvested profits, for instance, which are quite independent of external factors.

The present investigation has been carried back as far as 1926 and revised statistics of international investments are shown for the years from 1926 to 1935 in Tables 42 and 43. Very marked changes have taken place in Canada's international indebtedness during the present century. The industrial expansion in Canada in the years preceding the Great War was closely related to the heavy inflow of capital from Great Britain. In 1914 the value of British investments in Canada was not much different from the value of British investments as shown in the accompanying tables in recent years, although slightly higher than in 1926. The rapid growth in United States investments in Canada took place after 1914. Part of this increase in the investments of the United States in Canada came after 1926 and is reflected in Table 42 which shows a change in these investments between 1926 and 1930 of from \$3,161,200,000 to \$4,298,400,000. This influx of capital followed two contrasting channels. A large part of the capital was raised through the sale of new issues in New York but the capital coming to Canada through the channel of direct investment was also especially heavy and this capital invested directly in Canada has given United States investments in Canada a particular

\*Revised by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics. The subject is treated more fully in a bulletin "British and Foreign Capital Invested in Canada and Canadian Capital Invested Abroad, 1926-35" obtainable from the Dominion Statistician. For a list of the publications of this Branch, see Chapter XXIX.

character. Since 1930 there has been a reduction in the value of United States investments in Canada, as a result of the redemption of Canadian securities owned in the United States, changes in the values of equity investments in Canada, and other factors.

In Table 44 there is shown in detail the distribution in 1936 of British and foreign capital invested in Canada. The indebtedness of Canadian governments abroad amounted to \$1,688,700,000 of which \$524,200,000 represented government securities held by British investors and \$1,161,300,000 government securities held by residents of the United States. The total non-resident investments in Canadian railways, \$1,637,000,000, was about the same as the total government securities held abroad, but the British investments predominated in this group, being \$1,068,300,000 compared with a United States investment of \$548,800,000. In most other classes of investment the amounts owned in the United States were larger than the British although the latter were generally substantial.

In appraising Canada's international indebtedness, consideration must also be given to Canadian investments abroad. These have grown from \$1,352,800,000 in 1926 to \$1,671,500,000 in 1936, the principal growth being in Canadian portfolio holdings of United States securities although considerable amounts of the securities of Latin American and European governments were also acquired in the earlier part of the period. The increase in the holdings of these miscellaneous investments in other countries has been greater than the increase in total Canadian investments abroad, as there has been a very marked reduction in the net assets of the Canadian banks in other countries during this period.

For 1936 Canadian capital in other countries is estimated at \$1,671,500,000. The largest part of this, about \$1,000,000,000, was invested in the United States and was principally in the form of direct investments in railways and branch and subsidiary plants and in portfolio investments in the stocks and bonds of United States governments and corporations. Investments in other countries include a miscellaneous item of \$383,000,000 representing an estimate of Canadian holdings of other foreign securities such as the bonds of Latin American and European governments. Direct investments in other countries, largely in the British West Indies and Latin America, amounted to \$173,000,000.

Of further interest in considering the relative importance of Canada's international indebtedness in the nation's economic life is the place Canadian capital occupies in the total amount of capital invested in Canada. It is estimated that the amount of capital invested in Canada is about \$18,000,000,000. This sum includes the bonded indebtedness of Dominion, provincial and municipal governments, investments in railways, all manufacturing concerns, mines and metal industries, public utilities, trading establishments, finance, insurance, land and mortgages. It does not include private capital in domestic enterprises such as farms, homes, etc. Of this sum, it is estimated that 62 p.c., or over \$11,000,000,000, is owned in Canada, 22 p.c., or \$3,984,400,000, in the United States; 15 p.c., or \$2,725,000,000, in the United Kingdom and less than 1 p.c. or, \$124,000,000, in other countries.

**Investments of Canadian Insurance Companies Operating Abroad.**—An important change in the revised figures shown in Tables 42 to 45 is the omission of an item previously included, *viz.*, "Investments of Canadian Insurance Companies Operating in Other Countries". These insurance investments, so-called, are not investments of quite the same character as the other items. The large assets in other countries held by Canadian insurance branches in those countries

have against them, besides ordinary liabilities, the fiduciary interest of the policyholders. In fact when the prospective claims of policyholders are considered it appears that on balance there is a small net investment of these branches in Canada rather than a Canadian investment abroad. This is possible because the assets underlying the reserve funds need not all be held abroad. On the other hand, the fact that assets can be transferred between countries gives an importance to them as a factor in capital movements. Again, British and foreign securities held by Canadian companies in Canada have already been included as Canadian investments abroad. On account of the ambiguity of this item and the fact that it has already been included in another form, therefore, it has not been repeated in the tables.

With regard to British and foreign insurance investments in Canada, since there exist net assets in Canada over all liabilities including reserves against future claims of Canadian policyholders the residual amount is shown as a *bona fide* investment in Canada in Tables 42 and 44.

#### 42.—Estimated British and Foreign Capital Invested in Canada, Classified According to Main Types, as at Dec. 31, 1926-35.

NOTE.—Net equities of policyholders, etc., outside of Canada invested in Canada through Canadian insurance companies operating abroad are not shown in this table for the reason given in the text above. The omission does not materially affect the totals.

| Type of Investment.   | 1926.          | 1927.          | 1928.          | 1929.          | 1930.          | 1931.          | 1932.          | 1933.          | 1934.          | 1935.          |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|   | \$             | \$             | \$             | \$             | \$             | \$             | \$             | \$             | \$             | \$             |
|   | '000,000       | '000,000       | '000,000       | '000,000       | '000,000       | '000,000       | '000,000       | '000,000       | '000,000       | '000,000       |
| <b>Government Securities—</b>   |                |                |                |                |                |                |                |                |                |                |
| Dominion.....   | 632.0          | 628.1          | 618.6          | 571.6          | 675.0          | 627.4          | 630.3          | 741.9          | 749.4          | 807.3          |
| Provincial.....   | 419.7          | 460.7          | 471.9          | 520.8          | 590.2          | 604.2          | 606.6          | 570.0          | 554.9          | 530.8          |
| Municipal.....  | 372.1          | 393.3          | 393.3          | 400.3          | 429.5          | 437.2          | 408.0          | 392.4          | 389.4          | 379.6          |
|   | 1,423.8        | 1,482.1        | 1,483.8        | 1,492.7        | 1,694.7        | 1,668.8        | 1,638.5        | 1,704.3        | 1,693.7        | 1,717.7        |
| <b>Public Utilities—</b>  |                |                |                |                |                |                |                |                |                |                |
| Railways.....   | 1,573.4        | 1,602.5        | 1,636.0        | 1,771.0        | 1,835.1        | 1,896.3        | 1,874.2        | 1,859.2        | 1,825.6        | 1,683.0        |
| Other (traction, light, heat, power, telephone, etc.).....  | 466.3          | 515.8          | 562.1          | 620.0          | 660.8          | 698.5          | 730.1          | 751.9          | 766.7          | 780.0          |
| <b>Manufacturing—</b>   |                |                |                |                |                |                |                |                |                |                |
| Wood and paper products.....  | 473.6          | 513.0          | 509.8          | 567.0          | 596.0          | 525.5          | 484.2          | 458.4          | 453.6          | 462.0          |
| Metal industries.....   | 396.3          | 421.8          | 458.0          | 502.0          | 501.7          | 456.8          | 413.3          | 401.5          | 413.8          | 423.0          |
| All other manufacturing industries.....   | 451.4          | 482.9          | 516.0          | 546.1          | 521.3          | 495.8          | 460.2          | 459.1          | 475.8          | 494.0          |
| Mining.....   | 288.0          | 290.0          | 355.0          | 363.0          | 376.0          | 355.0          | 333.0          | 335.0          | 350.0          | 326.0          |
| Merchandising and service.....  | 235.4          | 241.8          | 250.4          | 255.8          | 251.5          | 237.5          | 225.8          | 219.4          | 222.0          | 220.8          |
| Insurance.....  | 93.8           | 106.0          | 102.0          | 104.6          | 142.5          | 151.7          | 160.5          | 161.7          | 198.9          | 220.0          |
| Finance and mortgage corporations.....  | 228.7          | 254.4          | 287.2          | 322.9          | 321.3          | 293.9          | 280.4          | 283.4          | 285.0          | 290.0          |
| Miscellaneous (agricultural lands, summer homes, prospecting, assets administered for persons or corporations residing outside Canada, etc.)..... | 260.0          | 265.0          | 278.0          | 290.0          | 295.0          | 288.0          | 287.0          | 280.0          | 280.0          | 275.0          |
| <b>Grand Totals (Great Britain, United States and Other Countries).....</b>   | <b>5,890.7</b> | <b>6,184.3</b> | <b>6,498.9</b> | <b>6,835.7</b> | <b>7,195.9</b> | <b>7,067.8</b> | <b>6,954.2</b> | <b>6,913.9</b> | <b>6,965.1</b> | <b>6,897.5</b> |
| Totals, British Capital.....  | 2,567.8        | 2,628.3        | 2,693.0        | 2,764.2        | 2,766.0        | 2,687.1        | 2,631.7        | 2,674.4        | 2,729.5        | 2,729.3        |
| Totals, United States Capital.....  | 3,161.2        | 3,423.8        | 3,664.0        | 3,926.5        | 4,298.4        | 4,254.5        | 4,198.3        | 4,115.2        | 4,112.1        | 4,044.6        |
| Totals, Capital of Other Countries.....   | 161.7          | 132.2          | 140.7          | 145.0          | 131.5          | 126.2          | 124.2          | 124.3          | 123.5          | 123.6          |

## 43.—Estimated Canadian Investments Abroad as at Dec. 31, 1926-35.

NOTE.—Investments held abroad by Canadian insurance companies operating in other countries are not shown in this table for the reason given on p. 398. The omission in its net effect does not materially affect the totals.

| Type of Investment.  | 1926.          | 1927.          | 1928.          | 1929.          | 1930.          | 1931.          | 1932.          | 1933.          | 1934.          | 1935.          |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|  | \$ '000,000    | \$ '000,000    | \$ '000,000    | \$ '000,000    | \$ '000,000    | \$ '000,000    | \$ '000,000    | \$ '000,000    | \$ '000,000    | \$ '000,000    |
| Canadian Government credits.....                                       | 36.1           | 32.4           | 31.1           | 30.9           | 30.7           | 30.5           | 30.5           | 30.5           | 30.5           | 30.5           |
| Net assets of Canadian banks outside Canada.....                       | 370.3          | 354.2          | 267.6          | 179.8          | 180.2          | 152.5          | 114.8          | 90.9           | 100.7          | 100.6          |
| Foreign securities held in Canada by Canadian insurance companies..... | 91.4           | 124.2          | 156.5          | 184.6          | 156.7          | 154.5          | 144.2          | 136.8          | 142.2          | 162.8          |
| Direct investments.....  | 397.0          | 401.5          | 412.0          | 423.5          | 443.0          | 445.0          | 446.0          | 447.0          | 449.0          | 453.0          |
| Miscellaneous investments.....   | 458.0          | 602.0          | 725.0          | 810.0          | 842.0          | 850.0          | 853.0          | 865.0          | 874.0          | 884.0          |
| <b>Grand Totals.....</b>   | <b>1,352.8</b> | <b>1,514.3</b> | <b>1,592.2</b> | <b>1,628.8</b> | <b>1,652.6</b> | <b>1,638.5</b> | <b>1,538.5</b> | <b>1,570.2</b> | <b>1,605.4</b> | <b>1,639.9</b> |
| Totals, Capital Invested in the United Kingdom.....                    | 59.6           | 61.2           | 53.3           | 50.6           | 67.7           | 50.6           | 44.7           | 49.0           | 47.4           | 50.8           |
| Totals, Capital Invested in United States.....                         | 778.0          | 870.6          | 917.7          | 929.8          | 933.1          | 928.8          | 906.1          | 875.7          | 921.1          | 963.4          |
| Totals, Capital Invested in Other Countries.....                       | 515.2          | 582.5          | 621.2          | 648.4          | 651.8          | 659.1          | 637.7          | 645.5          | 636.9          | 625.7          |

## 44.—Estimated British and Foreign Capital Invested in Canada as at Dec. 31, 1936.

NOTE.—Net equities of policyholders, etc., outside of Canada invested in Canada through Canadian insurance companies operating abroad are not shown in this table for the reason given on p. 398. The omission does not materially affect the totals.

| Type of Investment.   | Invested by Residents of— |                |                          | Total.         |
|---|---------------------------|----------------|--------------------------|----------------|
|   | United Kingdom.           | United States. | Other Countries.         |                |
|   | \$'000,000                | \$'000,000     | \$'000,000               | \$'000,000     |
| Government Securities—  |                           |                |                          |                |
| Dominion.....   | 318.8                     | 457.5          | 1                        | 806.3          |
| Provincial.....   | 67.8                      | 447.7          | 3.2 <sup>1</sup>         | 518.7          |
| Municipal.....  | 137.6                     | 226.1          |                          | 363.7          |
| Public Utilities—   | 524.2                     | 1,161.3        | 3.2 <sup>1</sup>         | 1,688.7        |
| Railways.....   | 1,068.3                   | 548.8          | 19.9                     | 1,637.0        |
| Other (traction, light, heat, power, telephone, etc.).....  | 184.8                     | 577.6          | 7.6                      | 770.0          |
| Manufacturing—  |                           |                |                          |                |
| Wood and paper products.....  | 94.3                      | 369.6          | 1.1                      | 465.0          |
| Metal industries.....   | 78.2                      | 345.2          | 4.6                      | 428.0          |
| All other manufacturing industries.....   | 204.9                     | 286.9          | 8.2                      | 500.0          |
| Mining.....   | 89.0                      | 244.0          | 7.0                      | 340.0          |
| Merchandising and service.....  | 73.6                      | 147.2          | 4.2                      | 225.0          |
| Insurance.....  | 80.5                      | 121.4          | 2.1                      | 210.0          |
| Finance and mortgage corporations.....  | 161.3                     | 97.4           | 36.3                     | 295.0          |
| Miscellaneous (agricultural lands, summer homes, prospecting, assets administered for persons or corporations residing outside Canada, etc.)..... | 160.0                     | 85.0           | 30.0                     | 275.0          |
| <b>Grand Totals.....</b>  | <b>2,725.1</b>            | <b>3,984.4</b> | <b>124.2<sup>1</sup></b> | <b>6,833.7</b> |

<sup>1</sup> Some indeterminate parts of the amounts shown as owned in the United Kingdom and possibly some shown as owned in the United States are owned by residents of other countries.

## 45.—Estimated Canadian Investments Abroad as at Dec. 31, 1936.

NOTE.—Investments held abroad by Canadian insurance companies operating in other countries are not shown in this table for the reason given on p. 398. The omission in its net effect does not materially affect the totals.

| Type of Investment.  | In the United Kingdom. | In United States. | In Other Countries. | Total.         |
|--|------------------------|-------------------|---------------------|----------------|
|  | \$'000,000             | \$'000,000        | \$'000,000          | \$'000,000     |
| Canadian Government credits.....                                       | Nil                    | Nil               | 30.5                | 30.5           |
| Net assets of Canadian banks held outside Canada.....                  | 12.6                   | 86.0              | 8.4                 | 107.0          |
| Foreign securities held in Canada by Canadian insurance companies..... | 13.9                   | 142.5             | 26.6                | 183.0          |
| Direct investments.....  | 14.0                   | 270.0             | 173.0               | 457.0          |
| Miscellaneous investments.....   | 10.0                   | 501.0             | 383.0               | 894.0          |
| <b>Grand Totals.....</b>   | <b>50.5</b>            | <b>999.5</b>      | <b>621.1</b>        | <b>1,671.1</b> |

## CHAPTER XXII.—CURRENCY AND BANKING; MISCELLANEOUS COMMERCIAL FINANCE.

In this chapter are assembled the statistics regarding financial institutions and transactions, other than those pertaining to insurance which are dealt with separately in Chapter XXIII. The important subject of currency and banking is treated in Part I of the chapter, while trust and loan companies, sales of Canadian bonds, corporation dividends, and foreign exchange, constitute sections of the miscellaneous commercial finance covered in Part II.

### PART I.—CURRENCY AND BANKING.

#### Section 1.—Historical Sketch.

The early history of the currency of Canada, both of the central provinces and of the maritime colonies, from the time of the first settlements to Confederation, is the story of a polyglot currency and the involved difficulties of determining exchange rating for the various coins and pieces.

The salient influences of early political and commercial affiliations upon the types of currency in use are reviewed below.

#### The Development of Currency in New France.

So long as trade remained in the hands of a few private traders, barter was the rule. Beads and other trinkets which appealed to the Indians, blankets and other useful articles, were traded directly for furs. With the further development of the colony during the French *régime*, while barter still remained, the growing complexity of social organization and trade emphasized the need for a convenient monetary unit, which was met by the adoption of French currency, but, in order to retain in the colony the gold and silver coin which arrived there, it was 'over-rated' to the extent of about one-third of its value in France. Thus there was a dual valuation of the same coinage, officially recognized as 'money of France' and 'money of the country'. Copper coins were given an even higher over-rating. Nevertheless, money remained very scarce and at one time wheat at current market rates was made legal tender in spite of the difficulties and hindrances to trade inherent in fluctuating values. The illicit fur traffic with English fur traders resulted in the introduction of Spanish silver dollars as well as various worn and mutilated coins to help fill the need. In 1681 foreign coin was officially recognized but it was stipulated by ordinance that it should pass by weight; it was given the one-third increase in value which custom had established for French currency.

One of the earliest forms of fiat paper money in the western world was introduced into New France in 1685. This 'card money', as it was termed, was not introduced primarily to meet the lack of circulating media (although, incidentally, it did relieve the prevailing scarcity) so much as an official expedient to meet the pay of soldiers until the annual Royal supplies were forthcoming. The first issue was backed by such annual supplies and was duly redeemed when the supplies arrived, but five years later another issue was made without such backing. This was the beginning of an inflationary move. By 1713, the amount of such unbacked currency outstanding was such as to reduce trade to a chaotic condition and confidence was seriously undermined. Later, card money was again resorted to, but on a sounder basis. The expanding needs of the Treasury, however, unfortunately brought about

the introduction and unlimited use of *ordonnances* and *billets* which quickly undermined the financial structure again, and at the time of the cession, the total amount of paper money outstanding was estimated at 80 million livres. It was because none of this paper money in its later issues was paid in full, and much of it was not redeemed in any manner, that the people of Old Canada resisted so firmly the efforts made in 1792, 1807, and 1808 to establish banks of issue under the authority of Parliament.

In 1721 the first effort was made to establish a special currency for the colony, but this was limited to copper coins and was not successful.

### The British Period to Confederation.

The period of military occupation (1759-1763) was marked by conditions of chaos in the matter of currency, but with the revival of the business activity of Montreal and Quebec with Nova Scotia and Massachusetts the currency standards of the latter were adopted and the Spanish dollar again made its appearance. It became the medium by which exchanges were balanced with Britain. Normally, the Spanish dollar was valued at 4s. 6d. sterling, but the tendency was to over-value it and in colonial ratings it varied between 4s. 6d. to as much as 7s. or 8s. In Nova Scotia, for instance, the customary rating for the Spanish dollar was 5s., while in New York colony it was 7s. 6d. to 8s. Corresponding margins of value prevailed in regard to other coins in the different colonies. The former of these two standard ratings, known as the Halifax currency, was accepted by Quebec, and Montreal adopted the latter, known as the York currency. Of course, there was much confusion and hindrance to trade between Montreal and Quebec as a result of the adoption of the dual standard.

In order to iron out the difficulties, Governor Murray passed an ordinance which established an official rating for the Province of Canada. The Spanish dollar was rated at 6s., the French crown at 6s. 0½d., and the British shilling at 1s. 4d. The custom of cutting up larger coins to make small change, which had grown up in the past, was prohibited. To meet such urgent needs for small coin, the merchants themselves issued bills due or 'bons' good at their face value for merchandise. Such 'bons' were the true forerunners of the bank note. The ratings given by Governor Murray were a compromise which was not permanently acceptable and proved unsatisfactory.

After the outbreak of the American Revolution in 1775, Quebec influences prevailed and Halifax currency became standard, although the use of York currency persisted in Upper Canada (where the United Empire Loyalists supported its use) until 1821, when it was deprived of legal recognition by an Act of Upper Canada.

In order to pay the expenses of the War of 1812, army bills issued against the credit of the United Kingdom were circulated. These, in the main, bore interest and were convertible into bills of exchange on the United Kingdom; they were redeemed within the ensuing four or five years. These army bill issues tended to renew confidence in paper money and familiarize the people with its use, thus paving the way for the note issues of the early banks after 1817. These first banks were created in Lower Canada, at first as private corporations but obtained charters a few years later. The charters granted to the early banks in Lower Canada are the foundations upon which subsequent improvements have been built.

In the early days of banking, one of the chief functions of banks was to issue promissory notes payable to the bearer on demand; where the banks' credit was



good these notes passed freely from hand to hand, and were the chief circulating media in the Canadas. In some cases bank notes were preferred to those issued by the colonial governments.

The Bank of Montreal began business towards the end of 1817 as a private institution. In the following year the Quebec Bank was established as well as the Bank of Canada at Montreal. These three Lower Canada institutions obtained their charters in 1822. In Upper Canada the Bank of Upper Canada was established at Kingston in 1818, but the first bank to receive a charter was the second Bank of Upper Canada established at York (Toronto) in 1821. In Nova Scotia, unsuccessful efforts were made as early as 1801 to form banks, and in 1812 the Government began to issue treasury notes not bearing interest and re-issuable, sometimes redeemable and sometimes not. This policy was continued down to Confederation. It seems to be in part because of these treasury issues of notes that no bank was started in Nova Scotia before 1825, when the Halifax Banking Company (private) commenced business. The Bank of Nova Scotia received a regular charter in 1832. A bank, the Bank of New Brunswick, was incorporated in New Brunswick in 1820.

Before the union of the two Canadas, the privilege of issuing paper money had been enjoyed almost entirely by the banks alone. Lord Sydenham now proposed a provincial bank of issue with the chartered banks gradually relinquishing the right to note issue, and Hincks,\* a young financier of promise, became chairman of the Joint Committee on Currency and Banking established in 1841. This Committee supported the provincial bank idea in principle. The chartered banks, of course, opposed it, and the bill was ultimately defeated, but the principle reappeared in subsequent measures and ultimately became the basis of the Dominion note issues. Lord Sydenham and Hincks did much, nevertheless, to strengthen and control the banking system.

A period of crisis in 1848-49 forced the adoption of a policy which led to the withdrawal from the banks of the right to issue notes of lower denominations than five dollars. The Government also now issued provincial debentures to the amount of one million dollars payable on demand. They were made acceptable in all payments due the Government and were reissuable. This is often regarded as the introduction of government paper into the currency system of the country, although, as already noted, Nova Scotia had issued government paper in 1812. Its success led to the revival of the project for a provincial bank of issue and in 1850 the Free Banking Act, designed to restrict note issue privileges and so reduce the number of different media of exchange, was passed, but the chartered banks would not agree to avail themselves of its provisions, nor were conditions in Canada altogether ripe for a change from the elastic system of note issue which had now become established in spite of the fact that, from the point of view of the note-holding public, the proposed system would have been safer.

Between 1840 and 1867 the problem of establishing a uniform metallic currency standard for united Canada was also dealt with. The majority of Canadians strongly favoured the United States decimal system and Hincks declared in its favour. Authorities in the United Kingdom, on the other hand, pressed for the sterling system. In 1853 and in 1858 the decimal system was adopted in the Canadas, and thus duplication of sterling and decimal systems was removed and the Canadian dollar, equivalent to the United States dollar, was established with the sovereign as legal tender. After 1860, the official accounts in Nova Scotia and New Brunswick were kept according to the decimal system.

\*Later, as Sir Francis Hincks, he was Dominion Minister of Finance (1869-73). His influence on the development of Canadian banking was very marked until his death in 1885.

### The Development of Currency and Banking after Confederation.

**Currency Acts.**—At Confederation, jurisdiction over currency passed to the Dominion Government. By the Uniform Currency Act of 1871 (34 Viet., c. 4), the decimal currency was extended throughout the Dominion; the British sovereign, rated at \$4-86 $\frac{2}{3}$ , became the standard coin and the United States eagle was made legal tender for \$10, while authority was given to coin a Canadian \$5 gold piece. No Canadian gold coinage was issued, however, prior to the establishment of the Canadian branch of the Royal Mint in 1908, the first coins struck being sovereigns similar to those of the United Kingdom, but with a small 'C' identifying them as having been coined in Canada. In May, 1912, the first Canadian \$10 and \$5 gold pieces were struck, but the Canadian gold coinage has so far been limited in amount, since Canadians have generally preferred Dominion notes to gold for use within the country, and, when gold is needed for export, bullion or British and United States gold coin serve the purpose equally well.

The currency system established by this Act was very little changed until the Currency Act of 1910 which made the standard a fixed weight of fine gold instead of the British sovereign, the latter becoming legal tender.

In respect to paper currency, the provisions of the Provincial Note Act of 1866 were extended to the new Dominion in 1868, and 'Dominion' notes came into being. After 1870 such notes could be issued to the amount of \$9,000,000 against a 20 p.c. specie reserve (\$2,000,000 reserve was required for the entire \$9,000,000) and notes in excess of this were to have 100 p.c. specie reserve. Dominion notes which were legal tender were in circulation side by side with bank-note issues which were not legal tender. In 1880 the basis of the present system was definitely established (see below, p. 904, and under heading Chartered Bank Notes, pp. 913-914).

**The Bank Act.**—After tentative legislation in 1867, the Bank Act of 1870 provided that new banks must have a minimum paid-up capital of \$200,000; at least 20 p.c. of the subscribed capital had to be paid up in each year after the commencement of business. A proposal to limit the liabilities of banks in relation to capital and specie and Government debenture holdings was not translated into legislation. Bank notes in circulation were not to exceed the amount of paid-up capital. The right to issue notes under \$4 was withdrawn, largely in consideration of the abolition of the tax of 1 p.c. on note circulation. If possible up to 50 p.c., but in no case less than one-third, of a bank's cash reserves were to be held in Dominion notes. Dividends were limited to 8 p.c. until or unless the bank's reserve fund was the equivalent of 20 p.c. of its paid-up capital. In case of the failure of a bank, double liability of shareholders became enforceable without waiting for the realization of the bank's general assets. Banks were required to transmit certified lists of shareholders annually, to be laid before Parliament. Any existing bank was permitted, on the authority of the shareholders, to apply for an extension of its charter, and the Governor in Council, upon the recommendation of the Minister of Justice and the Treasury Board, was empowered to extend such charter to 1881. Any suspension by a bank of payment of its liabilities for a period of 90 days would constitute insolvency, and operate as a forfeiture of its charter.

In 1871 the first comprehensive Banking Act of the Dominion was passed. A large part of the statute was devoted to the re-enactment and consolidation of legislation already in force, although the measure of 1870 contained the main features of the Government's policy. The procedure relative to extension of charters laid down in the preceding year was superseded by this Act, which became the charter

of the banks until July 1, 1881, that date being set in contemplation of regular decennial revisions. No new bank was permitted to commence business with less than \$500,000 capital *bona fide* subscribed and \$100,000 similarly paid up, with the further proviso that at least \$200,000 must be paid up within two years after commencement of business. The sections respecting loans against warehouse receipts, etc., were thoroughly revised and difficulties of procedure removed. Banks were permitted to take security on commodities in store pending marketing, and also while undergoing conversion from the raw to the finished state. Advances were allowed upon security of shares of other banks. It was provided that the rate of interest or discount charged by a bank should not exceed 7 p.c. and that no higher rate should be recoverable. Monthly returns of assets and liabilities were required. Certain technical amendments were made to the Bank Act in 1872, 1873, and 1875. In 1879 the power to lend upon the security of shares of other banks was repealed.

At the first general revision of the Bank Act in 1880 (effective 1881), a note holder was definitely recognized as a preferred creditor, claims of the Dominion and Provincial Governments, respectively, ranking next in order of preference. Banks were prohibited from issuing notes under \$5, higher denominations to be multiples of this sum. Dominion notes were now to constitute not less than 40 p.c. of the bank's cash reserves. Monthly returns of a more detailed character were to be made. The Act was amended in 1883 to enforce more effectively the prohibitions, restrictions, and duties already imposed upon the banks. The use of certain titles by private bankers not operating under the provisions of the Act was prohibited.

At the revision of 1890 (effective 1891), it was stipulated that not less than \$250,000 capital must be paid up before a certificate permitting a bank to commence business could be issued by the Treasury Board. A period of one year from the date of the charter was allowed for the payment of the capital and the carrying out of other preliminaries. Dividends were not to exceed 8 p.c. until or unless the reserve fund was the equivalent of 30 p.c. of the paid-up capital. A fund known as the "Bank Note Circulation Redemption Fund" was established, consisting of deposits made by the banks with the Minister of Finance of amounts equal to 5 p.c. of their average note circulation, such deposits to be subject to adjustment annually, and to constitute a guarantee of the payment of all notes of a suspended bank with interest at 6 p.c. from the date of suspension until the date when their redemption was undertaken by the liquidator. Failing action by the liquidator within two months, the Minister of Finance was authorized to redeem the notes out of the fund, and such outlay, if not made good out of the assets of the failed bank, was to be reimbursed by the contributing banks *pro rata* to their contributions. Another major change gave the banks, in certain classes of loans, the same legal power to take security over the borrowers' goods as had previously been granted by warehouse receipts. This enactment served to make general and more clear principles already recognized by previous legislation and practice. Directors' qualifications were set out more clearly and it was now provided that a majority only of directors, instead of all, need be British subjects. Penalties for excess note circulation were made more severe.

The revision of 1900 (effective 1901) recognized the Canadian Bankers' Association as an agency in the supervision and control of certain activities of the banks. It was charged, under the Treasury Board, with the responsibility of supervising the printing and distribution of notes to the banks and their issue and destruction; also with control over clearing houses and the appointment of curators to supervise

the affairs of suspended banks. The amended Act also included provisions permitting one bank to sell its assets to another. More detailed monthly returns were required and the interest on notes of failed banks was reduced from 6 p.c. to 5 p.c. In 1908, after the financial crisis of 1907, provision was made for emergency circulation during the crop-moving season from October to January, when banks were allowed to issue excess circulation up to 15 p.c. of their combined paid-up capital and rest or reserve funds, this emergency circulation to be taxed at a rate not exceeding 5 p.c. per annum. In 1912, the period was extended to the six months from September to February, inclusive.

At the fourth revision of the Bank Act in 1913 provision was made for an audit of each bank's affairs by auditors appointed by the shareholders. There was also provision for the establishment of Central Gold Reserves in which banks might deposit gold or Dominion notes for the purpose of issuing additional notes of their own there-against. Annual reports to the Minister of the fair market value of real and immovable property held by the banks for their own use were required. Banks were empowered to lend to farmers upon security of their threshed grain. As a war measure the provision for emergency circulation was extended in 1914 to cover the whole year and banks were further authorized to make payments in their own notes instead of in gold or Dominion notes.

The fifth revision of 1923 (13-14 Geo. V, c. 32) resulted in numerous important changes. The qualifications of provisional directors were re-defined, while provision was made for keeping records of attendance at directors' meetings and bringing them to the notice of shareholders. Annual and monthly statements were given further attention and more complete returns required, including statements of controlled companies in the names of which any part of a bank's operations were carried on. Other or special returns were to be made if called for by the Minister. Two auditors were now to be appointed by the shareholders instead of one, and the qualifications, duties, and responsibilities of auditors were more clearly defined. The personal liability of directors in case of distribution of profits in excess of legal limits was also more definitely expressed. Regulations regarding loans were amended and advances to any officer or clerk of a bank could not, in any circumstances, exceed \$10,000. Registration of security for loans under Sec. 88 was provided for. It became necessary for guarantee and pension funds to be invested in trustee securities. The punishment of directors and other bank officials for making false statements of a bank's position was provided for in Sec. 153. In 1924, as a result of the failure of the Home Bank of Canada, provision was made for periodical examination of the chartered banks by an Inspector-General of Banks, who was to be an officer of the Department of Finance.

The sixth revision of the Bank Act was postponed from 1933 to 1934 (c. 24), for adaptation to the establishment of the new Bank of Canada, and most of the alterations outlined the relations of the chartered banks with the Bank of Canada; these are given on pp. 906-907 in the résumé of the legislation under which the Bank of Canada was set up.

**Early Development of Central Bank Institutions.**—As noted above certain features of a central banking system had become evident before the establishment of the Bank of Canada, and provided more centralized control and flexibility of cash reserves. In chronological order with their origins these are again summarized here:—

1.—*Central Note Issue*, permanently established with the issue of Dominion notes under legislation of 1868.

2.—*The Canadian Bankers' Association*, established in 1900, and designed to effect greater co-operation among the banks in the issue of notes, in credit control, and in various aspects of bank activities.

3.—*The Central Gold Reserves*, established by the Bank Act of 1913.

4.—*Re-discount Facilities*, although originated as a war measure by the Finance Act of 1914, were made a permanent feature of the system by the Finance Act of 1923, which empowered the Minister of Finance to issue Dominion notes to the banks on the deposit by them of approved securities. This legislation provided the banks with a means of increasing their legal tender cash reserves at will.

## Section 2.—The Bank of Canada.

### Subsection 1.—The Bank of Canada Act and its Amendment.

C. 43 of the Statutes of 1934, "An Act to incorporate the Bank of Canada", provided for the establishment of a central bank in Canada. The capital of the Bank was originally \$5,000,000, divided into shares of \$50 par value. These shares were offered for public subscription by the Minister of Finance on Sept. 17, 1934, and were largely oversubscribed. The maximum allotment to any one individual or corporation was 15 shares. Shares of the Bank may be held only by British subjects ordinarily resident in Canada, or by corporations controlled by British subjects ordinarily resident in Canada. The maximum holding permitted one person is 50 shares. Directors, officers or employees of the chartered banks may not hold shares of the Bank. The Bank commenced business on Mar. 11, 1935.

By an amendment to the Act passed at the 1936 session of Parliament, the capitalization of the Bank was increased to \$10,100,000 by the sale of \$5,100,000 Class "B" shares to the Minister of Finance. The original shareholders are now designated Class "A".\*

The Bank is authorized to pay cumulative dividends of 4½ p.c. per annum from its profits after making such provision as the Board thinks proper for bad and doubtful debts, depreciation in assets, pension funds, and all such matters as are properly provided for by banks. The remainder of the profits will be paid into the Consolidated Revenue Fund of Canada and to the Rest Fund of the Bank in specified proportions until the Rest Fund is equal to the paid-up capital, when all the remaining profits will be paid into the Consolidated Revenue Fund.

The Bank may buy and sell securities of the Dominion, the provinces, the United Kingdom, and the United States of America, without restriction if of a maturity not exceeding two years, and in limited amounts if of longer maturity. It may also buy and sell securities of British Dominions and France without restriction, if maturing within six months. Short-term securities of the Dominion or provinces may be re-discounted. The Bank may buy and sell certain classes of commercial paper of limited currency, and if endorsed by a chartered bank may re-discount such commercial paper. Advances for six-month periods may be made to chartered banks, Quebec Savings Banks, the Dominion or any province against certain classes of collateral, and advances of specified duration may be made to the Dominion or any province in amounts not exceeding a fixed proportion of such government's revenue. The Bank may buy and sell gold, silver, nickel, and bronze coin and gold and silver bullion, and may deal in foreign exchange.

The provisions regarding the note issue of the Bank of Canada are dealt with on pp. 912-913.

\* At the time of going to press it is announced that legislation will be brought before the House of Commons before the end of the present (1938) session for the purchase of all outstanding Class "A" stock by the Dominion Government with the object of bringing the Bank of Canada under complete government ownership.

The Bank of Canada must maintain a reserve of gold equal to not less than 25 p.c. of its total note and deposit liabilities in Canada. The reserve, in addition to gold, may include silver bullion, balances in pounds sterling in the Bank of England, in United States dollars in the Federal Reserve Bank of New York, and in gold currencies in central banks in gold standard countries or in the Bank for International Settlements, treasury bills of the United Kingdom or the United States of America having a maturity not exceeding three months, and bills of exchange having a maturity not exceeding 90 days, payable in London, New York, or in a gold standard country, less any liabilities of the Bank payable in the currency of the United Kingdom, the United States of America, or a gold standard country.

The chartered banks are required to maintain a reserve of not less than 5 p.c. of their deposit liabilities within Canada in the form of deposits with and notes of the Bank of Canada.

The Bank acts as the fiscal agent of the Dominion of Canada and may, by agreement, act as banker or fiscal agent of any province. The Bank may not accept deposits from individuals and does not compete with the chartered banks in commercial banking fields.

The head office of the Bank is at Ottawa, and it has an agency in each province, namely, at Charlottetown, Halifax, Saint John, Montreal, Toronto, Winnipeg, Regina, Calgary, and Vancouver.

The Governor of the Bank is its chief executive officer and Chairman of the Board of Directors, and he is assisted by a Deputy Governor and an Assistant Deputy Governor. The first appointments were made by the Government. Subsequent appointments are to be made by the Board of Directors subject to the approval of the Governor in Council.

At the first meeting of the shareholders on Jan. 23, 1935, seven directors were elected for terms to run as follows: one until the third annual general meeting (1938), two until the fourth (1939), two until the fifth (1940), and two until the sixth annual general meeting (1941).

By the 1936 amendment the number of directors elected by the Class "A" shareholders will be eventually reduced to three who will hold office for three-year terms. The six directors appointed by the Class "B" shareholder with the approval of the Governor in Council, were announced on Sept. 11, 1936. These directors are appointed for terms to run as follows: two until the annual general meeting in 1940, two until 1941, and two until 1942. Thereafter, the Government directors, each of whom shall hold office for a term of three years, will be appointed by the Class "B" shareholder with the approval of the Governor in Council, two as of the day of the annual general meeting in 1940 and two at the day of each annual general meeting thereafter. In the transaction of the business of the Bank each director has one vote except that prior to the annual general meeting in 1940 each of the directors appointed by the Class "B" shareholder shall be entitled to two votes.

There is also an Executive Committee of the Board of Directors consisting of the Governor, Deputy Governor, and one member of the Board, which must meet once a week. This Committee has the same powers as the Board but every decision is submitted to the Board of Directors at its next meeting. The Board must meet at least four times a year. The Deputy Minister of Finance is an *ex officio* member of the Board of Directors and of the Executive Committee, but is without a vote.

The Governor, or in his absence the Deputy Governor, only has the power to veto any action or decision of the Board of Directors of the Executive Committee, subject to confirmation or disallowance by the Governor in Council.

### Subsection 2.—The Bank of Canada and Its Relationship to the Canadian Financial System.

An article under this title appeared at pp. 881-885 of the 1937 edition of the Year Book. It dealt with such subjects as the functions of the Bank, its control and regulation of credit and currency, the mechanism by which such control is exercised, the expansion and contraction of credit, the mitigation of general economic fluctuations, the control of exchange operations, the advisory function of the Bank, and its duties as the Government's banker.

### Subsection 3.—Bank of Canada Operations.

The operations of the Bank of Canada, as shown by the liabilities and assets statement as at Mar. 13, 1935, and Dec. 31, 1935-37, are shown in Table 1.

#### 1.—Liabilities and Assets of the Bank of Canada, Mar. 13, 1935, and Dec. 31, 1935-37.

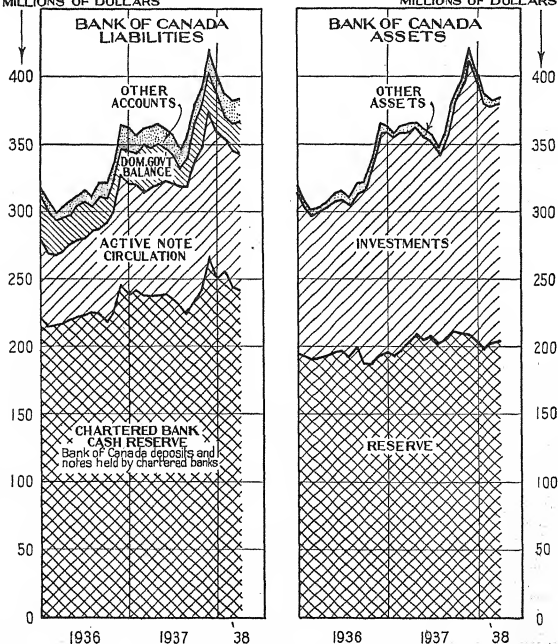
| Item.  | Mar. 13, 1935.<br>\$ | Dec. 31, 1935. <sup>1</sup><br>\$ | Dec. 31, 1936. <sup>1</sup><br>\$ | Dec. 31, 1937. <sup>1</sup><br>\$ |
|--|----------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| <b>LIABILITIES:</b>  |                      |                                   |                                   |                                   |
| Capital paid up .....  | 4,991,640            | 5,000,000                         | 10,100,000                        | 10,100,000                        |
| Reserve fund .....   | Nil                  | 173,092                           | 743,716                           | 1,348,414                         |
| Notes in circulation .....                                     | 97,805,665           | 99,077,229                        | 135,735,458                       | 165,830,405                       |
| Deposits—  |                      |                                   |                                   |                                   |
| Dominion Government .....                                      | 4,212,200            | 18,262,814                        | 19,917,359                        | 12,202,382                        |
| Chartered banks .....  | 151,937,638          | 181,630,034                       | 186,973,795                       | 106,059,737                       |
| Other .....  | 277,932              | 706,255                           | 2,059,627                         | 3,460,935                         |
| Totals, Deposits .....   | 156,417,750          | 200,665,133                       | 208,950,741                       | 211,769,054                       |
| Dividends declared .....                                       | Nil                  | 113,000                           | 182,793                           | 228,260                           |
| Other liabilities .....  | 99,702               | 2,020,098                         | 1,273,197                         | 1,034,083                         |
| <b>Totals, Liabilities .....</b>                               | <b>259,314,757</b>   | <b>307,655,152</b>                | <b>356,985,905</b>                | <b>390,430,216</b>                |
| <b>ASSETS:</b>   |                      |                                   |                                   |                                   |
| Reserves (at Market Values)—                                   |                      |                                   |                                   |                                   |
| Gold coin and bullion .....                                    | 106,584,356          | 180,509,343                       | 179,376,816                       | 179,763,762                       |
| Silver bullion .....   | 986,363              | 1,638,366                         | 2,257,032                         | 2,992,623                         |
| Sterling and U.S.A. dollars .....                              | 394,875              | 4,223,101                         | 9,125,401                         | 14,884,810                        |
| Other currencies, of countries on a gold standard .....        | Nil                  | 9,215                             | Nil                               | 382                               |
| Totals, Reserves .....   | 107,965,594          | 186,380,025                       | 190,759,248                       | 197,641,578                       |
| Subsidiary coin .....  | 297,335              | 128,778                           | 143,116                           | 42,989                            |
| Advances to Dominion Government .....                          | Nil                  | 3,465,813                         | Nil                               | Nil                               |
| Investments (at Not Exceeding Market Values)—                  |                      |                                   |                                   |                                   |
| Dominion and Provincial Government short-term securities ..... | 34,840,294           | 30,873,169                        | 61,290,024                        | 82,343,729                        |
| Other Dominion and Provincial Government securities .....      | 115,013,637          | 83,400,675                        | 99,016,300                        | 91,564,710                        |
| Other securities .....   | Nil                  | Nil                               | Nil                               | 12,212,437                        |
| Totals, Investments .....                                      | 149,853,931          | 114,283,844                       | 160,315,414                       | 186,120,876                       |
| Bank premises .....  | Nil                  | 111,911                           | 350,719                           | 1,167,563                         |
| All other assets .....   | 1,191,897            | 3,285,780                         | 5,417,408                         | 5,487,210                         |
| <b>Totals, Assets .....</b>                                    | <b>259,314,757</b>   | <b>307,655,152</b>                | <b>356,985,905</b>                | <b>390,430,216</b>                |

<sup>1</sup> From the Bank's Annual Statement.

The chart given below showing Bank of Canada liabilities and assets covers the short period since the Bank was established, but illustrates the relationship between the central bank's balance sheet and chartered bank cash reserves. The expansion of Bank of Canada liabilities and assets has provided for increased Bank of Canada notes in active circulation as the chartered bank-note issue is limited and gradually retired under Bank Act regulations, and somewhat enlarged the cash reserves of the chartered banks. The principal changes in Bank of Canada assets have been those due to revaluation of gold holdings required by the Exchange Fund Act of July, 1935, and the rise in investments, variations in which have been due in part to seasonal variations in cash reserves and active note circulation.

## BANK OF CANADA SOURCES AND DISTRIBUTION OF CASH

MONTHLY AVERAGE OF WEDNESDAY FIGURES  
MILLIONS OF DOLLARS



*Reproduced from the Bank of Canada's "Statistical Summary", April, 1938.*



## Section 3.—Currency.

## Subsection 1.—Canadian Coinage.

The present standard of Canada is gold of 900 millesimal fineness (23·22 grains equal to one dollar). As pointed out on p. 903 gold coin has been authorized but only very limited issues were ever made. The British sovereign and half sovereign, and United States eagle, half eagle, and double eagle are legal tender. Subsidiary coin consists of 50, 25 and 10 cent silver pieces,\* 800 fine (reduced from 925 fine in 1920). Such subsidiary silver coin is legal tender to the amount of ten dollars. The 5-cent piece (now made of nickel) is legal tender up to five dollars and the 1-cent bronze coin up to twenty-five cents. There is no provision for the redemption of subsidiary coin. Table 2 gives statistics of Canadian coinage, and Table 3 shows the coins in circulation at the end of each year from 1926 to 1937.

\*The Currency Act of 1910 made provision for a silver dollar and a 5-cent silver coin. The former was not coined until 1935, when a limited issue was made as a jubilee coin. The 5-cent silver coin was coined freely until 1921. It still has limited legal tender but has been replaced in the coinage by the 5-cent nickel piece.

## 2.—Particulars of Canadian Coinages Current in 1938.

| Coinage.  | Thick-<br>ness of<br>Blank. | Diameter of<br>Coin. |         | Fineness.                          | Legal Weight. |                |        | Legal Remedy—             |                      | Amount<br>for<br>which<br>Legal<br>Tender. |
|-----------|-----------------------------|----------------------|---------|------------------------------------|---------------|----------------|--------|---------------------------|----------------------|--|
|           |                             |                      |         |                                    |               |                |        | Of<br>Weight.             | Of<br>Fine-<br>ness. |  |
|           |                             | in.                  | in. mm. | 1,000 ths.                         | grns.         | oz.            | grams. | grns.                     | grams.               | 1,000ths.                                  |
| Gold—     |                             |                      |         |                                    |               |                |        |                           |                      |  |
| \$10..... | ·068                        | 1·060                | 26·92   | 900                                | 258           | ·5375          | 16·72  | ·4                        | ·026                 | 1 } any                                    |
| \$ 5..... | ·053                        | ·850                 | 21·59   | 900                                | 129           | ·26875         | 8·36   | ·25                       | ·016                 | 1 } amount.                                |
| Silver—   |                             |                      |         |                                    |               |                |        |                           |                      |  |
| \$ 1..... | ·09375                      | 1·40                 | 35·56   | 800                                | 360           | ·75            | 23·33  | 1·50                      | ·097                 | 6 } 10·00                                  |
| 50c.....  | ·064                        | 1·170                | 29·72   | 800                                | 180           | ·375           | 11·66  | 1·50                      | ·097                 | 6 } 10·00                                  |
| 25c.....  | ·051                        | ·930                 | 23·62   | 800                                | 90            | ·1875          | 5·83   | 1·00                      | ·065                 | 6 } 10·00                                  |
| 10c.....  | ·035                        | ·705                 | 17·91   | 800                                | 36            | ·075           | 2·33   | per 10 pieces.<br>3·00    | ·194                 | 6 } 10·00                                  |
| Nickel—   |                             |                      |         |                                    |               |                |        | per lb. of 100<br>pieces. |                      |  |
| 5c.....   | ·055<br>to<br>·057          | ·835                 | 21·21   | 1,000                              | 70            | lb. av.<br>·01 | 4·54   | 100·00                    | 6·480                | 15 } 5·00                                  |
| Bronze—   |                             |                      |         |                                    |               |                |        | per lb. of 140<br>pieces. |                      |  |
| 1c.....   | ·0495                       | ·750                 | 19·05   | { Cu. 955·<br>Sn. 30·<br>Zn. 15· } | 50            | ·007           | 3·24   | 140·00                    | 9·072                | - } 0·25                                   |

## 3.—Circulation of Canadian Coin at Dec. 31, 1926-37.

NOTE.—Net issues of coin since 1858.

| Date.     | Silver.    | Nickel. <sup>1</sup> | Bronze.   | Total.     | Per<br>Capita. |
|-----------|------------|----------------------|-----------|------------|----------------|
|           | \$         | \$                   | \$        | \$         | \$             |
| Dec. 31—  |            |                      |           |            |                |
| 1926..... | 27,433,463 | 564,865              | 2,043,833 | 30,042,161 | 3·18           |
| 1927..... | 27,104,534 | 813,784              | 2,080,196 | 29,998,514 | 3·11           |
| 1928..... | 27,737,963 | 1,063,627            | 2,171,657 | 30,973,247 | 3·15           |
| 1929..... | 28,638,195 | 1,330,498            | 2,200,789 | 32,259,482 | 3·22           |
| 1930..... | 28,562,330 | 1,494,525            | 2,297,405 | 32,354,260 | 3·17           |
| 1931..... | 28,706,345 | 1,775,139            | 2,346,054 | 32,827,541 | 3·16           |
| 1932..... | 28,853,740 | 1,939,923            | 2,558,962 | 33,352,625 | 3·17           |
| 1933..... | 28,530,340 | 2,064,054            | 2,678,302 | 33,272,696 | 3·12           |
| 1934..... | 28,702,640 | 2,256,268            | 2,745,295 | 33,704,204 | 3·11           |
| 1935..... | 28,407,198 | 2,449,278            | 2,818,341 | 33,674,787 | 3·08           |
| 1936..... | 28,442,074 | 2,650,891            | 2,904,283 | 33,997,233 | 3·08           |
| 1937..... | 29,367,857 | 2,899,361            | 3,003,286 | 35,290,504 | 3·17           |

<sup>1</sup> Nickel coins were first issued in 1922.

**The Royal Canadian Mint.**—The Ottawa Mint, established as a branch of the Royal Mint under the (Imperial) Coinage Act, 1870, and opened on Jan. 2, 1908, was by 21-22 Geo. V, c. 48, constituted a branch of the Department of Finance, and by the Proclamation of Nov. 14, 1931, issued under Sec. 3 of that Act, it has since Dec. 1, 1931, operated as the Royal Canadian Mint. At first the British North American provinces, and later the Dominion of Canada, obtained their coins from the Royal Mint in London or from The Mint, Birmingham, Ltd., and in its earlier years the operations of the Mint in Canada were confined to the production of gold, silver, and bronze coins for domestic circulation, of British sovereigns, and of small coins struck under contract for Newfoundland and Jamaica. Previous to 1914 small quantities of gold bullion were refined, but during the War the Mint came to the assistance of the British Government by establishing a refinery in which nearly twenty million ounces of South African gold were treated on account of the Bank of England, and the subsequent great development of the gold-mining industry in Canada has resulted in gold-refining becoming one of the principal activities of the Mint. Gold coins have not been struck since 1919, most of the fine gold produced from the rough shipments from the mines being delivered to the Department of Finance or, since Mar. 11, 1935, to the Bank of Canada in the form of bars of approximately 400 fine oz. each, the rest being sold in a convenient form to manufacturers. The fine silver extracted from the rough gold, when not required for coinage, is sold in New York or disposed of to local manufacturing firms.

**4.—Annual Receipts of Gold Bullion at the Ottawa Mint, and Bullion and Coinage Issued, calendar years 1926-37.**

| Calendar Year. | Gold<br>Received. | Gold Coin<br>and Bullion<br>Issued. | Silver<br>Coin<br>Issued. | Nickel<br>Coin<br>Issued. | Bronze<br>Coin<br>Issued. |
|----------------|-------------------|-------------------------------------|---------------------------|---------------------------|---------------------------|
|                | fine oz.          | fine oz.                            | \$                        | \$                        | \$                        |
| 1926.....      | 1,375,502         | 1,347,668                           | 50,000                    | 168,500                   | 28,200                    |
| 1927.....      | 1,448,180         | 1,451,907                           | 574,000                   | 249,000                   | 37,500                    |
| 1928.....      | 1,325,113         | 1,305,200                           | 867,000                   | 250,000                   | 92,100                    |
| 1929.....      | 438,351           | 468,384                             | 1,081,000                 | 267,000                   | 123,300                   |
| 1930.....      | 862,075           | 722,469                             | 326,000                   | 164,500                   | 13,400                    |
| 1931.....      | 1,721,237         | 1,735,112                           | 475,400                   | 281,000                   | 51,400                    |
| 1932.....      | 2,829,529         | 2,873,221                           | 287,000                   | 165,000                   | 213,200                   |
| 1933.....      | 2,568,838         | 2,589,649                           | 155,000                   | 125,000                   | 120,800                   |
| 1934.....      | 3,008,977         | 3,038,019                           | 172,300                   | 193,000                   | 69,900                    |
| 1935.....      | 3,158,780         | 3,177,401                           | 601,020                   | 194,000                   | 75,100                    |
| 1936.....      | 3,603,335         | 3,625,549                           | 809,200                   | 202,600                   | 87,200                    |
| 1937.....      | 3,933,453         | 3,937,910                           | 1,322,200                 | 251,100                   | 105,400                   |

**Subsection 2.—Dominion and Bank of Canada Notes.**

**Dominion Notes.**—It has been explained in the historical outline at the beginning of this chapter that Dominion notes became established in 1868. The legislation by which the issue was expanded with the growth of the country was given in a footnote on p. 952 of the 1934-35 Year Book.

Prior to the taking over of the note issue by the Bank of Canada when it opened on Mar. 11, 1935, Dominion notes were issued under any one of three statutory authorities: (1) the Dominion Notes Act (Statutes of 1934, c. 34), which required a gold reserve of 25 p.c. to be held against the first \$120,000,000 of notes issued and full gold coverage against any issue in excess of \$120,000,000; (2) the Finance Act (R.S.C. 1927, c. 70), Part II of which authorized the Minister of Finance to advance to any chartered bank or to the savings banks of Quebec, Dominion notes to any amount on the pledge of approved securities deposited with the Minister. These advances bore interest and no gold coverage was required to be held on Dominion notes so advanced; (3) C. 4 of the Statutes of 1915, authorizing the Government to issue Dominion notes to the amount of \$26,000,000 without gold coverage, but partly covered by the deposit of \$16,000,000 of railway securities guaranteed by the Dominion Government.

The Dominion note issue was therefore partly gold-backed and partly fiduciary. Dominion notes were legal tender and, in normal times when Canada was on the gold standard, they were redeemable in gold.

Dominion notes were of two types, those for the purpose of general circulation, and 'special' notes. The latter were used only by the banks for inter-bank transactions and clearings, or for cash reserves or deposit in the Central Gold Reserves. They were mainly of \$5,000 and \$50,000 denominations. Dominion notes for the purpose of general circulation were of the denominations of 25 cents, \$1, \$2, \$4, \$5, \$50, \$500 and \$1,000, although for a considerable time no \$4 or \$50 notes had been issued. Since the minimum denomination for chartered bank notes was set at \$5, Dominion notes of lower denominations naturally were largely in circulation among the general public, but there was nothing to prevent any of these Dominion notes from being included in the reserves of the banks, and it was provided that at least 40 p.c. of the banks' reserves were to consist of Dominion notes.

**Bank of Canada Notes.**—The Bank of Canada, when it commenced operations, assumed the liability for Dominion notes outstanding, which were replaced in public circulation, and partly replaced as cash reserves, by its own legal-tender notes in denominations of \$1, \$2, \$5, \$10, \$20, \$50, \$100 and \$1,000. Deposits of chartered banks at the Bank of Canada completed the replacement of Dominion notes as cash reserves.

The chartered banks are required under the Bank Act of 1934 to reduce the issue of their own bank notes gradually during the ten years 1935-45 to an amount not in excess of 25 p.c. of their paid-up capital on Mar. 11, 1935. Bank of Canada notes are thus replacing chartered bank notes as the issue of the latter is reduced.

In Table 5 are shown the denominations of Dominion or Bank of Canada notes in circulation in 1926, 1929, 1932, and in the three latest years. In the denominations under \$5, which have, for many years, been used for general circulation, there has been little change. In the denominations from \$5 to \$1,000, where Bank of Canada notes have partially replaced chartered bank notes or Dominion notes, there has been a large increase. On the other hand, the special Dominion notes in denominations from \$1,000 to \$50,000 which were used almost exclusively for inter-bank transactions or bank reserves, are no longer in use.

5.—Denominations of Dominion or Bank of Canada Notes in Circulation, 1926, 1929, 1932, and 1935-37.

Note.—Annual averages of month-end figures.

| Denomination.     | 1926.       | 1929.       | 1932.       | 1935.       | 1936.       | 1937.       |
|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                   | \$          | \$          | \$          | \$          | \$          | \$          |
| Provincial.....   | 27,624      | 27,621      | 27,594      | 27,584      | 27,583      | 27,581      |
| Fractional.....   | 1,330,663   | 1,330,710   | 1,287,544   | 1,253,376   | 1,173,630   | 1,142,455   |
| \$ 1.....         | 17,732,100  | 20,032,308  | 18,957,935  | 21,073,594  | 21,896,929  | 23,048,042  |
| 2.....            | 12,925,212  | 14,609,088  | 13,346,323  | 14,457,105  | 14,904,532  | 15,662,722  |
| 4.....            | 33,397      | 32,138      | 31,004      | 29,861      | 29,608      | 29,444      |
| Totals....        | 32,048,996  | 36,081,865  | 33,650,400  | 36,841,820  | 38,122,282  | 39,910,244  |
| \$ 5.....         | 626,179     | 730,101     | 5,137,627   | 11,718,950  | 14,264,286  | 21,415,392  |
| 10.....           | Nil         | Nil         | Nil         | 11,074,430  | 23,517,545  | 37,914,727  |
| 20.....           | Nil         | Nil         | Nil         | 3,503,082   | 7,962,389   | 15,328,494  |
| 25.....           | Nil         | Nil         | Nil         | 115,510     | 93,339      | 73,433      |
| 50.....           | 650         | 650         | 650         | 1,094,821   | 2,801,183   | 4,588,100   |
| 100.....          | Nil         | Nil         | Nil         | 1,443,950   | 3,071,616   | 5,813,192   |
| 500.....          | 1,875,917   | 1,811,375   | 2,530,833   | 21,073,894  | 2,416,917   | 1,981,542   |
| 1,000.....        | 3,179,250   | 4,168,917   | 6,437,583   | 11,585,083  | 12,414,166  | 14,017,323  |
| Totals....        | 6,301,996   | 6,711,543   | 14,106,683  | 61,610,020  | 67,141,941  | 101,122,213 |
| Specials—         |             |             |             |             |             |             |
| \$ 1,000.....     | 671,333     | 407,667     | 3,500       | 1,000       | 1,000       | 1,000       |
| 5,000.....        | 16,307,500  | 7,206,583   | 8,063,750   | 2,065,833   | 10,000      | 10,000      |
| 50,000.....       | 134,075,000 | 153,970,834 | 110,064,167 | 26,816,667  | Nil         | Nil         |
| Totals, Specials. | 151,053,833 | 161,588,084 | 118,121,417 | 28,883,500  | 11,000      | 11,000      |
| Grand Totals..    | 190,004,825 | 204,381,492 | 165,878,510 | 127,335,340 | 105,275,223 | 141,033,457 |

Subsection 3.—Chartered Bank Notes.

By reference to the historical outline at the beginning of this chapter, the developments may be traced by which bank notes became the chief circulating medium in Canada in the period preceding the establishment of the Bank of Canada. The main steps of this development which remained as permanent features of the system are assembled and emphasized here. By the Bank Act of 1870 (later consolidated with the general Bank Act of 1871), the note issue of a bank was not to exceed its paid-up capital, no bank notes were to be issued under \$4 in value (later changed to \$5 and multiples thereof), and, while the banks were allowed to use their own discretion regarding the amount of their cash reserves, it was stipulated that at least one-third (later increased to 40 p.c.) of such cash reserves as they chose to carry should consist of Dominion notes. In the revision of 1880, a note-holder was definitely recognized as a preferred creditor. The Bank Act of 1890 provided for the Bank Note Circulation Redemption Fund, made up by each bank depositing with the Minister of Finance an amount equal to 5 p.c. of its note circulation. As a result of the operation of this fund and of making notes a prior lien against the assets of failed banks, no bank-note holder in Canada has suffered a loss since 1881. In 1908, after the financial crisis of 1907, provision was made for the banks to issue, during the crop-moving season, October to January, inclusive (later extended to September to February, inclusive), an excess circulation up to 15 p.c. of their combined capital and 'rest' or reserve funds, such excess to be taxed at a rate not exceeding 5 p.c. per annum. The revision of the Bank Act in 1913 provided for the establishment of Central Gold Reserves in which banks might deposit gold or Dominion notes and

issue additional notes of their own there-against. The Finance Act (c. 3) of 1914, gave the Minister of Finance authority to issue Dominion notes to the banks against approved securities deposited with him. Originally passed as a war measure, this was made a permanent feature of the system by the Finance Act (c. 48) of 1923, and provided the banks with the means of further expanding their note issue by the deposit of the Dominion notes, so obtained, in the Central Gold Reserves.

Bank notes, although forming the chief circulating medium in the hands of the public, were a fiduciary issue; they were not legal tender but were convertible into Dominion notes which were legal tender.

The provisions regarding bank notes were materially changed with the establishment of the Bank of Canada under the Bank Act (c. 24) of 1934. The authority both for seasonal expansion and for additional issue secured by deposit in the Central Gold Reserves was then terminated. Provision was made for a gradual reduction in bank-note circulation over a period of years as explained on p. 912. As a result of these changes, current data on bank-note circulation are not comparable with those of earlier years. However, statistics of total notes in the hands of the general public are comparable. This public circulation includes chartered bank notes together with Dominion notes and Bank of Canada notes, exclusive of those held by the banks as reserves. Statistics on this basis are shown in Table 6.

6.—Note Circulation in the Hands of the Public, 1926-37.

| Year.     | Averages of Month-End<br>Figures. |  |             | Averages of Daily<br>Figures of Total. |                             |
|-----------|-----------------------------------|--|-------------|--|-----------------------------|
|           | Chartered<br>Bank. <sup>1</sup>   | Dominion<br>or Bank of<br>Canada. <sup>2</sup> | Total.      | Amount. <sup>3</sup>                   | Per<br>Capita. <sup>4</sup> |
|           | \$                                | \$   | \$          | \$'000,000                             | \$                          |
| 1926..... | 168,885,995                       | 26,314,706                                     | 195,200,701 | 195                                    | 20.63                       |
| 1927..... | 172,100,763                       | 27,793,500                                     | 199,894,263 | 198                                    | 20.55                       |
| 1928..... | 176,716,979                       | 28,803,340                                     | 205,520,319 | 204                                    | 20.74                       |
| 1929..... | 178,291,030                       | 30,063,870                                     | 208,354,900 | 205                                    | 20.44                       |
| 1930..... | 159,341,085                       | 23,812,059                                     | 183,153,144 | 185                                    | 18.12                       |
| 1931..... | 141,969,350                       | 28,572,011                                     | 170,541,361 | 167                                    | 16.09                       |
| 1932..... | 132,165,942                       | 28,483,686                                     | 160,649,628 | 158                                    | 15.04                       |
| 1933..... | 130,362,488                       | 29,066,051                                     | 159,428,539 | 157                                    | 14.70                       |
| 1934..... | 135,537,793                       | 30,547,720                                     | 166,085,513 | 163                                    | 15.06                       |
| 1935..... | 125,644,102                       | 47,288,051                                     | 172,932,153 | 169                                    | 15.45                       |
| 1936..... | 119,507,306                       | 66,934,958                                     | 186,442,264 | 182                                    | 16.50                       |
| 1937..... | 110,259,134                       | 94,876,384                                     | 205,135,518 | 200                                    | 17.99                       |

<sup>1</sup> Gross note circulation of chartered banks. <sup>2</sup> Total issue less notes held by chartered banks and notes deposited in the Central Gold Reserves up to March, 1935. <sup>3</sup> Annual averages of daily figures supplied by the Bank of Canada. <sup>4</sup> Figures based on estimates of population as given on p. 155.

## Section 4.—Monetary Reserves.

### Subsection 1.—Bank of Canada Reserves.

In the 1936 edition of the Year Book, the composition of Canadian Gold Reserves held by the Government was presented for the years 1905 to 1934, in Table 3. p. 895. Since March, 1935, the gold reserves have been held by the Bank of Canada. By authority of the Exchange Fund Act (c. 60, 1935), effective in July, 1935, they are to be valued at the prevailing current market price of gold. The effect of the revaluation as from the above date is shown in the chart on p. 909. The new data are now to be found under the item "Reserves" on the "Assets" side of Table 1, p. 908.

### Subsection 2.—Chartered Bank Canadian Cash Reserves.

**Before the Establishment of the Bank of Canada.**—Up to March, 1935, legal tender cash reserves in Canada were made up partly of Dominion notes (see

pp. 911-912) and partly of gold coin and bullion, and subsidiary coin, including these forms of cash held by the banks themselves and as deposits in the Central Gold Reserves. In so far as these reserves were in actual gold or were in Dominion notes backed by gold, they were subject to the expanding or contracting influences of monetary gold imports or exports arising from Canada's balance of international payments, so long as Canada was on the gold standard.

Since the Establishment of the Bank of Canada.—When the Bank of Canada was established, the chartered banks turned over their reserves of gold in Canada and Dominion notes to the new bank in exchange for deposits with and notes of the Bank of Canada. It was provided that henceforth the chartered banks were to carry reserves in these forms amounting to at least 5 p.c. of their deposit liabilities in Canada. Since that time, therefore, the gold reserves against currency and bank credit have been in the custody of the central bank.

The cash reserves shown in Table 7, include, prior to Mar. 11, 1935, the gold and coin and Dominion notes held by the banks in Canada and the deposits in the Central Gold Reserves not ear-marked against the issue of bank notes, and, since the above date, notes of and deposits with the Bank of Canada.

#### 7.—Cash Reserve of the Chartered Banks in Canada, 1926-37.

NOTE.—Figures supplied by the Bank of Canada. For detailed figures after 1935, see Table 10, item 1.

| Year.     | Annual<br>Average of<br>Daily<br>Figures. | Annual<br>Average of<br>Month-End<br>Figures. | Year.                   | Annual<br>Average of<br>Daily<br>Figures. | Annual<br>Average of<br>Month-End<br>Figures. |
|-----------|---|---|-------------------------|---|---|
|           | \$'000,000                                | \$'000,000                                    |                         | \$'000,000                                | \$'000,000                                    |
| 1926..... | 192                                       | 197   | 1933.....               | 189                                       | 195   |
| 1927..... | 187                                       | 194   | 1934.....               | 201                                       | 203   |
| 1928..... | 193                                       | 205   |                         |   |   |
| 1929..... | 191                                       | 212   | 1935 <sup>1</sup> ..... | 213                                       | 216   |
| 1930..... | 176                                       | 197   | 1936.....               | 225                                       | 225   |
| 1931..... | 169                                       | 182   | 1937.....               | 240                                       | 240   |
| 1932..... | 172                                       | 186   |                         |   |   |

<sup>1</sup> See text immediately preceding this table.

## Section 5.—Commercial Banking.

### Subsection 1.—Historical.

Since one of the chief functions of the early banks in Canada was to issue notes to provide a convenient currency or circulating medium, it has been expedient to cover both currency and banking in the one historical sketch which will be found on pp. 900-906. However, the function of note issue is no longer as important as it was. Latterly, the services of the chartered banks in gathering deposits from innumerable sources have emphasized the importance of deposit banking by which the savings of the people are put to immediate productive and commercial use; with the development of commercial banking, other necessary commercial banking facilities have been given more importance. Included among these is the mechanism of bills of exchange by which foreign trade is financed. The principal features of this development of commercial banking facilities in the evolution of the Canadian banking system may be summarized as follows: (1) its origin, closely related to the Montreal produce and export trade, and to the commerce of Halifax and Saint John; (2) the development of the branch bank system in order to meet the demands of a rapidly moving frontier of settlement; (3) the adaptation to the requirements of the grain and cattle trade of the west; and (4) the consolidation during later years of the

features which tended towards its early success. The development of a stable system has been accompanied by failures, particularly marked about the middle of the 19th century, but progress has nevertheless been steady, based on sound principles, and adapted as closely as could be to the particular needs of the country.

The branch bank is perhaps the most distinctive feature of the Canadian system as it exists to-day, and for a country such as Canada, vast in area and with a small population, the plan has proved a good one. A result of the growth of branch banks was the development of a partially centralized system—centralized as to banks, of which there are now ten, rather than as to districts as in the partially centralized system of the United States. There were 28 chartered banks in existence at Confederation. The elimination of weaker banks or their amalgamation with more stable institutions has been a progressive move towards greater security and confidence. The banks at Confederation were as follows:—

#### ONTARIO AND QUEBEC.

Bank of Montreal.  
Quebec Bank.  
Commercial Bank of Canada.  
City Bank.  
Gore Bank.  
Bank of British North America.  
Banque du Peuple.  
Niagara District Bank.  
Molson's Bank.  
Bank of Toronto.  
Ontario Bank.  
Eastern Townships Bank.  
Banque Nationale.  
Banque Jacques-Cartier.  
Merchants' Bank of Canada.

Royal Canadian Bank.  
Union Bank of Lower Canada.  
Mechanics' Bank.  
Canadian Bank of Commerce.

#### NOVA SCOTIA.

Bank of Yarmouth.  
Merchants' Bank of Halifax.  
People's Bank of Halifax.  
Union Bank of Halifax.  
Bank of Nova Scotia.

#### NEW BRUNSWICK.

Bank of New Brunswick.  
Commercial Bank of New Brunswick.  
St. Stephen's Bank.  
People's Bank of New Brunswick.

Table 8 shows the amalgamations since 1867, while a table at pp. 894-895 of the 1937 Year Book showed the insolvencies since Confederation; there have been no further changes reported and, therefore, the table is not reprinted here.

#### 8.—Bank Absorptions in Canada since 1867.

NOTE.—The purchasing banks named in the latter part of the table on p. 917 are no longer in business.

| Purchasing Bank.                      | Bank Absorbed.                      | Date. <sup>1</sup> |
|---------------------------------------|-------------------------------------|--------------------|
| Bank of Montreal.....                 | Exchange Bank, Yarmouth, N.S.....   | Aug. 13, 1903      |
|                                       | People's Bank of Halifax, N.S.....  | June 27, 1905      |
|                                       | Ontario Bank.....                   | Oct. 13, 1906      |
|                                       | People's Bank of New Brunswick..... | Apr. 15, 1907      |
|                                       | Bank of British North America.....  | Oct. 12, 1918      |
|                                       | Merchants' Bank of Canada.....      | Mar. 20, 1922      |
|                                       | Molson's Bank.....                  | Jan. 20, 1925      |
| Canadian Bank of Commerce.....        | Gore Bank.....                      | May 19, 1870       |
|                                       | Bank of British Columbia.....       | Dec. 31, 1900      |
|                                       | Halifax Banking Company.....        | May 30, 1903       |
|                                       | Merchants' Bank of P.E.I.....       | May 31, 1906       |
|                                       | Eastern Townships' Bank.....        | Feb. 29, 1912      |
|                                       | Bank of Hamilton.....               | Dec. 31, 1923      |
|                                       | Standard Bank of Canada.....        | Nov. 3, 1928       |
| Bank of Nova Scotia.....              | Union Bank of P.E.I.....            | Oct. 1, 1883       |
|                                       | Bank of New Brunswick.....          | Feb. 15, 1913      |
|                                       | The Metropolitan Bank.....          | Nov. 14, 1914      |
|                                       | The Bank of Ottawa.....             | Apr. 30, 1919      |
| Royal Bank of Canada.....             | Union Bank of Halifax.....          | Nov. 1, 1910       |
|                                       | Traders' Bank of Canada.....        | Sept. 3, 1912      |
|                                       | Quebec Bank.....                    | Jan. 2, 1917       |
|                                       | Northern Crown Bank.....            | July 2, 1918       |
|                                       | Union Bank of Canada.....           | Aug. 31, 1925      |
| Imperial Bank of Canada.....          | Niagara District Bank.....          | June 21, 1875      |
|                                       | The Weyburn Security Bank.....      | May 1, 1931        |
| Banque d'Hochelega <sup>2</sup> ..... | Banque Nationale.....               | Apr. 30, 1924      |

<sup>1</sup> Dates given since 1900 are those of the Orders in Council authorizing the absorptions.

<sup>2</sup> The Banque d'Hochelega after absorbing the Banque Nationale adopted the name Banque Canadienne Nationale.

## 8.—Bank Absorptions in Canada since 1867—concluded.

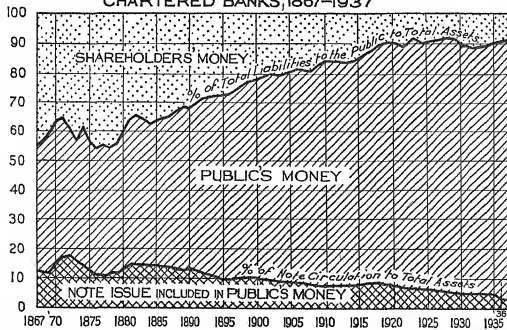
| Purchasing Bank.                | Bank Absorbed.                           | Date. <sup>1</sup> |
|---------------------------------|--|--------------------|
| Bank of New Brunswick .....     | Summerside Bank .....                    | Sept. 12, 1901     |
| Merchants' Bank of Canada ..... | Merchants' Bank .....                    | Feb. 22, 1868      |
|                                 | Commercial Bank of Canada .....          | June 1, 1868       |
| Union Bank of Halifax .....     | Commercial Bank of Windsor .....         | Oct. 31, 1902      |
| Northern Crown Bank .....       | The Northern Bank .....                  | July 2, 1908       |
|                                 | Crown Bank of Canada .....               | July 2, 1908       |
| Union Bank of Canada .....      | United Empire Bank .....                 | Mar. 31, 1911      |
| Home Bank of Canada .....       | La Banque Internationale du Canada ..... | Apr. 15, 1913      |
| Standard Bank of Canada .....   | Western Bank of Canada .....             | Feb. 13, 1909      |
|                                 | Sterling Bank of Canada .....            | Dec. 31, 1924      |

<sup>1</sup> Dates given since 1900 are those of the Orders in Council authorizing the absorptions.

## Subsection 2.—Combined Statistics of Chartered Banks.

In Table 9 are given summary statistics of Canadian banking business since Confederation. In order to afford a clear view of the nature of banking transactions in Canada, bank liabilities have been classified in two main groups: liabilities to shareholders and liabilities to the public. Only the latter group is ordinarily considered when determining the financial position of any such institution. Assets are divided into four groups, 'other assets' being included in the total. As of interest to students of banking practice, the relative rates of increase of capital and reserve funds may be noted, also the great increase in the proportion of liabilities to the public to total liabilities, and the gradually increasing percentage of liabilities to the public to total assets. The accompanying chart of ownership division of total assets is of interest in this connection. The declining proportion of notes in circulation to total liabilities to the public is also characteristic of the evolution of banking in recent times. Holdings of Dominion and Provincial Government and municipal securities were relatively insignificant prior to the Great War.

PERCENTAGE DISTRIBUTION OF THE TOTAL ASSETS  
OF THE  
CHARTERED BANKS, 1867-1937





## 9.—Historical Summary showing Development of the Canadian

NOTE.—These statistics are yearly averages computed from the twelve monthly returns. Dashes  
LIABILITIES.

| Cal-<br>endar<br>Year.  | Liabilities<br>to Shareholders. |                             | Liabilities to the Public.  |                                  |                                  |                                      |  |
|-------------------------|---------------------------------|-----------------------------|-----------------------------|----------------------------------|----------------------------------|--------------------------------------|--|
|                         | Capital.                        | Rest or<br>Reserve<br>Fund. | Notes<br>in<br>Circulation. | Demand<br>Deposits<br>in Canada. | Notice<br>Deposits<br>in Canada. | Total<br>on<br>Deposit. <sup>1</sup> | Total<br>Public<br>Liabilities. <sup>2</sup> |
|                         | \$                              | \$                          | \$                          | \$                               | \$                               | \$                                   | \$   |
| 1867 <sup>3</sup> ..... | 30,926,470                      | -                           | 9,346,081                   | -                                | -                                | 31,375,316                           | 43,273,969                                   |
| 1868.....               | 30,507,447                      | -                           | 9,350,646                   | -                                | -                                | 33,653,594                           | 45,144,854                                   |
| 1869.....               | 30,732,637                      | -                           | 9,539,511                   | -                                | -                                | 40,028,090                           | 50,940,226                                   |
| 1870.....               | 33,031,249                      | -                           | 15,149,081                  | -                                | -                                | 48,763,205                           | 65,685,870                                   |
| 1871.....               | 37,095,340                      | -                           | 20,914,637                  | -                                | -                                | 56,287,931                           | 80,250,974                                   |
| 1872.....               | 45,190,085                      | -                           | 25,296,454                  | -                                | -                                | 61,481,452                           | 90,864,688                                   |
| 1873.....               | 54,600,501                      | -                           | 27,165,878                  | -                                | -                                | 65,426,042                           | 98,982,668                                   |
| 1874.....               | 60,388,340                      | -                           | 27,904,963                  | -                                | -                                | 77,113,764                           | 116,412,392                                  |
| 1875.....               | 64,619,513                      | -                           | 23,635,039                  | -                                | -                                | 74,042,446                           | 104,069,356                                  |
| 1876.....               | 60,804,398                      | -                           | 21,245,935                  | -                                | -                                | 72,852,589                           | 99,014,014                                   |
| 1877.....               | 65,005,009                      | -                           | 20,704,338                  | -                                | -                                | 79,810,237                           | 99,810,731                                   |
| 1878.....               | 63,682,863                      | -                           | 20,475,586                  | -                                | -                                | 70,856,253                           | 95,538,831                                   |
| 1879.....               | 62,737,276                      | -                           | 19,480,103                  | -                                | -                                | 73,151,425                           | 96,760,113                                   |
| 1880.....               | 60,652,117                      | -                           | 22,529,623                  | -                                | -                                | 85,303,814                           | 111,838,941                                  |
| 1881.....               | 59,534,977                      | -                           | 28,516,692                  | -                                | -                                | 94,346,481                           | 127,176,249                                  |
| 1882.....               | 59,799,644                      | -                           | 33,582,080                  | -                                | -                                | 110,133,124                          | 149,777,214                                  |
| 1883.....               | 61,390,118                      | -                           | 33,283,302                  | -                                | -                                | 107,648,353                          | 145,688,095                                  |
| 1884.....               | 61,379,021                      | 18,149,193 <sup>4</sup>     | 30,449,410                  | -                                | -                                | 102,398,228                          | 137,498,917                                  |
| 1885.....               | 61,711,566                      | 17,879,710                  | 30,720,762                  | -                                | -                                | 104,014,660                          | 138,762,695                                  |
| 1886.....               | 61,662,086                      | 17,817,993                  | 31,030,499                  | -                                | -                                | 111,449,365                          | 146,954,260                                  |
| 1887.....               | 60,890,561                      | 17,878,582                  | 32,475,118                  | -                                | -                                | 112,650,985                          | 149,704,492                                  |
| 1888.....               | 60,345,035                      | 18,529,911                  | 32,205,259                  | -                                | -                                | 125,136,473                          | 163,990,797                                  |
| 1889.....               | 60,229,752                      | 19,766,426                  | 32,207,144                  | -                                | -                                | 134,650,732                          | 173,029,062                                  |
| 1890.....               | 59,974,902                      | 21,127,838                  | 32,834,511                  | -                                | -                                | 135,548,704                          | 173,207,587                                  |
| 1891.....               | 60,700,697                      | 22,821,501                  | 33,061,042                  | -                                | -                                | 148,396,968                          | 187,332,325                                  |
| 1892.....               | 61,626,311                      | 24,511,709                  | 33,788,679                  | -                                | -                                | 160,668,471                          | 208,062,169                                  |
| 1893.....               | 62,009,346                      | 25,837,753                  | 33,811,925                  | -                                | -                                | 174,776,722                          | 217,195,975                                  |
| 1894.....               | 62,063,371                      | 27,041,235                  | 31,160,003                  | -                                | -                                | 181,743,890                          | 221,066,724                                  |
| 1895.....               | 61,806,700                      | 27,273,500                  | 30,807,041                  | -                                | -                                | 190,015,939                          | 229,794,322                                  |
| 1896.....               | 62,648,173                      | 26,526,032                  | 31,455,297                  | -                                | -                                | 193,616,460                          | 232,838,086                                  |
| 1897.....               | 62,027,703                      | 27,087,782                  | 34,350,118                  | -                                | -                                | 211,768,096                          | 252,660,705                                  |
| 1898.....               | 62,571,920                      | 27,627,520                  | 37,873,634                  | -                                | -                                | 236,101,062                          | 281,076,056                                  |
| 1899.....               | 63,726,399                      | 28,958,999                  | 41,513,139                  | -                                | -                                | 266,504,528                          | 318,624,033                                  |
| 1900.....               | 65,154,594                      | 32,372,394                  | 46,574,780                  | -                                | -                                | 305,140,242                          | 350,394,095                                  |
| 1901.....               | 67,035,615                      | 36,249,145                  | 50,001,205                  | 95,109,631 <sup>5</sup>          | 221,624,664 <sup>5</sup>         | 349,573,327                          | 420,003,743                                  |
| 1902.....               | 69,869,070                      | 40,212,943                  | 55,412,598                  | 104,424,203                      | 244,063,545                      | 390,370,493                          | 466,958,829                                  |
| 1903.....               | 70,643,125                      | 47,761,636                  | 60,244,072                  | 112,461,787                      | 209,811,501                      | 424,107,140                          | 507,527,550                                  |
| 1904.....               | 79,234,191                      | 62,062,335                  | 61,709,838                  | 117,962,023                      | 307,007,192                      | 470,205,744                          | 564,014,079                                  |
| 1905.....               | 82,655,828                      | 56,474,124                  | 64,025,643                  | 133,116,550                      | 328,411,275                      | 531,243,479                          | 618,678,633                                  |
| 1906.....               | 91,035,604                      | 64,002,266                  | 70,638,870                  | 165,144,569                      | 381,778,705                      | 605,968,513                          | 713,790,553                                  |
| 1907.....               | 95,953,732                      | 69,806,892                  | 75,784,482                  | 166,342,144                      | 413,014,057                      | 654,839,711                          | 796,026,924                                  |
| 1908.....               | 96,147,526                      | 70,441,265                  | 71,401,697                  | 169,721,755                      | 406,103,063                      | 658,367,015                          | 762,077,184                                  |
| 1909.....               | 97,329,333                      | 75,887,695                  | 73,943,119                  | 225,414,828                      | 464,635,263                      | 783,268,880                          | 882,598,547                                  |
| 1910.....               | 98,787,929                      | 79,970,340                  | 82,120,303                  | 260,232,399                      | 532,087,627                      | 909,904,839                          | 1,019,177,001                                |
| 1911.....               | 103,009,256                     | 83,892,256                  | 99,882,223                  | 304,801,755                      | 568,976,299                      | 980,433,788                          | 1,097,661,393                                |
| 1912.....               | 112,730,943                     | 108,090,476                 | 100,146,541                 | 359,431,895                      | 625,705,765                      | 1,102,910,383                        | 1,240,191,354                                |
| 1913.....               | 116,297,729                     | 109,129,393                 | 105,265,336                 | 367,214,143                      | 626,199,470                      | 1,126,571,523                        | 1,287,372,534                                |
| 1914.....               | 114,750,807                     | 113,120,026                 | 104,600,158                 | 346,080,938                      | 656,760,637                      | 1,144,211,303                        | 1,309,944,006                                |
| 1915.....               | 113,982,741                     | 113,020,310                 | 106,137,092                 | 358,444,252                      | 690,904,274                      | 1,198,340,315                        | 1,353,629,123                                |
| 1916.....               | 113,175,353                     | 112,989,541                 | 120,691,913                 | 428,717,781                      | 780,842,383                      | 1,418,035,429                        | 1,596,095,337                                |
| 1917.....               | 111,637,755                     | 113,560,997                 | 161,029,606                 | 468,049,790                      | 928,271,838                      | 1,643,203,020                        | 1,866,228,236                                |
| 1918.....               | 110,618,504                     | 114,004,510                 | 198,645,254                 | 587,342,904                      | 966,341,499                      | 1,912,395,780                        | 2,184,359,820                                |
| 1919.....               | 115,004,960                     | 121,160,774                 | 218,919,261                 | 621,676,065                      | 1,125,202,403                    | 2,189,428,885                        | 2,456,882,568                                |
| 1920.....               | 123,617,120                     | 128,756,690                 | 228,800,379                 | 653,862,899                      | 1,239,308,076                    | 2,438,079,792                        | 2,784,068,998                                |
| 1921.....               | 129,096,339                     | 134,104,030                 | 194,621,710                 | 551,914,643                      | 1,289,347,063                    | 2,264,580,736                        | 2,556,454,190                                |
| 1922.....               | 126,456,455                     | 129,027,270                 | 166,466,109                 | 602,781,284                      | 1,191,637,004                    | 2,120,997,030                        | 2,394,522,667                                |
| 1923.....               | 124,375,293                     | 120,441,667                 | 170,420,793                 | 623,170,890                      | 1,107,277,065                    | 2,107,606,111                        | 2,374,306,370                                |
| 1924.....               | 122,409,504                     | 123,841,666                 | 166,136,785                 | 611,218,736                      | 1,108,245,414                    | 2,139,621,760                        | 2,438,771,001                                |
| 1925.....               | 118,331,227                     | 123,106,366                 | 165,235,168                 | 631,180,578                      | 1,269,542,684                    | 2,221,160,611                        | 2,532,332,064                                |
| 1926.....               | 116,638,254                     | 125,441,700                 | 168,885,965                 | 653,322,935                      | 1,340,559,021                    | 2,277,192,043                        | 2,604,601,786                                |
| 1927.....               | 121,666,774                     | 130,320,897                 | 172,100,763                 | 696,069,007                      | 1,399,062,201                    | 2,415,132,260                        | 2,758,324,713                                |
| 1928.....               | 122,839,879                     | 134,087,485                 | 176,716,978                 | 677,467,295                      | 1,496,608,545                    | 2,610,594,865                        | 3,044,742,105                                |
| 1929.....               | 137,269,085                     | 150,636,682                 | 178,291,030                 | 966,387,381                      | 1,479,870,058                    | 2,696,747,867                        | 3,215,503,963                                |
| 1930.....               | 144,500,874                     | 160,639,246                 | 199,341,085                 | 922,895,347                      | 1,427,569,716                    | 2,816,611,587                        | 3,290,530,268                                |
| 1931.....               | 144,674,853                     | 162,075,000                 | 141,969,350                 | 978,604,394                      | 1,437,976,392                    | 2,422,834,828                        | 2,741,554,219                                |
| 1932.....               | 144,500,000                     | 162,000,000                 | 132,165,842                 | 948,270,764                      | 1,376,325,128                    | 2,256,639,530                        | 2,540,014,789                                |
| 1933.....               | 144,500,000                     | 167,250,000                 | 130,362,432                 | 938,362,432                      | 1,358,407,944                    | 2,336,841,559                        | 2,517,834,260                                |
| 1934.....               | 144,918,667                     | 132,004,160                 | 135,337,793                 | 913,973,500                      | 1,372,817,869                    | 2,274,607,936                        | 2,548,720,434                                |
| 1935.....               | 145,500,000                     | 132,750,000                 | 125,644,102                 | 968,615,373                      | 1,445,281,247                    | 2,426,760,923                        | 2,697,950,352                                |
| 1936.....               | 145,500,000                     | 133,000,000                 | 119,507,306                 | 918,340,501                      | 1,518,216,945                    | 2,614,895,507                        | 2,855,622,232                                |
| 1937.....               | 145,500,000                     | 133,750,000                 | 110,250,134                 | 991,319,545                      | 1,573,654,555                    | 2,775,530,413                        | 3,025,721,653                                |

<sup>1</sup> Includes the deposits of Dominion and Provincial Governments and also, since 1901, deposits elsewhere than in Canada. <sup>2</sup> Includes other liabilities to the public. <sup>3</sup> Six-month average.

<sup>4</sup> First year reported.

## Chartered Banking Business, calendar years, 1867-1937.

indicate that no information is available under the corresponding column heads for the years indicated.

## ASSETS.

| Cal-<br>endar<br>Year. | Specie and<br>Dominion<br>or Bank<br>of Canada<br>Notes. <sup>1</sup> | Dominion and<br>Provincial<br>Government<br>Securities. | Municipal<br>Securities in<br>Canada and<br>Public<br>Securities<br>Elsewhere. | Total<br>Securities. | Total<br>Loans. | Total<br>Assets. <sup>2</sup> | P.C. of<br>Public<br>Li-<br>abilities<br>to Total<br>Assets. <sup>2</sup> |
|------------------------|---|---|--|----------------------|-----------------|-------------------------------|---|
|                        | \$  | \$  | \$   | \$                   | \$              | \$                            | p.c.  |
| 1867 <sup>3</sup>      | -   | -   | -  | -                    | 53,889,703      | 78,294,870                    | 55.27   |
| 1868                   | -   | -   | -  | -                    | 52,299,050      | 70,860,976                    | 56.53   |
| 1869                   | -   | -   | -  | -                    | 56,433,953      | 86,283,693                    | 59.04   |
| 1870                   | -   | -   | -  | -                    | 66,279,961      | 103,197,103                   | 63.65   |
| 1871                   | -   | -   | -  | -                    | 84,799,841      | 125,273,631                   | 64.06   |
| 1872                   | -   | -   | -  | -                    | 106,744,665     | 148,862,445                   | 61.04   |
| 1873                   | -   | -   | -  | -                    | 119,274,317     | 166,056,595                   | 56.60   |
| 1874                   | -   | -   | -  | -                    | 131,680,111     | 187,921,031                   | 61.95   |
| 1875                   | -   | -   | -  | -                    | 136,029,307     | 186,255,330                   | 56.17   |
| 1876                   | -   | -   | -  | -                    | 127,621,577     | 183,499,801                   | 54.29   |
| 1877                   | -   | -   | -  | -                    | 125,681,658     | 181,019,194                   | 55.14   |
| 1878                   | -   | -   | -  | -                    | 119,682,659     | 175,450,274                   | 54.45   |
| 1879                   | -   | -   | -  | -                    | 113,488,108     | 173,548,490                   | 55.75   |
| 1880                   | -   | -   | -  | -                    | 102,166,115     | 154,276,190                   | 60.99   |
| 1881                   | -   | -   | -  | -                    | 116,953,497     | 200,613,879                   | 63.39   |
| 1882                   | -   | -   | -  | -                    | 140,077,194     | 227,428,835                   | 65.83   |
| 1883                   | -   | -   | -  | -                    | 143,944,657     | 228,084,650                   | 63.98   |
| 1884                   | -   | -   | -  | -                    | 130,490,053     | 219,998,642                   | 62.50   |
| 1885                   | -   | -   | -  | -                    | 126,827,792     | 219,147,080                   | 63.32   |
| 1886                   | -   | -   | -  | -                    | 132,833,313     | 228,061,872                   | 64.44   |
| 1887                   | -   | -   | -  | -                    | 139,753,755     | 230,393,072                   | 64.98   |
| 1888                   | -   | -   | -  | -                    | 141,002,373     | 243,504,164                   | 67.55   |
| 1889                   | -   | -   | -  | -                    | 149,958,980     | 253,799,803                   | 68.18   |
| 1890                   | -   | -   | -  | -                    | 153,301,335     | 254,546,329                   | 68.05   |
| 1891                   | -   | -   | -  | -                    | 171,082,677     | 269,307,032                   | 69.60   |
| 1892                   | 17,704,201 <sup>4</sup>   | -   | -  | -                    | 193,458,838     | 291,636,281                   | 71.84   |
| 1893                   | 19,714,648  | -   | -  | -                    | 206,623,042     | 302,696,715                   | 71.75   |
| 1894                   | 22,371,954  | -   | -  | -                    | 204,124,939     | 307,520,020                   | 71.87   |
| 1895                   | 22,092,872  | -   | -  | -                    | 203,730,800     | 316,530,510                   | 72.50   |
| 1896                   | 22,318,027  | -   | -  | -                    | 213,211,996     | 320,937,643                   | 72.39   |
| 1897                   | 24,178,151  | -   | -  | -                    | 212,014,635     | 341,163,505                   | 74.06   |
| 1898                   | 25,330,564  | -   | -  | -                    | 223,806,320     | 370,533,991                   | 75.88   |
| 1899                   | 26,682,971  | -   | -  | -                    | 251,467,076     | 412,504,768                   | 77.24   |
| 1900                   | 29,047,382  | -   | -  | -                    | 279,279,761     | 450,715,065                   | 77.62   |
| 1901                   | 32,088,501  | 11,331,385 <sup>4</sup>                                 | 13,031,176 <sup>4</sup>  | 388,299,888          | 581,829,324     | 78.97                         |   |
| 1902                   | 35,478,598  | 9,804,998   | 14,437,632   | 430,662,670          | 585,761,109     | 79.72                         |   |
| 1903                   | 42,510,574  | 11,189,007  | 14,896,472   | 472,619,689          | 641,543,226     | 79.11                         |   |
| 1904                   | 50,307,871  | 10,705,202  | 15,850,145   | 509,011,998          | 685,417,768     | 79.67                         |   |
| 1905                   | 56,990,326  | 8,833,626   | 15,820,685   | 559,814,118          | 707,490,153     | 80.61                         |   |
| 1906                   | 61,237,581  | 9,360,614   | 20,460,670   | 655,809,879          | 778,512,078     | 81.25                         |   |
| 1907                   | 70,550,520  | 9,546,927   | 21,198,817   | 709,975,274          | 945,385,708     | 81.82                         |   |
| 1908                   | 80,654,276  | 9,522,743   | 19,788,937   | 760,170,833          | 941,296,619     | 80.06                         |   |
| 1909                   | 95,558,461  | 11,663,798  | 21,707,363   | 762,195,546          | 1,067,007,534   | 82.72                         |   |
| 1910                   | 104,735,626   | 14,741,621  | 21,696,987   | 870,100,890          | 1,211,453,351   | 84.13                         |   |
| 1911                   | 120,146,080   | 10,637,580  | 22,848,170   | 928,909,616          | 1,303,131,260   | 84.23                         |   |
| 1912                   | 132,853,405   | 9,388,968   | 22,586,119   | 1,061,943,991        | 1,470,065,478   | 84.36                         |   |
| 1913                   | 141,872,584   | 9,995,237   | 23,183,162   | 1,109,493,263        | 1,530,093,671   | 84.14                         |   |
| 1914                   | 165,845,957   | 11,697,603  | 22,707,738   | 1,101,830,924        | 1,555,076,395   | 84.20                         |   |
| 1915                   | 208,438,854   | 12,814,898  | 31,553,091   | 1,066,262,854        | 1,990,424,643   | 84.75                         |   |
| 1916                   | 230,118,831   | 29,717,007  | 117,902,686  | 1,135,896,531        | 1,539,286,709   | 86.82                         |   |
| 1917                   | 285,399,567   | 131,078,564   | 136,341,125  | 1,219,161,252        | 2,111,559,555   | 88.38                         |   |
| 1918                   | 351,762,841   | 162,821,026   | 252,936,568  | 1,329,660,869        | 2,432,331,418   | 89.81                         |   |
| 1919                   | 370,775,723   | 214,621,625   | 256,270,715  | 1,552,671,202        | 2,754,568,118   | 90.60                         |   |
| 1920                   | 367,165,054   | 230,356,255   | 210,826,991  | 1,935,449,637        | 3,094,133,843   | 90.86                         |   |
| 1921                   | 335,081,032   | 166,088,146   | 156,552,503  | 1,781,184,781        | 2,841,782,079   | 89.69                         |   |
| 1922                   | 305,522,425   | 198,820,031   | 90,131,491   | 1,643,643,443        | 2,638,776,483   | 89.62                         |   |
| 1923                   | 291,999,879   | 242,292,315   | 112,642,627  | 1,605,939,828        | 2,643,773,986   | 92.16                         |   |
| 1924                   | 266,961,330   | 314,099,067   | 135,597,860  | 502,561,847          | 1,546,792,080   | 70.17                         |   |
| 1925                   | 259,714,043   | 358,344,887   | 147,563,292  | 565,505,647          | 1,562,017,009   | 78.99                         |   |
| 1926                   | 252,754,268   | 343,595,936   | 127,768,375  | 532,817,056          | 1,682,379,658   | 80.84                         |   |
| 1927                   | 252,188,447   | 324,580,796   | 133,514,843  | 520,971,402          | 1,829,905,328   | 80.60                         |   |
| 1928                   | 264,804,251   | 338,897,004   | 124,996,823  | 522,628,208          | 2,079,403,626   | 83.23                         |   |
| 1929                   | 261,628,173   | 341,744,572   | 104,309,024  | 499,015,138          | 2,279,247,504   | 83.28                         |   |
| 1930                   | 232,016,616   | 316,196,343   | 101,585,131  | 471,637,542          | 2,094,597,746   | 83.37                         |   |
| 1931                   | 207,883,857   | 454,368,965   | 154,829,056  | 674,397,232          | 1,764,088,477   | 80.68                         |   |
| 1932                   | 206,925,103   | 459,709,241   | 150,891,590  | 658,758,801          | 1,562,067,313   | 78.07                         |   |
| 1933                   | 209,850,285   | 626,881,709   | 163,834,318  | 841,151,958          | 1,409,067,110   | 81.41                         |   |
| 1934                   | 214,419,280   | 683,498,403   | 139,850,099  | 866,726,589          | 1,373,450,071   | 80.81                         |   |
| 1935                   | 227,602,952 <sup>4</sup>  | 860,942,292   | 137,764,626  | 1,044,351,633        | 1,276,430,825   | 80.67                         |   |
| 1936                   | 240,596,447 <sup>4</sup>  | 1,074,795,141   | 161,879,725  | 1,330,806,991        | 1,140,557,800   | 80.65                         |   |
| 1937                   | 249,372,724 <sup>4</sup>  | 1,118,893,938   | 181,072,016  | 1,426,371,394        | 1,200,574,223   | 81.37                         |   |

<sup>1</sup> Including deposits in Central Gold Reserves, 1913-34.<sup>2</sup> Includes other assets.<sup>3</sup> First year reported.<sup>4</sup> Ten-month average.<sup>5</sup> Specie and notes of, and deposits in, the Bank of Canada.

## 10.—Assets of Chartered Banks, 1929, 1932, and 1935-37.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year. As the first two items have been worked out only to the nearest million for the years prior to 1936, the totals are not the exact sums of the individual items.

| Item.   | 1929.                | 1932.                | 1935.                  | 1936.                | 1937.                |
|---|----------------------|----------------------|------------------------|----------------------|----------------------|
|   | \$                   | \$                   | \$                     | \$                   | \$                   |
| Cash reserve against Canadian deposits (as per Table 7).....                | 212,000,000          | 188,000,000          | 216,000,000            | 225,126,826          | 239,893,926          |
| Secured bank-note issue .....   | 25,000,000           | 2,000,000            | 1                      | Nil                  | Nil                  |
| Subsidiary coin.....  | 2                    | 2                    | 5,795,547 <sup>2</sup> | 5,430,512            | 5,075,458            |
| Notes of other Canadian banks.  | 16,807,334           | 11,247,365           | 7,131,768              | 6,592,665            | 6,048,097            |
| Cheques of other banks .....  | 149,545,199          | 82,948,867           | 95,892,529             | 107,274,939          | 110,292,586          |
| Deposits at other Canadian banks.....                                       | 4,698,323            | 3,461,775            | 4,796,596              | 4,581,657            | 4,584,844            |
| Gold and coin abroad.....   | 24,797,260           | 19,089,489           | 9,703,723              | 10,039,218           | 4,403,340            |
| Foreign currencies.....   | 19,468,671           | 16,022,766           | 21,713,478             | 23,678,115           | 23,086,428           |
| Deposits at United Kingdom banks.....                                       | 4,826,444            | 9,383,994            | 21,693,367             | 28,842,740           | 23,783,213           |
| Deposits at foreign banks.....  | 86,178,585           | 97,999,358           | 87,022,098             | 91,805,124           | 96,487,680           |
| Securities—   |                      |                      |                        |                      |                      |
| Dominion and Provincial Government securities....                           | 341,744,572          | 489,709,241          | 860,942,292            | 1,074,795,141        | 1,118,893,938        |
| Other Canadian and foreign public securities.....                           | 104,309,024          | 150,891,599          | 137,764,626            | 161,879,725          | 181,972,016          |
| Other bonds, debentures, and stocks.....                                    | 52,961,542           | 55,157,961           | 45,644,735             | 94,134,125           | 125,505,440          |
| Call and Short Loans—   |                      |                      |                        |                      |                      |
| In Canada.....  | 267,271,438          | 117,224,745          | 32,395,250             | 93,225,528           | 107,443,328          |
| Elsewhere.....  | 301,091,053          | 84,237,574           | 71,554,958             | 64,379,795           | 67,097,568           |
| Current Loans—  |                      |                      |                        |                      |                      |
| Canada—   |                      |                      |                        |                      |                      |
| Loans to Provincial Governments.....  | 19,002,655           | 34,386,119           | 25,788,750             | 20,729,091           | 19,652,784           |
| Loans to cities, towns, municipalities, and school districts.....           | 93,325,211           | 130,567,792          | 108,029,440            | 99,940,882           | 97,769,341           |
| Other current loans and discounts.....                                      | 1,342,666,883        | 1,032,081,481        | 828,722,109            | 698,689,782          | 731,060,179          |
| Elsewhere than in Canada...   | 248,367,887          | 171,861,621          | 145,719,541            | 150,338,542          | 164,776,853          |
| Non-current loans .....   | 7,522,377            | 12,317,980           | 14,220,747             | 13,254,180           | 11,574,170           |
| Other Assets—   |                      |                      |                        |                      |                      |
| Real estate, other than bank premises.....                                  | 5,618,820            | 7,141,708            | 8,419,183              | 8,795,431            | 8,662,108            |
| Mortgages on real estate sold by the banks.....                             | 7,221,774            | 6,244,908            | 5,456,314              | 4,796,988            | 4,228,687            |
| Bank premises.....  | 75,536,823           | 79,714,603           | 76,794,405             | 75,446,272           | 74,420,237           |
| Bank circulation redemption fund.....                                       | 6,246,861            | 6,721,355            | 6,808,157              | 6,971,506            | 6,697,792            |
| Liabilities of customers under letters of credit <i>as per contra</i> ..... | 100,473,805          | 48,671,585           | 55,037,693             | 62,011,410           | 69,512,423           |
| All other assets.....   | 11,957,574           | 14,520,279           | 15,058,189             | 11,743,561           | 12,964,696           |
| <b>Totals, Assets .....</b>   | <b>3,528,465,027</b> | <b>2,869,429,779</b> | <b>2,856,577,704</b>   | <b>3,144,506,755</b> | <b>3,317,687,132</b> |

<sup>1</sup> System changed due to establishment of the Bank of Canada.  
<sup>2</sup> Ten-month average.

<sup>2</sup> Included in first item.

11.—Liabilities of Chartered Banks, 1929, 1932, and 1935-37.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

| Item.   | 1929.                | 1932.                | 1935.                | 1936.                | 1937.                |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|
|   | \$                   | \$                   | \$                   | \$                   | \$                   |
| <b>LIABILITIES TO THE PUBLIC.</b>                   |                      |                      |                      |                      |                      |
| Notes in Circulation.....                           | 178,201,030          | 132,165,942          | 125,644,102          | 119,507,306          | 110,259,134          |
| <b>Deposit Liabilities—</b>                         |                      |                      |                      |                      |                      |
| Government Deposits—                                |                      |                      |                      |                      |                      |
| Dominion.....                                       | 77,815,312           | 55,598,660           | 25,457,951           | 37,829,700           | 47,244,049           |
| Provincial.....                                     | 24,536,732           | 26,151,681           | 39,333,219           | 39,338,129           | 42,705,298           |
| <b>Public Deposits—</b>                             |                      |                      |                      |                      |                      |
| Demand.....   | 696,387,381          | 486,270,764          | 568,615,373          | 618,340,561          | 601,319,545          |
| Time.....   | 1,479,870,068        | 1,376,325,128        | 1,445,281,247        | 1,518,216,945        | 1,573,654,555        |
| Foreign.....  | 418,138,374          | 312,293,297          | 348,073,133          | 401,170,172          | 420,606,996          |
| <b>Inter-Bank Deposits—</b>                         |                      |                      |                      |                      |                      |
| Canadian.....                                       | 14,528,474           | 10,694,683           | 12,964,738           | 13,648,502           | 14,572,684           |
| United Kingdom.....                                 | 25,663,879           | 5,131,001            | 9,826,826            | 9,490,214            | 12,208,395           |
| Other.....  | 100,254,711          | 49,732,341           | 26,307,060           | 30,152,038           | 37,432,300           |
| <b>Totals, Deposit Liabilities.....</b>             | <b>2,837,224,921</b> | <b>2,322,107,555</b> | <b>2,475,850,547</b> | <b>2,668,186,351</b> | <b>2,830,743,773</b> |
| Canadian currency (estimated)                       | \$,293,000,000       | 1,955,000,000        | \$,108,000,000       | \$,215,000,000       | \$,328,000,000       |
| Foreign currency (estimated)                        | 544,000,000          | 367,000,000          | 398,000,000          | 438,000,000          | 458,000,000          |
| <b>Totals, Note and Deposit Liabilities.....</b>    | <b>3,015,515,951</b> | <b>2,454,363,497</b> | <b>2,601,503,649</b> | <b>2,787,693,657</b> | <b>2,950,002,907</b> |
| <b>Advances under the Finance Act.....</b>          | <b>82,916,667</b>    | <b>37,352,667</b>    | <b>5,836,417</b>     | <b>Nil</b>           | <b>Nil</b>           |
| <b>Other Liabilities to the Public—</b>             |                      |                      |                      |                      |                      |
| Bills payable.....                                  | 10,842,329           | 1,579,945            | 1,169,090            | 1,052,312            | 953,701              |
| Letters of credit outstanding.....                  | 100,473,804          | 48,071,585           | 55,037,693           | 62,011,410           | 69,512,423           |
| Liabilities not included under foregoing heads..... | 5,754,347            | 4,182,095            | 4,402,903            | 4,864,853            | 5,252,622            |
| <b>TOTALS, LIABILITIES TO THE PUBLIC.....</b>       | <b>3,215,503,098</b> | <b>2,546,149,789</b> | <b>2,667,950,352</b> | <b>2,855,622,232</b> | <b>3,025,721,653</b> |
| <b>LIABILITIES TO SHAREHOLDERS.</b>                 |                      |                      |                      |                      |                      |
| Capital.....  | 137,290,085          | 144,500,000          | 145,500,000          | 145,500,000          | 145,500,000          |
| Reserve or reserve fund.....                        | 150,636,682          | 162,000,000          | 132,750,000          | 133,000,000          | 133,750,000          |
| <b>Grand Totals, Liabilities.....</b>               | <b>3,503,498,865</b> | <b>2,852,649,789</b> | <b>2,946,200,352</b> | <b>3,134,122,232</b> | <b>3,304,971,653</b> |

12.—Ratio Comparisons of Certain Assets and Liabilities of Chartered Banks, 1926-37.

NOTE.—Yearly averages of month-end figures, except where otherwise specified.

| Year.     | Canadian Cash to Canadian Deposits. |            | Securities to Note and Deposit Liabilities. | Loans to Note and Deposit Liabilities. |
|-----------|-------------------------------------|------------|---|--|
|           | Daily. <sup>1</sup>                 | Month-End. |   |  |
|           | p.c.                                | p.c.       | p.c.  | p.c.                                   |
| 1926..... | 9.8                                 | 10.1       | 21.3  | 67.2                                   |
| 1927..... | 9.6                                 | 9.4        | 19.7  | 69.4                                   |
| 1928..... | 9.5                                 | 9.1        | 18.2  | 72.0                                   |
| 1929..... | 8.3                                 | 9.2        | 16.6  | 75.6                                   |
| 1930..... | 8.2                                 | 9.2        | 17.1  | 74.6                                   |
| 1931..... | 8.1                                 | 8.6        | 25.5  | 63.7                                   |
| 1932..... | 8.8                                 | 9.5        | 28.4  | 64.5                                   |
| 1933..... | 9.8                                 | 10.1       | 34.8  | 58.2                                   |
| 1934..... | 10.2                                | 10.3       | 35.3  | 55.0                                   |
| 1935..... | 10.1                                | 10.2       | 40.1  | 49.1                                   |
| 1936..... | 10.2                                | 10.0       | 47.7  | 40.9                                   |
| 1937..... | 10.2                                | 10.1       | 48.4  | 40.7                                   |

<sup>1</sup> Daily average Canadian cash to Canadian deposits; figures supplied by the Bank of Canada.

**Classification of Deposits and Loans.**—As a result of an amendment to the Bank Act in 1934, deposits and loans are required to be classified according to size of the deposit, or purpose of the loan, each year. The figures cover deposits and loans in Canada only. Statistics for 1934 will be found at p. 902 of the 1937 Year Book.

**13.—Classification of Deposits, According to Size, in Chartered Banks in Canada, as at Oct. 31, 1935-37.**

| Kind and Size of Deposit.             | 1935.            |                      | 1936.            |                      | 1937.            |                      |
|---------------------------------------|------------------|----------------------|------------------|----------------------|------------------|----------------------|
|                                       | No.              | \$                   | No.              | \$                   | No.              | \$                   |
| <b>Deposits Payable on Demand—</b>    |                  |                      |                  |                      |                  |                      |
| \$1,000 or less.....                  | 574,333          | 76,008,060           | 580,008          | 81,662,728           | 596,830          | 84,938,517           |
| \$1,000 to \$5,000.....               | 39,294           | 80,086,361           | 43,622           | 89,701,847           | 47,438           | 97,755,972           |
| \$5,000 to \$25,000.....              | 9,855            | 95,421,344           | 10,469           | 108,384,669          | 11,416           | 114,786,855          |
| \$25,000 to \$100,000.....            | 2,126            | 99,676,371           | 2,328            | 107,745,625          | 3,842            | 116,483,832          |
| Over \$100,000.....                   | 752              | 271,030,681          | 697              | 279,808,927          | 765              | 264,111,589          |
| Adjustment items.....                 | —                | 2,713,508            | —                | —3,021,920           | —                | 2,048,380            |
| <b>Totals.....</b>                    | <b>625,860</b>   | <b>624,936,324</b>   | <b>637,124</b>   | <b>664,281,667</b>   | <b>659,991</b>   | <b>679,125,145</b>   |
| <b>Deposits Payable After Notice—</b> |                  |                      |                  |                      |                  |                      |
| \$1,000 or less.....                  | 3,716,326        | 425,873,551          | 3,664,766        | 432,501,930          | 3,770,692        | 456,017,245          |
| \$1,000 to \$5,000.....               | 263,449          | 518,525,239          | 268,525          | 537,147,512          | 274,810          | 551,364,007          |
| \$5,000 to \$25,000.....              | 32,460           | 280,898,088          | 34,224           | 297,615,548          | 36,343           | 315,602,666          |
| \$25,000 to \$100,000.....            | 2,276            | 99,785,473           | 2,313            | 99,078,550           | 2,371            | 103,622,340          |
| Over \$100,000.....                   | 471              | 136,199,058          | 496              | 141,338,693          | 536              | 154,100,491          |
| Adjustment items <sup>1</sup> .....   | —                | 4,290,265            | —                | 2,637,199            | —                | 2,987,073            |
| <b>Totals.....</b>                    | <b>4,014,982</b> | <b>1,465,571,674</b> | <b>3,970,314</b> | <b>1,510,319,432</b> | <b>4,084,752</b> | <b>1,583,694,222</b> |

<sup>1</sup> Representing certified cheques, interest accrued on interest-bearing accounts, items in transit, etc.

**14.—Loans, According to Class, made by Chartered Banks in Canada and Outstanding as at Oct. 31, 1935-37.**

| Class of Loan.   | 1935.                | 1936.              | 1937.              |
|--|----------------------|--------------------|--------------------|
|  | \$                   | \$                 | \$                 |
| Provincial Government.....   | 29,651,382           | 14,711,533         | 26,384,534         |
| Municipal government and school district.....  | 96,777,122           | 91,982,393         | 94,187,869         |
| <b>Agricultural—</b>   |                      |                    |                    |
| (a) Loans to farmers, cattlemen, and fruit growers....   | 59,949,953           | 53,959,605         | 57,490,784         |
| (b) Loans to grain dealers, grain exporters and seed merchants.....  | 166,441,828          | 64,528,319         | 30,803,892         |
| <b>Totals, Agricultural.....</b>   | <b>226,391,781</b>   | <b>118,487,924</b> | <b>88,294,676</b>  |
| <b>Financial—</b>  |                      |                    |                    |
| (a) Call loans and other accommodation to brokers and bond dealers.....                                      | 66,697,883           | 97,376,547         | 73,531,185         |
| (b) Loans to trust, loan, mortgage, investment and insurance companies and other financial institutions..... | 63,132,592           | 73,830,397         | 68,966,413         |
| (c) Loans to individuals against approved stocks and bonds not otherwise classified.....                     | 101,183,396          | 111,462,635        | 142,798,237        |
| <b>Totals, Financial.....</b>  | <b>231,013,871</b>   | <b>282,669,579</b> | <b>285,295,835</b> |
| Merchandising, wholesale and retail.....   | 113,767,896          | 115,889,919        | 129,635,451        |
| Manufacturing—dealers in, lumber, pulpwood, and products thereof.....  | 72,974,075           | 94,850,267         | 62,949,545         |
| Other manufacturing of all descriptions.....   | 119,200,354          | 129,962,252        | 156,555,520        |
| Mining.....  | 6,812,425            | 6,898,818          | 6,109,791          |
| Fishing, including packers and curers of fish.....   | 7,207,205            | 8,193,886          | 7,709,483          |
| Public utility, including transportation companies.....  | 71,265,093           | 8,387,018          | 11,948,007         |
| Building—contractors and others for building purposes.....   | 24,125,443           | 23,719,245         | 33,579,276         |
| Charitable and religious institutions—churches, parishes, hospitals, etc.....                                | 16,101,300           | 14,797,993         | 16,408,806         |
| Other.....   | 52,320,478           | 52,986,222         | 61,567,831         |
| <b>Grand Totals.....</b>   | <b>1,067,609,025</b> | <b>933,537,049</b> | <b>980,626,624</b> |

**Clearing-House Transactions.**—In advanced industrial societies money is only 'the small change of commerce'. The great bulk of monetary transfers, particularly in the case of the larger transactions, is made through the banks. Thus it has been estimated that in the United States in 1917 about 6 p.c. of the business transactions of the country were financed by the use of money and the remaining 94 p.c. by the use of cheques. Accordingly, if we knew the aggregate amount of the cheques paid through the banks and charged to accounts, we should have an almost complete record of the volume of business transacted, and thus of the business activity of the country.

Statistics of this character were at first secured through the operation of the clearing houses—places where the representatives of all the banks met daily in the leading cities and presented for payment the notes of other banks and the cheques drawn upon other banks that had been paid in to their institutions in the regular course of business. In Canada, the first clearing houses to be established were those of Halifax (1887), Montreal (1889), Toronto (1891), Hamilton (1891), and Winnipeg (1893), and the number has subsequently increased to 32.

For the purpose of the Central Clearing Settlement, each bank maintains in its account with the Bank of Canada, Ottawa, a balance (in excess of whatever deposit is maintained as part of the 5 p.c. reserve against deposit liabilities in Canada required by statute) deemed sufficient to settle its clearing obligations. Montreal, Ottawa, Toronto, Winnipeg, and Vancouver are settlement points for the clearing houses in their respective zones. The debit or credit balances of the banks at the specified points are daily communicated by the clearing-house manager, and confirmed by the respective bank, to the local Agent of the Bank of Canada (to the Bank of Canada in the case of Ottawa) for transmission to the Bank of Canada at Ottawa by telephone or telegraph, which bank on the same day debits or credits, as the case may be, the account of the respective bank maintained with the Bank of Canada. By this means practically all the banking transactions of the country are adjusted daily in Ottawa in the accounts maintained by the banks with the Bank of Canada.

Table 15 shows for the years 1933-37 the total volume of clearings in the clearing houses of Canada. These figures, it may be added, represent not only actual city clearings but exchanges between numerous rural branches in each district.

**15.—Amounts of Exchanges of the Clearing Houses of Chartered Banks in Canada for the calendar years 1933-37.**

NOTE.—For the years 1919-23, see p. 806 of the 1924 Year Book; for 1924-28, p. 859 of the 1929 Year Book; and for 1929-32, p. 911 of the 1933 Year Book.

| Clearing House.   | 1933.       | 1934.       | 1935.       | 1936.       | 1937.       |
|-------------------|-------------|-------------|-------------|-------------|-------------|
|                   | \$          | \$          | \$          | \$          | \$          |
| Brandon.....      | 14,533,306  | 15,458,987  | 15,020,604  | 16,404,775  | 16,950,884  |
| Brantford.....    | 36,878,757  | 38,456,332  | 41,207,595  | 45,356,164  | 50,506,997  |
| Calgary.....      | 256,392,620 | 255,085,201 | 292,584,549 | 305,417,532 | 306,818,075 |
| Chatham.....      | 21,461,353  | 22,211,032  | 22,192,630  | 25,865,402  | 31,781,621  |
| Edmonton.....     | 173,437,240 | 189,164,864 | 190,411,079 | 197,022,175 | 206,183,407 |
| Fort William..... | 26,551,158  | 32,061,443  | 30,651,069  | 37,944,014  | 40,556,659  |
| Halifax.....      | 100,850,483 | 110,685,559 | 112,710,681 | 119,545,816 | 134,094,626 |
| Hamilton.....     | 175,111,440 | 191,235,709 | 197,844,548 | 236,482,873 | 285,024,414 |
| Kingston.....     | 25,953,786  | 26,825,320  | 26,779,593  | 28,025,967  | 29,466,619  |

**15.—Amounts of Exchanges of the Clearing Houses of Chartered Banks in Canada for the calendar years 1933-37—concluded.**

| Clearing House.    | 1933.                 | 1934.                 | 1935.                 | 1936.                 | 1937.                 |
|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                    | \$                    | \$                    | \$                    | \$                    | \$                    |
| Kitchener.....     | 43,365,053            | 50,268,751            | 50,414,984            | 54,834,963            | 56,542,066            |
| Lethbridge.....    | 17,301,733            | 20,785,708            | 23,093,854            | 24,105,821            | 25,229,839            |
| London.....        | 116,906,848           | 128,018,177           | 134,707,964           | 145,222,921           | 146,861,077           |
| Medicine Hat.....  | 9,819,336             | 10,988,541            | 12,995,361            | 12,367,708            | 12,092,715            |
| Moncton.....       | 31,577,841            | 34,991,249            | 36,753,000            | 37,250,494            | 41,278,230            |
| Montreal.....      | 4,249,531,044         | 4,653,226,857         | 4,582,416,573         | 5,386,188,857         | 5,871,146,513         |
| Moos Jaw.....      | 25,548,000            | 24,740,854            | 27,283,900            | 31,587,919            | 30,976,707            |
| New Westminster... | 21,278,157            | 25,028,251            | 27,463,691            | 32,166,195            | 35,055,324            |
| Ottawa.....        | 196,686,205           | 219,698,923           | 1,076,864,472         | 1,132,979,446         | 1,091,883,251         |
| Peterborough.....  | 27,848,985            | 30,920,440            | 31,325,062            | 32,347,673            | 32,660,582            |
| Prince Albert..... | 12,106,245            | 14,357,763            | 18,437,203            | 17,814,604            | 18,048,670            |
| Quebec.....        | 191,774,625           | 200,669,727           | 207,012,322           | 222,901,251           | 264,680,505           |
| Regina.....        | 170,858,649           | 181,277,356           | 191,995,407           | 218,683,823           | 186,954,514           |
| Saint John.....    | 74,770,201            | 84,066,825            | 84,059,113            | 90,730,898            | 99,329,689            |
| Sarnia.....        | 18,781,336            | 20,886,635            | 23,082,010            | 28,754,497            | 24,842,473            |
| Saskatoon.....     | 59,500,613            | 65,343,280            | 74,956,723            | 77,033,722            | 70,019,704            |
| Sherbrooke.....    | 27,452,934            | 28,628,148            | 28,659,155            | 29,959,127            | 35,528,449            |
| Sudbury.....       | 26,470,130            | 34,881,455            | 38,895,230            | 46,340,527            | 50,746,395            |
| Toronto.....       | 4,910,531,044         | 5,643,522,459         | 5,720,065,061         | 6,465,263,740         | 6,397,987,504         |
| Vancouver.....     | 667,955,703           | 755,532,352           | 781,204,535           | 953,666,363           | 975,233,058           |
| Victoria.....      | 69,300,699            | 73,931,173            | 79,007,806            | 87,484,888            | 89,962,678            |
| Windsor.....       | 106,323,870           | 104,459,995           | 115,902,542           | 142,249,053           | 161,779,776           |
| Winnipeg.....      | 2,807,734,669         | 2,676,180,032         | 2,622,557,766         | 2,925,627,890         | 2,930,163,981         |
| <b>Totals.....</b> | <b>14,720,611,033</b> | <b>15,963,570,498</b> | <b>16,927,486,132</b> | <b>19,202,526,601</b> | <b>18,856,384,667</b> |

**Bank Debits.**—As the number of separate banks has in recent years been steadily diminishing through amalgamations (see pp. 916 to 917), there being only 10 in December, 1937,\* as compared with 18 in 1923, inter-bank transactions are a steadily decreasing proportion of total business transacted, and bank clearings have ceased to be a satisfactory measure of general business. The Canadian Bankers' Association agreed to secure from January, 1924, the monthly aggregate figures of the amount of cheques charged to accounts at all banking offices situated in the clearing-house centres of Canada, and monthly and annual figures of cheques charged to accounts (bank debits) have been published since that time by the Dominion Bureau of Statistics. Further, in order that an estimate might be made of the proportion of banking transactions outside the clearing-house cities to the total, the Canadian Bankers' Association secured for the month of January, 1935, the grand total of all cheques charged to accounts at all branch banks throughout the Dominion. The results were published in the Bureau's Monthly Review of Bank Debits for February, 1935, and showed that the aggregate of transactions outside the clearing-house cities was in January, 1935, 12½ p.c. of the grand total in the clearing-house cities. The corresponding figures in the five economic areas were as follows: Maritime Provinces 104.2 p.c.; Quebec 6.9 p.c.; Ontario 13.5; Prairie Provinces 8.4 p.c.; British Columbia 16.7 p.c. Only in the Maritime Provinces did the total of bank debits in clearing-house cities appear to represent inadequately the grand total of business transactions.

\*Barclays Bank, established in 1920, was the latest addition to the commercial chartered banks in Canada; the number has remained at 10 since 1931.

# 16.—Bank Debits at the Clearing-House Centres of Canada, by Individual Centres, calendar years, 1933-37.

NOTE.—For the years 1924-28, see pp. 860-861 of the 1929 Year Book; and for 1929-32, p. 912 of the 1933 Year Book.

| Clearing-House Centre.     | 1933.                 | 1934.                 | 1935.                 | 1936.                 | 1937.                 |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                            | \$                    | \$                    | \$                    | \$                    | \$                    |
| <b>Maritime Provinces—</b> |                       |                       |                       |                       |                       |
| Halifax.....               | 254,222,616           | 275,948,590           | 310,052,273           | 341,775,552           | 406,591,857           |
| Moncton.....               | 72,568,809            | 87,228,253            | 90,680,025            | 98,641,301            | 112,550,923           |
| Saint John.....            | 154,222,107           | 171,074,214           | 173,320,562           | 189,985,161           | 214,218,066           |
| Totals.....                | 481,013,532           | 534,251,057           | 574,052,860           | 630,402,014           | 733,359,946           |
| <b>Quebec—</b>             |                       |                       |                       |                       |                       |
| Montreal.....              | 7,943,786,599         | 8,834,691,435         | 8,307,134,410         | 10,150,016,770        | 10,596,261,705        |
| Quebec.....                | 553,047,475           | 550,663,970           | 606,964,150           | 717,146,205           | 888,524,702           |
| Sherbrooke.....            | 65,236,186            | 64,354,455            | 63,430,468            | 71,484,756            | 83,635,135            |
| Totals.....                | 8,567,070,260         | 9,449,709,866         | 8,977,529,028         | 10,938,647,731        | 11,568,421,542        |
| <b>Ontario—</b>            |                       |                       |                       |                       |                       |
| Brantford.....             | 80,401,856            | 84,950,018            | 94,186,017            | 103,221,469           | 120,088,991           |
| Chatham.....               | 64,147,944            | 71,122,708            | 79,902,107            | 100,552,126           | 111,553,991           |
| Fort William.....          | 47,791,570            | 49,838,324            | 50,202,917            | 63,348,734            | 68,085,229            |
| Hamilton.....              | 460,728,640           | 528,307,669           | 559,388,191           | 601,358,579           | 691,483,173           |
| Kingston.....              | 51,473,716            | 52,719,902            | 55,634,971            | 67,807,438            | 76,687,262            |
| Kitchener.....             | 93,144,698            | 108,504,353           | 114,191,829           | 128,018,389           | 143,295,155           |
| London.....                | 299,130,638           | 334,741,204           | 362,317,829           | 420,889,625           | 413,075,352           |
| Ottawa.....                | 1,339,009,715         | 1,914,296,966         | 1,444,156,227         | 1,469,292,434         | 1,348,844,155         |
| Peterborough.....          | 49,090,223            | 53,767,240            | 60,023,193            | 68,620,664            | 75,770,408            |
| Sarnia.....                | 86,377,931            | 78,158,895            | 69,145,537            | 74,160,267            | 81,347,420            |
| Sudbury.....               | 41,886,025            | 48,991,202            | 55,597,151            | 72,735,265            | 88,780,691            |
| Toronto.....               | 10,221,687,968        | 11,389,321,892        | 10,642,516,427        | 12,158,836,487        | 12,236,886,028        |
| Windsor.....               | 192,566,981           | 204,453,372           | 289,364,280           | 499,678,369           | 493,352,632           |
| Totals.....                | 13,027,437,905        | 14,919,504,095        | 13,876,626,476        | 15,778,670,837        | 15,939,149,497        |
| <b>Prairie Provinces—</b>  |                       |                       |                       |                       |                       |
| Brandon.....               | 27,283,657            | 26,885,135            | 25,066,690            | 28,313,991            | 31,358,553            |
| Calgary.....               | 557,891,735           | 526,966,099           | 616,831,075           | 636,145,594           | 658,708,182           |
| Edmonton.....              | 366,409,278           | 382,681,968           | 400,418,426           | 387,380,725           | 417,099,669           |
| Lethbridge.....            | 36,911,296            | 42,671,124            | 48,946,714            | 45,780,043            | 51,787,653            |
| Medicine Hat.....          | 21,606,539            | 25,377,296            | 27,322,542            | 26,822,729            | 26,611,236            |
| Moose Jaw.....             | 48,696,759            | 51,316,748            | 53,374,399            | 77,376,584            | 73,307,647            |
| Prince Albert.....         | 17,844,842            | 21,106,632            | 24,434,064            | 25,976,662            | 28,730,736            |
| Regina.....                | 439,593,195           | 475,031,328           | 505,052,792           | 495,621,447           | 428,357,091           |
| Saskatoon.....             | 100,029,783           | 102,963,180           | 110,058,112           | 121,553,190           | 121,374,664           |
| Winnipeg.....              | 4,798,187,549         | 4,682,240,160         | 4,632,791,950         | 4,600,521,712         | 2,988,695,675         |
| Totals.....                | 6,414,353,624         | 6,337,239,720         | 6,445,395,764         | 6,505,518,677         | 4,827,021,407         |
| <b>British Columbia—</b>   |                       |                       |                       |                       |                       |
| New Westminster.....       | 47,213,108            | 52,390,693            | 59,819,150            | 70,089,850            | 74,751,206            |
| Vancouver.....             | 1,207,251,145         | 1,320,856,775         | 1,349,924,217         | 1,682,786,893         | 1,692,613,583         |
| Victoria.....              | 237,125,920           | 252,720,716           | 262,718,851           | 322,481,831           | 340,644,455           |
| Totals.....                | 1,491,590,173         | 1,625,968,184         | 1,672,462,218         | 2,075,358,484         | 2,098,109,246         |
| <b>Grand Totals.....</b>   | <b>29,981,465,494</b> | <b>32,866,672,922</b> | <b>31,546,066,311</b> | <b>35,923,606,743</b> | <b>35,166,961,438</b> |

## Subsection 3.—Statistics of Individual Chartered Banks.

**Assets and Liabilities.**—Tables 17 and 18 show, respectively, the principal and total assets and liabilities of the individual banks for the years 1929 and 1934-37, the figures being averages computed from the monthly bank returns. The statistics in column 2 of Table 17 represent, for years prior to 1935, when the Bank of Canada was established, the totals of the banks' holdings of gold and coin in Canada, Dominion notes, and that part of their deposits in the Central Gold Reserves not required against their note issues; they now represent the total of Bank of Canada notes in the possession of the chartered banks together with their deposits at the Bank of Canada. Figures for this column have been supplied by the Bank of Canada.



## 17.—Principal and Total Assets of Individual Chartered Banks, 1929 and 1934-37.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

| Bank.                             | Year.             | Cash Reserve<br>against<br>Canadian<br>Deposits. | Total<br>Securities. | Total<br>Loans. | Total<br>Assets. |
|-----------------------------------|-------------------|--|----------------------|-----------------|------------------|
|                                   |                   | \$   | \$                   | \$              | \$               |
| Bank of Montreal.....             | 1929              | 86,400,000                                       | 130,941,236          | 581,302,970     | 913,750,043      |
|                                   | 1934              | 74,500,000                                       | 305,191,599          | 293,631,480     | 740,549,406      |
|                                   | 1935              | 65,400,000                                       | 349,672,401          | 266,878,000     | 706,144,449      |
|                                   | 1936              | 72,200,000                                       | 420,732,431          | 220,222,292     | 707,418,203      |
|                                   | 1937              | 74,800,000                                       | 451,446,479          | 231,442,795     | 843,559,630      |
| Bank of Nova Scotia.....          | 1929              | 18,400,000                                       | 44,107,378           | 172,881,551     | 275,287,022      |
|                                   | 1934              | 19,500,000                                       | 83,293,801           | 120,490,723     | 299,496,674      |
|                                   | 1935              | 23,400,000                                       | 108,828,021          | 110,217,442     | 277,368,870      |
|                                   | 1936              | 20,400,000                                       | 123,250,165          | 105,196,805     | 290,605,674      |
|                                   | 1937              | 21,200,000                                       | 117,296,803          | 118,505,352     | 297,863,823      |
| Bank of Toronto.....              | 1929              | 8,700,000  | 17,633,621           | 89,012,432      | 134,465,442      |
|                                   | 1934              | 5,900,000  | 39,137,354           | 55,006,566      | 114,639,430      |
|                                   | 1935              | 11,000,000                                       | 43,941,167           | 51,748,891      | 121,582,723      |
|                                   | 1936              | 11,500,000                                       | 58,430,476           | 45,543,097      | 133,018,556      |
|                                   | 1937              | 12,700,000                                       | 65,362,279           | 47,498,717      | 141,847,481      |
| Banque Provinciale du Canada..... | 1929              | 1,200,000  | 10,203,136           | 33,950,003      | 54,648,363       |
|                                   | 1934              | 800,000  | 20,024,712           | 19,763,225      | 47,745,805       |
|                                   | 1935              | 2,400,000  | 20,044,145           | 18,463,790      | 48,383,082       |
|                                   | 1936              | 3,000,000  | 23,813,904           | 16,748,284      | 50,954,098       |
|                                   | 1937              | 4,500,000  | 20,213,729           | 17,419,458      | 55,310,698       |
| Canadian Bank of Commerce.....    | 1929              | 40,000,000                                       | 86,446,466           | 498,345,544     | 737,542,966      |
|                                   | 1934              | 45,400,000                                       | 155,860,792          | 282,374,191     | 561,283,374      |
|                                   | 1935              | 46,500,000                                       | 208,399,787          | 253,357,099     | 585,971,009      |
|                                   | 1936              | 45,600,000                                       | 255,564,828          | 233,933,735     | 618,864,661      |
|                                   | 1937              | 46,300,000                                       | 271,802,011          | 240,550,574     | 649,200,637      |
| Royal Bank of Canada.....         | 1929              | 38,300,000                                       | 126,757,074          | 614,002,764     | 949,010,252      |
|                                   | 1934              | 41,100,000                                       | 147,674,205          | 393,513,846     | 713,016,286      |
|                                   | 1935              | 42,000,000                                       | 192,962,019          | 379,979,253     | 750,717,195      |
|                                   | 1936              | 44,400,000                                       | 283,617,114          | 338,870,903     | 817,847,875      |
|                                   | 1937              | 49,400,000                                       | 323,108,273          | 349,453,135     | 880,211,590      |
| Dominion Bank.....                | 1929              | 7,700,000  | 20,378,753           | 99,205,694      | 150,976,550      |
|                                   | 1934              | 5,000,000  | 31,683,339           | 66,984,948      | 119,809,861      |
|                                   | 1935              | 8,300,000  | 36,766,116           | 62,975,908      | 126,554,150      |
|                                   | 1936              | 10,200,000                                       | 49,836,736           | 56,988,446      | 135,785,656      |
|                                   | 1937              | 9,600,000  | 53,952,829           | 59,671,160      | 141,019,393      |
| Banque Canadienne Nationale.....  | 1929              | 4,400,000  | 39,444,192           | 90,376,497      | 155,406,098      |
|                                   | 1934              | 3,400,000  | 44,146,522           | 62,287,900      | 125,079,011      |
|                                   | 1935              | 8,800,000  | 49,179,738           | 54,918,107      | 128,084,699      |
|                                   | 1936              | 8,600,000  | 61,094,262           | 50,519,670      | 137,442,533      |
|                                   | 1937              | 10,100,000                                       | 55,143,091           | 63,037,116      | 145,750,652      |
| Imperial Bank of Canada.....      | 1929              | 7,300,000  | 21,818,113           | 96,859,437      | 148,644,987      |
|                                   | 1934              | 7,100,000  | 30,805,888           | 77,075,727      | 133,274,500      |
|                                   | 1935              | 7,700,000  | 36,690,825           | 75,599,293      | 137,764,762      |
|                                   | 1936              | 8,000,000  | 49,172,456           | 70,102,051      | 147,179,035      |
|                                   | 1937              | 10,700,000                                       | 54,932,510           | 72,434,899      | 157,036,305      |
| Weyburn Security Bank.....        | 1929 <sup>1</sup> | 200,000  | 1,166,833            | 3,178,206       | 6,349,160        |
| Barclays Bank (Canada).....       | 1929 <sup>2</sup> | 100,000  | 358,012              | 197,405         | 4,437,434        |
|                                   | 1934              | 100,000  | 2,807,080            | 1,955,465       | 12,155,754       |
|                                   | 1935              | 600,000  | 4,867,734            | 2,203,072       | 14,056,175       |
|                                   | 1936              | 500,000  | 5,276,920            | 2,432,507       | 15,889,882       |
|                                   | 1937              | 700,000  | 7,112,790            | 2,551,017       | 18,686,623       |
| Totals.....                       | 1929              | 212,000,000                                      | 499,015,138          | 2,279,247,564   | 3,528,468,027    |
|                                   | 1934              | 203,000,000                                      | 866,725,938          | 1,373,683,071   | 3,837,919,961    |
|                                   | 1935              | 216,000,000                                      | 1,044,351,633        | 1,276,430,825   | 3,956,577,704    |
|                                   | 1936              | 225,000,000                                      | 1,350,896,991        | 1,149,557,800   | 3,144,506,763    |
|                                   | 1937              | 240,000,000                                      | 1,426,371,394        | 1,200,574,233   | 3,317,087,132    |

<sup>1</sup> Absorbed by the Imperial Bank of Canada May 1, 1931.<sup>2</sup> Four-month average. Bank commenced business in September, 1929. The grand totals for 1929 are, however, twelve-month averages for all banks.

## 18.—Principal and Total Liabilities of Individual Chartered Banks, 1929 and 1934-37.

Note.—The statistics in this table are averages computed from the twelve monthly returns in each year.

| Bank.                             | Year.             | Notes in Circulation. | Deposit Liabilities. |               |             | Liabilities to Shareholders. | Total Liabilities. |
|-----------------------------------|-------------------|-----------------------|----------------------|---------------|-------------|------------------------------|--------------------|
|                                   |                   |                       | Government.          | Public.       | Inter-Bank. |                              |                    |
|                                   |                   | \$                    | \$                   | \$            | \$          | \$                           | \$                 |
| Bank of Montreal...               | 1929              | 44,588,405            | 53,303,709           | 680,631,822   | 30,303,442  | 70,446,677                   | 908,926,178        |
|                                   | 1934              | 34,185,593            | 29,904,262           | 575,941,584   | 6,988,247   | 74,000,000                   | 736,498,121        |
|                                   | 1935              | 29,849,273            | 23,491,810           | 517,001,769   | 9,486,070   | 74,000,000                   | 764,351,944        |
|                                   | 1936              | 28,711,578            | 25,252,440           | 647,936,495   | 9,557,704   | 74,250,000                   | 795,463,714        |
|                                   | 1937              | 24,246,142            | 38,833,093           | 679,048,576   | 12,511,120  | 75,000,000                   | 842,093,963        |
| Bank of Nova Scotia.....          | 1929              | 15,956,549            | 3,061,797            | 202,312,043   | 6,968,900   | 30,000,000                   | 272,704,813        |
|                                   | 1934              | 12,001,984            | 2,449,297            | 203,850,935   | 4,332,452   | 36,000,000                   | 268,505,628        |
|                                   | 1935              | 10,771,142            | 2,957,007            | 215,204,121   | 4,105,639   | 36,000,000                   | 276,534,562        |
|                                   | 1936              | 10,101,797            | 5,446,076            | 225,436,635   | 4,869,675   | 36,000,000                   | 289,797,351        |
|                                   | 1937              | 9,800,871             | 2,566,548            | 237,225,243   | 4,427,098   | 36,000,000                   | 290,515,820        |
| Bank of Toronto....               | 1929              | 8,334,322             | 1,058,293            | 100,825,532   | 4,301,318   | 14,127,164                   | 132,734,214        |
|                                   | 1934              | 6,271,812             | 1,453,638            | 86,269,244    | 1,842,095   | 15,000,000                   | 113,702,660        |
|                                   | 1935              | 5,260,483             | 1,914,259            | 94,232,150    | 2,500,251   | 15,000,000                   | 120,647,096        |
|                                   | 1936              | 4,680,577             | 3,043,809            | 103,774,815   | 3,134,582   | 15,000,000                   | 132,023,164        |
|                                   | 1937              | 4,225,007             | 2,684,423            | 112,252,400   | 3,537,407   | 15,000,000                   | 140,835,623        |
| Banque Provinciale du Canada..... | 1929              | 4,464,714             | 425,790              | 42,296,216    | 121,181     | 5,500,000                    | 54,146,998         |
|                                   | 1934              | 3,837,903             | 323,837              | 36,750,500    | 50,153      | 5,000,000                    | 47,388,099         |
|                                   | 1935              | 3,602,385             | 245,491              | 38,919,770    | 45,940      | 5,000,000                    | 45,052,049         |
|                                   | 1936              | 3,498,552             | 232,101              | 41,795,210    | 59,358      | 5,000,000                    | 50,652,813         |
|                                   | 1937              | 3,283,591             | 1,615,086            | 45,046,361    | 97,844      | 5,000,000                    | 55,022,562         |
| Canadian Bank of Commerce.....    | 1929              | 33,352,567            | 11,530,442           | 529,141,722   | 53,207,388  | 55,543,749                   | 731,593,634        |
|                                   | 1934              | 24,800,103            | 10,508,445           | 442,708,474   | 8,386,672   | 50,000,000                   | 558,813,189        |
|                                   | 1935              | 25,348,088            | 14,619,635           | 466,714,142   | 10,233,069  | 50,000,000                   | 584,120,623        |
|                                   | 1936              | 24,091,592            | 15,432,633           | 496,360,221   | 11,366,460  | 50,000,000                   | 610,530,515        |
|                                   | 1937              | 22,294,347            | 17,760,683           | 518,257,897   | 13,767,952  | 50,000,000                   | 643,936,383        |
| Royal Bank of Canada.....         | 1929              | 41,105,812            | 23,341,461           | 700,120,040   | 33,859,608  | 68,142,960                   | 944,796,101        |
|                                   | 1934              | 31,412,978            | 13,656,783           | 570,131,891   | 10,637,520  | 55,000,000                   | 711,370,571        |
|                                   | 1935              | 30,894,509            | 14,668,783           | 614,911,650   | 10,559,313  | 55,000,000                   | 748,444,778        |
|                                   | 1936              | 30,414,628            | 18,790,155           | 677,279,767   | 12,096,293  | 55,000,000                   | 815,579,893        |
|                                   | 1937              | 29,431,402            | 16,095,540           | 726,481,376   | 14,886,475  | 55,000,000                   | 866,173,511        |
| Dominion Bank....                 | 1929              | 7,904,871             | 1,690,531            | 107,612,958   | 6,009,296   | 15,635,582                   | 150,041,996        |
|                                   | 1934              | 6,478,601             | 1,298,338            | 89,093,687    | 2,349,343   | 14,000,000                   | 119,247,417        |
|                                   | 1935              | 6,294,324             | 1,343,678            | 97,065,461    | 3,234,575   | 14,000,000                   | 125,952,174        |
|                                   | 1936              | 6,159,670             | 1,816,717            | 106,075,402   | 3,182,815   | 14,000,000                   | 135,145,017        |
|                                   | 1937              | 5,779,618             | 1,964,018            | 111,797,450   | 3,498,397   | 14,000,000                   | 140,586,800        |
| Banque Canadienne Nationale.....  | 1929              | 11,796,049            | 3,117,266            | 115,948,289   | 1,079,893   | 12,598,742                   | 153,806,492        |
|                                   | 1934              | 8,102,106             | 2,276,750            | 97,741,302    | 1,086,559   | 12,000,000                   | 124,382,852        |
|                                   | 1935              | 6,660,373             | 1,653,758            | 104,903,295   | 1,051,327   | 12,000,000                   | 127,372,211        |
|                                   | 1936              | 4,825,287             | 1,732,259            | 116,278,220   | 1,143,784   | 12,000,000                   | 136,841,502        |
|                                   | 1937              | 5,145,069             | 1,089,900            | 123,767,079   | 2,065,425   | 12,000,000                   | 144,989,351        |
| Imperial Bank of Canada.....      | 1929              | 10,156,422            | 4,484,691            | 110,927,178   | 3,602,427   | 15,000,000                   | 146,916,789        |
|                                   | 1934              | 8,140,964             | 3,669,030            | 100,496,833   | 2,655,510   | 15,000,000                   | 132,175,094        |
|                                   | 1935              | 6,704,185             | 3,757,551            | 106,821,368   | 2,803,772   | 15,000,000                   | 136,675,412        |
|                                   | 1936              | 6,114,146             | 5,338,889            | 115,499,134   | 2,920,199   | 15,000,000                   | 146,155,207        |
|                                   | 1937              | 5,747,563             | 7,793,619            | 122,375,207   | 3,826,475   | 15,000,000                   | 156,020,052        |
| Weyburn Security Bank.....        | 1929 <sup>1</sup> | 511,116               | 138,064              | 4,415,048     | 45,729      | 774,560                      | 6,258,719          |
| Barclays Bank (Canada).....       | 1929 <sup>2</sup> | 108,607               | Nil                  | 493,097       | 2,844,367   | 1,000,000                    | 4,449,695          |
|                                   | 1934              | 305,749               | 292,130              | 5,785,926     | 4,078,691   | 1,620,833                    | 12,148,707         |
|                                   | 1935              | 289,337               | 138,698              | 6,198,018     | 5,078,168   | 2,250,000                    | 14,049,157         |
|                                   | 1936              | 309,479               | 82,734               | 7,290,779     | 4,950,378   | 2,250,000                    | 15,853,146         |
|                                   | 1937              | 335,484               | 41,407               | 9,329,597     | 5,595,367   | 2,250,000                    | 18,679,288         |
| Totals.....                       | 1929              | 178,291,030           | 102,362,644          | 2,594,395,513 | 140,477,064 | 287,905,767                  | 3,563,463,865      |
|                                   | 1934              | 135,537,783           | 65,832,560           | 2,298,775,376 | 42,437,251  | 277,520,833                  | 2,826,241,267      |
|                                   | 1935              | 125,644,182           | 61,791,170           | 2,361,969,753 | 49,086,624  | 278,250,969                  | 2,946,290,352      |
|                                   | 1936              | 119,507,306           | 77,167,615           | 2,537,722,678 | 53,290,754  | 278,590,969                  | 3,134,122,323      |
|                                   | 1937              | 110,259,134           | 89,949,317           | 2,655,551,996 | 64,213,560  | 279,250,969                  | 3,364,971,653      |

<sup>1</sup> Absorbed by the Imperial Bank of Canada, May 1, 1931.

<sup>2</sup> Four-month average. Bank commenced business in September, 1929. The grand totals for 1929 are, however, twelve-month averages for all banks.

**Earnings of Canadian Banks.**—The chartered banks of Canada are for the most part Dominion-wide institutions, doing business in all parts of the country. Their earnings, therefore, reflect with very considerable faithfulness the fluctuations of general business.

**19.—Net Profits of Canadian Banks and Rates of Dividend Paid, for their business years ended 1932-37.**

NOTE.—These figures are not strictly comparable owing to variations from year to year in the practices of individual banks, and between banks. With the exception of La Banque Provinciale du Canada, the profits for 1936 and 1937 are shown after deducting Dominion and Provincial Government taxes.

| Bank.                             | 1932.             |                | 1933.             |                | 1934.             |                |
|-----------------------------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|
|                                   | Net Profits.      | Dividend Rate. | Net Profits.      | Dividend Rate. | Net Profits.      | Dividend Rate. |
|                                   | \$                | p.c.           | \$                | p.c.           | \$                | p.c.           |
| Bank of Montreal.....             | 4,663,100         | 11             | 4,005,154         | 8½             | 4,106,024         | 8              |
| Bank of Nova Scotia.....          | 2,303,434         | 15             | 2,035,900         | 12½            | 1,860,330         | 12             |
| Bank of Toronto.....              | 1,044,393         | 11             | 1,037,922         | 10             | 822,499           | 10             |
| Banque Provinciale du Canada..... | 454,659           | 8½             | 410,655           | 6½             | 417,366           | 6              |
| Canadian Bank of Commerce         | 4,279,424         | 11             | 3,048,832         | 8½             | 3,413,054         | 8              |
| Royal Bank of Canada.....         | 4,861,849         | 11             | 3,901,649         | 8½             | 4,989,217         | 8              |
| Dominion Bank.....                | 1,179,931         | 11             | 1,130,202         | 10             | 1,151,501         | 10             |
| Banque Canadienne Nationale.....  | 972,075           | 10             | 970,350           | 10             | 935,823           | 9½             |
| Imperial Bank of Canada.....      | 1,205,335         | 11½            | 1,204,039         | 10             | 1,231,992         | 10             |
| Barclays Bank (Canada)....        | 2                 | —              | 2                 | —              | 2                 | —              |
| <b>Totals, Net Profits.....</b>   | <b>20,964,260</b> | <b>—</b>       | <b>18,353,703</b> | <b>—</b>       | <b>18,326,466</b> | <b>—</b>       |

| Bank.                             | 1935.             |                | 1936.             |                | 1937.             |                |
|-----------------------------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|
|                                   | Net Profits.      | Dividend Rate. | Net Profits.      | Dividend Rate. | Net Profits.      | Dividend Rate. |
|                                   | \$                | p.c.           | \$                | p.c.           | \$                | p.c.           |
| Bank of Montreal.....             | 4,007,302         | 8              | 3,181,501         | 8              | 3,408,328         | 8              |
| Bank of Nova Scotia.....          | 1,834,174         | 12             | 1,926,686         | 12             | 1,952,140         | 12             |
| Bank of Toronto.....              | 806,391           | 10             | 1,141,810         | 10             | 1,156,372         | 10             |
| Banque Provinciale du Canada..... | 400,843           | 6              | 402,678           | 6              | 444,410           | 6              |
| Canadian Bank of Commerce         | 3,389,031         | 8              | 2,909,124         | 8              | 2,934,117         | 8              |
| Royal Bank of Canada.....         | 4,340,522         | 8              | 3,504,241         | 8              | 3,711,379         | 8              |
| Dominion Bank.....                | 1,130,052         | 10             | 951,277           | 10             | 976,838           | 10             |
| Banque Canadienne Nationale.....  | 915,790           | 8              | 727,935           | 8              | 774,228           | 8              |
| Imperial Bank of Canada.....      | 1,208,079         | 10             | 962,813           | 10             | 967,977           | 10             |
| Barclays Bank (Canada)....        | 2                 | —              | 2                 | —              | 2                 | —              |
| <b>Totals, Net Profits.....</b>   | <b>18,032,184</b> | <b>—</b>       | <b>15,708,065</b> | <b>—</b>       | <b>16,355,789</b> | <b>—</b>       |

<sup>1</sup> This bank paid at the rate of 10 p.c. per annum for the first half-year and 8 p.c. for the second.

<sup>2</sup> None reported.

**Branches of Chartered Banks.**—During the period from 1881 to 1901, the number of chartered banks doing business in Canada under the Bank Act remained almost the same, 36 in 1881 and 1891, and 34 in 1901, but during the present century there has been in banking, as in industry, an era of amalgamations, the number of banks having dropped to 25 in 1913 and to 10 in 1931. That this has been far from involving a curtailment of banking facilities is seen in Table 9, which shows the development of the banking business since 1867, and in Table 20, which compares the number of branch banks existing in Canada at different periods, and shows a growth from 123 at Confederation to 4,083, inclusive of sub-agencies, at Dec. 31, 1930. Since then, owing to the shrinkage in commercial activities as a result of the depression, some unprofitable branches have been closed and the total has declined to 3,336, exclusive of 145 branches and agencies in other countries, as at Dec. 31, 1937.

**20.—Numbers of Branches of Chartered Banks in Canada, by Provinces, Dec. 31, 1868, 1902, 1905, 1920, 1926, 1930, 1934-37.**

| Province.             | 1868.      | 1902.      | 1905.        | 1920. <sup>1</sup> | 1926. <sup>1</sup> | 1930. <sup>1</sup> | 1934. <sup>1</sup> | 1935. <sup>1</sup> | 1936. <sup>1</sup> | 1937. <sup>1</sup> |
|-----------------------|------------|------------|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| P.E. Island.....      | Nil        | 0          | 10           | 41                 | 28                 | 28                 | 27                 | 27                 | 27                 | 27                 |
| Nova Scotia.....      | 5          | 89         | 101          | 169                | 134                | 138                | 134                | 134                | 135                | 134                |
| New Brunswick.....    | 4          | 35         | 49           | 121                | 101                | 102                | 98                 | 97                 | 98                 | 97                 |
| Quebec.....           | 12         | 137        | 196          | 1,150              | 1,072              | 1,183              | 1,093              | 1,073              | 1,069              | 1,074              |
| Ontario.....          | 100        | 349        | 549          | 1,586              | 1,326              | 1,409              | 1,259              | 1,223              | 1,224              | 1,209              |
| Manitoba.....         | Nil        | 52         | 95           | 349                | 224                | 239                | 193                | 184                | 175                | 169                |
| Saskatchewan.....     | Nil        | Nil        | Nil          | 591                | 427                | 447                | 309                | 290                | 279                | 248                |
| Alberta.....          | Nil        | 30         | 87           | 424                | 269                | 304                | 215                | 209                | 200                | 186                |
| British Columbia..... | 2          | 46         | 55           | 242                | 186                | 229                | 195                | 190                | 187                | 188                |
| Yukon.....            | Nil        | Nil        | 3            | 3                  | 3                  | 4                  | 4                  | 4                  | 4                  | 4                  |
| <b>Totals.....</b>    | <b>123</b> | <b>747</b> | <b>1,145</b> | <b>4,676</b>       | <b>3,770</b>       | <b>4,083</b>       | <b>3,527</b>       | <b>3,431</b>       | <b>3,398</b>       | <b>3,336</b>       |

<sup>1</sup> Includes sub-agencies for receiving deposits for the banks employing them.

Table 21 gives the numbers of branches of the various banks, by provinces, as at Dec. 31, 1937, while Table 22 presents the statistics of branches of Canadian banks doing business outside Canada, an extension of Canadian banking (more especially to Newfoundland and the West Indies) which proceeded very rapidly in the war and early post-war period, rising to a total of 206 in 1921. Since then this number has gradually declined to 145 branches and sub-agencies in 1937.

**21.—Numbers of Branches of Individual Canadian Chartered Banks in each Province and Outside Canada at Dec. 31, 1937.**

NOTE.—This table does not include sub-agencies which numbered 591 in 1937, including 2 outside Canada.

| Bank.                             | P.E. Island. | Nova Scotia. | New Brunswick. | Quebec.    | Ontario.     | Manitoba.  |
|-----------------------------------|--------------|--------------|----------------|------------|--------------|------------|
| Bank of Montreal.....             | 1            | 13           | 13             | 109        | 191          | 29         |
| Bank of Nova Scotia.....          | 8            | 36           | 35             | 21         | 126          | 7          |
| Bank of Toronto.....              | Nil          | Nil          | Nil            | 14         | 105          | 11         |
| Banque Provinciale du Canada..... | 3            | Nil          | 13             | 105        | 14           | Nil        |
| Canadian Bank of Commerce.....    | 6            | 18           | 6              | 58         | 233          | 36         |
| Royal Bank of Canada.....         | 6            | 63           | 22             | 77         | 224          | 60         |
| Dominion Bank.....                | Nil          | Nil          | 1              | 9          | 98           | 12         |
| Banque Canadienne Nationale.....  | Nil          | Nil          | Nil            | 202        | 13           | 4          |
| Imperial Bank of Canada.....      | Nil          | Nil          | Nil            | 4          | 116          | 8          |
| Barclays Bank (Canada).....       | Nil          | Nil          | Nil            | 1          | 1            | Nil        |
| <b>Totals.....</b>                | <b>24</b>    | <b>130</b>   | <b>90</b>      | <b>600</b> | <b>1,121</b> | <b>167</b> |

| Bank.                             | Saskatchewan. | Alberta.   | British Columbia. | Yukon.   | Outside Canada. | Total.       |
|-----------------------------------|---------------|------------|-------------------|----------|-----------------|--------------|
| Bank of Montreal.....             | 34            | 46         | 46                | 2        | 10              | 494          |
| Bank of Nova Scotia.....          | 15            | 9          | 6                 | Nil      | 39              | 302          |
| Bank of Toronto.....              | 24            | 7          | 9                 | Nil      | Nil             | 170          |
| Banque Provinciale du Canada..... | Nil           | Nil        | Nil               | Nil      | Nil             | 135          |
| Canadian Bank of Commerce.....    | 57            | 45         | 61                | 2        | 13              | 535          |
| Royal Bank of Canada.....         | 80            | 46         | 46                | Nil      | 78              | 702          |
| Dominion Bank.....                | 4             | 3          | 4                 | Nil      | 2               | 133          |
| Banque Canadienne Nationale.....  | 2             | 5          | Nil               | Nil      | 1               | 227          |
| Imperial Bank of Canada.....      | 30            | 21         | 11                | Nil      | Nil             | 190          |
| Barclays Bank (Canada).....       | Nil           | Nil        | Nil               | Nil      | Nil             | 2            |
| <b>Totals.....</b>                | <b>246</b>    | <b>182</b> | <b>183</b>        | <b>4</b> | <b>143</b>      | <b>2,890</b> |

22.—Numbers of Branches of each of the Canadian Chartered Banks in Other Countries, with their Locations, Dec. 31, 1936 and 1937.

| Bank and Location.          | 1936.           | 1937.           | Bank and Location.             | 1936.            | 1937.            |
|-----------------------------|-----------------|-----------------|--------------------------------|------------------|------------------|
| Bank of Montreal—           |                 |                 | Royal Bank of Canada—          |                  |                  |
| Newfoundland.....           | 5 <sup>1</sup>  | 5 <sup>1</sup>  | Newfoundland.....              | 5                | 5                |
| England.....                | 2               | 2               | England.....                   | 2                | 2                |
| United States.....          | 3               | 3               | British West Indies.....       | 11               | 11               |
| Bank of Nova Scotia—        |                 |                 | United States.....             | 23               | 23               |
| Newfoundland.....           | 12              | 12              | Cuba.....                      | 12               | 11               |
| England.....                | 1               | 1               | Puerto Rico, etc.....          | 1                | 1                |
| British West Indies.....    | 12 <sup>2</sup> | 12 <sup>2</sup> | France (auxiliary).....        | 1                | 1                |
| United States.....          | 3               | 3               | Spain.....                     | 1                | 1                |
| Cuba.....                   | 8               | 8               | Central and South America..... | 24               | 23               |
| Puerto Rico, etc.....       | 3               | 3               | Dominion Bank—                 |                  |                  |
| Canadian Bank of Commerce—  |                 |                 | England.....                   | 1                | 1                |
| Newfoundland.....           | 2               | 2               | United States.....             | 1                | 1                |
| England.....                | 1               | 1               | Banque Canadienne Natio-       |                  |                  |
| British West Indies.....    | 3               | 3               | nale—                          |                  |                  |
| United States.....          | 5               | 5               | France.....                    | 1                | 1                |
| Cuba.....                   | 1               | 1               |                                |                  |                  |
| St. Pierre and Miquelon.... | 1               | 1               |                                |                  |                  |
|                             |                 |                 | Totals.....                    | 143 <sup>2</sup> | 143 <sup>2</sup> |

<sup>1</sup> Exclusive of one sub-agency.

<sup>2</sup> Exclusive of two sub-agencies.

## Section 6.—Government and Other Savings Banks.

In a comparatively new country where capital is relatively scarce, it is a natural thing that the banks which finance the business institutions should also absorb the bulk of the people's savings for use in promoting the business of the country. Thus in Canada the great bulk of the current savings of the people is found in the savings or notice deposits of the Canadian chartered banks, the annual average figures of which are given for recent years in Table 9 of this chapter, the 1937 average being \$1,573,654,555. Further, the current savings of the Canadian people are going very largely into the purchase of life insurance, the total premiums paid in the single year 1936 aggregating \$206,806,949. In comparison with the enormous figures of notice deposits in chartered banks and with total insurance in force, the deposits in the special savings banks are comparatively small, but are none the less significant.

There are three distinct types of savings bank in Canada at the present time, in addition to the savings departments of the chartered banks and of trust and loan companies. First, there is the Post Office Savings Bank, the deposits in which are a direct obligation of the Dominion Government. Secondly, there are Provincial Government savings banking institutions in Ontario and in Alberta, where the depositor becomes a direct creditor of the province. Thirdly, there are in the province of Quebec two important savings banks, the Montreal City and District Savings Bank and the Caisse d'Economie de Notre-Dame de Québec, established under Dominion legislation and making monthly reports to the Department of Finance.

**Dominion Government Savings Banks.**—Prior to 1929 there were two classes of Dominion Government savings banks in Canada, the Post Office Savings Bank, under the Post Office Department, and the Dominion Government Savings Bank, attached to the Department of Finance. The former was established under the Post Office Act of 1867 (31 Vict., c. 10) in order to "enlarge the facilities now available for the deposit of small savings, to make the Post Office available for that purpose, and to give the direct security of the Dominion to every depositor for repayment of all money deposited by him together with the interest due thereon".

Branches of the Government Savings Bank proper, under the authority of the Finance Department, were established in the leading cities of Canada under the management of the Assistant Receivers General and in other places, in the provinces of Nova Scotia and New Brunswick, under managers appointed by the Governor in Council. The Dominion Government Savings Bank was amalgamated with the Post Office Savings Bank in 1929. Historical statistics for both systems will be found in Table 23 and more detailed figures covering the latest six years in Table 24.

**23.—Deposits with Dominion Government Savings Banks,<sup>1</sup> for representative years ended June 30, 1868-1906, and Mar. 31, 1907-37.**

NOTE.—Figures for all intermediate years will be found on p. 833 of the 1926 Year Book.

| Fiscal Year. | Post Office Savings Bank. | Dominion Government Savings Bank. | Fiscal Year. | Post Office Savings Bank. | Dominion Government Savings Bank. |
|--------------|---------------------------|-----------------------------------|--------------|---------------------------|-----------------------------------|
|              | \$                        | \$                                |              | \$                        | \$                                |
| 1868.....    | 204,589                   | 1,483,219                         | 1917.....    | 42,582,479                | 13,633,010                        |
| 1870.....    | 1,588,849                 | 1,822,570                         | 1918.....    | 41,283,479                | 12,177,283                        |
| 1875.....    | 2,926,090                 | 4,245,091                         | 1919.....    | 41,654,900                | 11,402,908                        |
| 1880.....    | 3,945,669                 | 7,107,287                         | 1920.....    | 31,605,594                | 10,729,218                        |
| 1885.....    | 15,090,540                | 17,888,536                        | 1921.....    | 29,010,619                | 10,150,189                        |
| 1890.....    | 21,990,053                | 19,021,812                        | 1922.....    | 24,837,181                | 9,829,653                         |
| 1895.....    | 26,805,542                | 17,644,950                        | 1923.....    | 22,357,268                | 9,433,839                         |
| 1900.....    | 37,507,456                | 15,642,267                        | 1924.....    | 25,156,449                | 9,055,091                         |
| 1905.....    | 45,368,321                | 16,649,136                        | 1925.....    | 24,662,000                | 8,940,073                         |
| 1906.....    | 45,736,488                | 16,174,134                        | 1926.....    | 24,035,669                | 8,794,870                         |
| 1907.....    | 47,453,228                | 16,688,584                        | 1927.....    | 23,402,337                | 8,519,706                         |
| 1908.....    | 47,564,284                | 16,616,871                        | 1928.....    | 23,463,210                | 7,040,566                         |
| 1909.....    | 45,190,484                | 14,748,430                        | 1929.....    | 28,373,770                | "                                 |
| 1910.....    | 43,586,357                | 14,877,872                        | 1930.....    | 26,086,636                | "                                 |
| 1911.....    | 43,330,570                | 14,673,752                        | 1931.....    | 24,750,227                | "                                 |
| 1912.....    | 43,563,764                | 14,656,564                        | 1932.....    | 23,919,677                | "                                 |
| 1913.....    | 42,728,942                | 14,411,541                        | 1933.....    | 23,920,915                | "                                 |
| 1914.....    | 41,501,286                | 13,976,162                        | 1934.....    | 23,158,919                | "                                 |
| 1915.....    | 39,995,406                | 14,006,158                        | 1935.....    | 22,547,006                | "                                 |
| 1916.....    | 40,008,418                | 13,519,555                        | 1936.....    | 22,047,287                | "                                 |
|              |                           |                                   | 1937.....    | 21,879,593                | "                                 |

<sup>1</sup> Do not include Provincial Government Savings Banks.

<sup>2</sup> Included in Post Office Savings Bank.

**24.—Summary of the Financial Business of the Post Office Savings Bank, Mar. 31, 1932-37.**

| Item.                         | 1932.      | 1933.      | 1934.      | 1935.      | 1936.      | 1937.      |
|-------------------------------|------------|------------|------------|------------|------------|------------|
|                               | \$         | \$         | \$         | \$         | \$         | \$         |
| Deposits during year.....     | 3,582,988  | 3,609,427  | 2,565,470  | 2,223,907  | 2,292,326  | 2,830,193  |
| Interest on deposits.....     | 706,270    | 683,814    | 580,946    | 510,592    | 435,558    | 426,535    |
| Totals, cash and interest.... | 4,289,258  | 4,353,241  | 3,146,415  | 2,734,499  | 2,727,884  | 3,256,728  |
| Withdrawals.....              | 5,119,808  | 4,352,003  | 3,908,411  | 3,346,412  | 3,227,602  | 3,424,422  |
| At credit of depositors.....  | 23,919,677 | 23,920,915 | 23,158,919 | 22,547,000 | 22,047,287 | 21,879,593 |

**Provincial Government Savings Banks.**—Institutions for the deposit of savings are operated by the Provincial Governments of Ontario and Alberta, while a similar institution was in operation in Manitoba from 1924 to 1932 when the depositors' accounts were taken over by the chartered banks.

*Ontario.*—In the session of 1921, the Legislature of Ontario authorized the establishment of the Province of Ontario Savings Office, and in March, 1922, the first branches were opened. The funds received from this source are used almost exclusively to finance farm loans under the Agricultural Development Act. Interest at the rate of 2 p.c. per annum compounded half-yearly is paid on accounts. The deposits are all repayable on demand. Total deposits on Jan. 31, 1938, were over \$38,600,000 and the number of depositors at that date was over 113,000. Twenty-five branches are in operation throughout the province.

*Alberta.*—In Alberta the Provincial Treasury receives savings deposits and issues demand savings certificates bearing interest at 2 p.c., or term certificates for one, two, or three years, in denominations of \$25 and upwards, bearing interest at 2 p.c. for one year and 2½ p.c. for two or three years. The total amount in savings certificates on Dec. 31, 1937, was \$7,278,299, made up of \$4,174,433 in demand certificates and \$3,103,866 in term certificates.

**Other Savings Banks.**—The Montreal City and District Savings Bank, founded in 1846 and now operating under a charter of 1871, had on Dec. 31, 1937, a paid-up capital and reserve of \$4,500,000, savings deposits of \$61,596,525, and total liabilities of \$62,651,999. Total assets amounted to \$67,696,388 including nearly \$50,000,000 of Dominion, provincial, and municipal securities. The Caisse d'Economie de Notre-Dame de Québec, founded in 1848 under the auspices of the St. Vincent de Paul Society, incorporated by Act of the Canadian Legislature in 1855 and given a Dominion charter by 34 Vic., c. 7, had on Dec. 31, 1937, savings deposits of \$13,554,387, a paid-up capital and reserve of \$2,500,000 and total assets of \$16,889,837.

The co-operative people's banks of Quebec (234 reported to the Provincial Government in 1936) are also an important element in promoting thrift and assisting business in that province. Thus on Dec. 31, 1936, savings deposits in these banks amounted to \$7,692,407, while the amount on loan was \$8,943,821. Loans granted in 1936 numbered 13,974 amounting to \$3,370,821. Profits realized amounted to \$459,601. (See also p. 783 of this volume.)

**25.—Deposits in the Montreal City and District Bank and the Caisse d'Economie de Notre-Dame de Québec, as at June 30, for representative years 1868-1906, and Mar. 31, 1907-37.**

NOTE.—Figures for all intermediate years will be found on p. 833 of the 1926 Year Book.

| Year.              | Deposits.  | Year.              | Deposits.  | Year.              | Deposits.  |
|--------------------|------------|--------------------|------------|--------------------|------------|
|                    | \$         |                    | \$         |                    | \$         |
| <b>At June 30—</b> |            | <b>At Mar. 31—</b> |            | <b>At Mar. 31—</b> |            |
| 1868.....          | 3,369,799  | 1910.....          | 32,239,620 | 1925.....          | 65,837,254 |
| 1870.....          | 5,369,103  | 1911.....          | 22,239,620 | 1926.....          | 67,241,344 |
| 1875.....          | 6,611,416  | 1912.....          | 34,770,386 | 1927.....          | 69,940,351 |
| 1880.....          | 6,681,025  | 1913.....          | 39,526,765 | 1928.....          | 72,695,422 |
| 1885.....          | 9,191,895  | 1914.....          | 40,133,351 |                    |            |
| 1890.....          | 10,908,987 | 1915.....          | 39,110,439 | 1929.....          | 70,800,603 |
| 1895.....          | 13,128,483 | 1916.....          | 37,817,474 | 1930.....          | 68,846,366 |
|                    |            | 1917.....          | 40,465,637 | 1931.....          | 69,820,422 |
| 1900.....          | 17,425,472 |                    |            | 1932.....          | 68,663,324 |
| 1905.....          | 25,050,966 | 1918.....          | 44,139,978 | 1933.....          | 68,113,501 |
| 1906.....          | 27,309,194 | 1919.....          | 42,000,543 |                    |            |
|                    |            | 1920.....          | 46,799,877 |                    |            |
| <b>At Mar. 31—</b> |            | 1921.....          | 53,118,053 | 1934.....          | 66,673,219 |
| 1907.....          | 28,359,618 | 1922.....          | 58,576,775 | 1935.....          | 66,496,595 |
| 1908.....          | 28,027,248 | 1923.....          | 59,327,961 | 1936.....          | 69,665,415 |
| 1909.....          | 29,867,973 | 1924.....          | 64,245,811 | 1937.....          | 73,450,133 |

## PART II.—MISCELLANEOUS COMMERCIAL FINANCE.

### Section 1.—Loan and Trust Companies.\*

The Canada Year Book, 1934-35, presented at p. 993 an outline of the development of loan and trust companies in Canada from 1844 to 1913.

The laws relating to trust and loan companies were revised by the Loan and Trust Companies Acts of 1914 (4-5 Geo. V, cc. 40 and 55), with the result that the statistics of provincially incorporated loan and trust companies ceased to be collected. In Table 1, however, certain summary statistics of provincial companies have been supplied for 1936 by courtesy of those companies and are included in order to complete the picture for loan and trust companies throughout Canada. The provincial figures are believed to be substantially correct. It will be noted that the totals for the division of assets of trust companies by type of asset (shown in the lower part of the table) do not agree with the totals in the upper part of the trust company section, for the reason that par values are used in the former case and book values in the latter. The statistics of Tables 2 and 3 refer only to those companies operating under Dominion charter, except that, beginning in 1925, the statistics of loan companies and trust companies incorporated by the province of Nova Scotia, and brought by the laws of that province under the examination of the Dominion Department of Insurance, have been included as well as those for trust companies in New Brunswick since 1934 in Table 3. All the tabulations of this Section have been rearranged and revised; the historical series now start with the year 1920, at which time the Dominion Department of Insurance took over the administration of the legislation concerning Dominion trust and loan companies—the Department of Finance had previously exercised supervision of their activities.

As indicating the progress of the aggregate of loan company business in Canada, it may be stated that the book value of the assets of all loan companies rose from \$188,637,298 in 1922 to \$213,649,794 in 1931, but had declined to \$196,120,255 by 1936. The assets of trust companies, not including trust, estates, and agency funds, which cannot be regarded as assets in the same sense as company and guaranteed funds, have increased from \$154,202,165 in 1928 to \$237,588,455 in 1936. In the former year, the total of trust, estates, and agency funds administered amounted to \$1,077,953,643 and in the latter year to \$2,537,931,352. (Table 1.)

**Functions of Loan Companies.**—The principal function of loan companies is the lending of funds on first mortgage security, the money thus made available for development purposes being secured mainly by the sale of debentures to the investing public and by savings department deposits. Of the loan companies operating under provincial charters, the majority conduct loan, savings, and mortgage business, generally in the more prosperous farming communities. The historical statistics published in Tables 1 and 2 respecting loan companies have been revised by the separation of the statistics of small loans companies, which are now included in Section 2.

**Functions of Trust Companies.**—Trust companies act as executors, trustees and administrators under wills or by appointment, as trustees under marriage or other settlements, as agents or attorneys in the management of the estates of the living, as guardians of minor or incapable persons, as financial agents for municipalities and companies and, where so appointed, as authorized trustees in bankruptcy. Some companies receive deposits, but the lending of actual trust funds is restricted by law. The figures of Table 1 are of particular interest in the case

\* Revised under the direction of G. D. Finlayson, Superintendent of Insurance, Department of Insurance.



of trust companies, which, on account of the nature of their functions, are mainly provincial institutions, since their chief duties are intimately connected with the matter of probate, which lies within the sole jurisdiction of the provinces.

**1.—Summary Statistics of the Operations of Dominion and Provincial Loan and Trust Companies in Canada, as at Dec. 31, 1936.**

| Item.                                  | Provincial Companies.<br>\$ | Dominion Companies.<br>\$ | Total.<br>\$ |
|--|-----------------------------|---------------------------|--------------|
| <b>LOAN COMPANIES.</b>                 |                             |                           |              |
| Book value of assets.....              | 58,909,744                  | 137,210,511               | 196,120,255  |
| Liabilities to the public.....         | 29,326,729                  | 101,194,542               | 130,521,271  |
| Capital Stock—                         |                             |                           |              |
| Authorized.....                        | 42,523,375                  | 59,150,000                | 101,673,375  |
| Subscribed.....                        | 20,329,402                  | 26,208,900                | 46,538,302   |
| Paid-up.....                           | 18,012,979                  | 19,831,368                | 37,844,347   |
| Reserve and contingency funds.....     | 10,610,227                  | 15,262,037                | 25,872,264   |
| Other liabilities to shareholders..... | 812,557                     | 1,351,205                 | 2,163,762    |
| Total liabilities to shareholders..... | 29,435,793                  | 30,005,270                | 59,441,063   |
| Net profits realized during year.....  | 1,035,868                   | 1,287,563                 | 2,323,431    |

**TRUST COMPANIES.**

|                                       |                    |                   |                    |
|---------------------------------------|--------------------|-------------------|--------------------|
| Assets (Book Values)—                 |                    |                   |                    |
| Company funds.....                    | 63,770,447         | 16,374,558        | 80,145,005         |
| Guaranteed funds.....                 | 121,986,843        | 35,456,607        | 157,443,450        |
| <b>Totals.....</b>                    | <b>185,757,290</b> | <b>51,831,165</b> | <b>237,588,455</b> |
| Estates, trust, and agency funds..... | 2,311,000,898      | 220,024,454       | 2,531,025,352      |
| Capital Stock—                        |                    |                   |                    |
| Authorized.....                       | 66,007,600         | 18,650,000        | 84,657,600         |
| Subscribed.....                       | 30,282,046         | 10,943,470        | 41,225,516         |
| Paid-up.....                          | 27,935,240         | 9,503,722         | 37,438,962         |
| Reserve and contingency funds.....    | 18,830,662         | 4,935,216         | 23,765,878         |
| Unappropriated surpluses.....         | 2,818,723          | 698,115           | 3,516,838          |
| Net profits realized during year..... | 2,729,120          | 729,405           | 3,458,525          |

**CLASSIFICATION OF COMPANY FUNDS, GUARANTEED FUNDS, AND ESTATES, TRUST AND AGENCY FUNDS, BY TYPE OF ASSET (PAR VALUES).**

| Type of Asset.                  | Company Funds.        |                     | Guaranteed Funds.     |                     | Total Company and Guaranteed Funds. |                     | Estates, Trust, and Agency Funds. |                     |
|---------------------------------|-----------------------|---------------------|-----------------------|---------------------|-------------------------------------|---------------------|-----------------------------------|---------------------|
|                                 | Provincial Companies. | Dominion Companies. | Provincial Companies. | Dominion Companies. | Provincial Companies.               | Dominion Companies. | Provincial Companies.             | Dominion Companies. |
|                                 | \$                    | \$                  | \$                    | \$                  | \$                                  | \$                  | \$                                | \$                  |
| Dominion and provincial bonds.. | 5,950,820             | 2,069,357           | 11,016,618            | 4,164,709           | 16,967,438                          | 6,234,066           | 314,991,970                       | 35,720,448          |
| Mortgages....                   | 13,574,716            | 5,360,064           | 59,407,750            | 20,979,239          | 72,982,472                          | 26,339,303          | 131,793,467                       | 33,362,386          |
| Cash.....                       | 1,624,137             | 908,014             | 6,830,358             | 1,199,866           | 8,504,495                           | 2,107,880           | 45,579,825                        | 5,547,043           |
| Other Assets <sup>1</sup> ....  | 40,402,880            | 7,245,778           | 43,927,321            | 10,365,199          | 54,330,201                          | 17,610,977          | 1,817,783,388                     | 145,081,356         |
| <b>Totals....</b>               | <b>61,552,553</b>     | <b>15,583,213</b>   | <b>121,232,053</b>    | <b>36,709,013</b>   | <b>182,784,066</b>                  | <b>52,292,226</b>   | <b>2,310,153,650</b>              | <b>219,711,833</b>  |

<sup>1</sup> Including real estate, collateral loans, stocks, bonds other than Dominion and provincial issues which are not segregated in the company returns.

2.—Classification of Assets and Liabilities of Loan Companies Chartered by the Dominion Government, as at Dec. 31, 1920-36.

NOTE.—Figures given in this table do not include small loans companies (see Section 2 of this chapter, p. 937-988) and differ from those published in earlier Year Books.

ASSETS.

| Year.                    | Real Estate. <sup>1</sup> | Mortgages on Real Estate. | Collateral Loans. | Bonds, Debentures, Stocks and other Company Property. | Cash on Hand and in Banks. | Interest, Rents, etc., Due and Accrued. | Total. <sup>2</sup> |
|--------------------------|---------------------------|---------------------------|-------------------|---|----------------------------|---|---------------------|
|                          | \$                        | \$                        | \$                | \$  | \$                         | \$                                      | \$                  |
| 1920.....                | 4,753,049                 | 63,725,084                | 1,750,128         | 16,593,932  | 3,363,877                  | 1,658                                   | 90,413,261          |
| 1921.....                | 4,979,779                 | 67,147,513                | 1,618,865         | 15,328,797  | 4,568,984                  | 2,790,348                               | 96,698,810          |
| 1922.....                | 5,309,854                 | 60,824,965                | 1,916,976         | 16,967,305  | 4,800,649                  | 2,989,460                               | 102,462,090         |
| 1923.....                | 5,515,170                 | 73,858,726                | 1,772,148         | 16,445,635  | 3,467,822                  | 3,353,822                               | 104,866,102         |
| 1924.....                | 4,035,532                 | 71,463,506                | 1,722,803         | 18,568,856  | 3,656,992                  | 2,470,756                               | 101,919,837         |
| 1925 <sup>3</sup> .....  | 3,982,921                 | 79,106,407                | 1,532,366         | 20,210,387  | 3,442,928                  | 2,180,700                               | 110,638,667         |
| 1926 <sup>4</sup> .....  | 4,150,307                 | 89,873,578                | 1,161,886         | 18,426,169  | 4,284,648                  | 2,274,535                               | 120,321,095         |
| 1927 <sup>5</sup> .....  | 3,999,808                 | 102,501,193               | 1,585,891         | 18,884,434  | 5,073,479                  | 2,020,087                               | 134,669,734         |
| 1928 <sup>6</sup> .....  | 4,172,704                 | 105,106,365               | 2,472,312         | 17,874,808  | 3,255,166                  | 1,746,138                               | 134,634,288         |
| 1929 <sup>7</sup> .....  | 6,156,227                 | 103,774,850               | 2,266,288         | 17,054,463  | 3,186,180                  | 1,833,545                               | 134,377,701         |
| 1930 <sup>8</sup> .....  | 7,069,914                 | 105,477,328               | 2,420,927         | 20,834,907  | 4,291,855                  | 2,558,238                               | 142,057,134         |
| 1931 <sup>9</sup> .....  | 8,104,521                 | 106,607,563               | 1,020,076         | 23,430,382  | 3,282,016                  | 8,529,451                               | 147,094,183         |
| 1932 <sup>10</sup> ..... | 8,208,875                 | 102,661,879               | 491,387           | 21,521,472  | 4,527,610                  | 4,366,369                               | 142,886,473         |
| 1933 <sup>11</sup> ..... | 8,800,817                 | 98,387,741                | 240,069           | 18,767,937  | 4,311,594                  | 5,437,535                               | 136,980,422         |
| 1934 <sup>12</sup> ..... | 9,112,878                 | 97,169,985                | 238,458           | 21,093,414  | 4,384,592                  | 6,532,556                               | 140,147,065         |
| 1935 <sup>13</sup> ..... | 9,527,647                 | 96,008,289                | 306,183           | 20,572,693  | 3,670,060                  | 6,926,558                               | 137,994,145         |
| 1936 <sup>14</sup> ..... | 9,770,965                 | 97,622,787                | 271,690           | 21,175,454  | 3,496,046                  | 3,928,038                               | 137,210,511         |

LIABILITIES.

| Year.                    | Liabilities to Shareholders. |                |                     | Liabilities to the Public.      |                         |            |                           |                     |
|--------------------------|------------------------------|----------------|---------------------|---------------------------------|-------------------------|------------|---------------------------|---------------------|
|                          | Capital Paid Up              | Reserve Funds. | Total. <sup>4</sup> | Debentures and Debenture Stock. |                         | Deposits.  | Interest Due and Accrued. | Total. <sup>5</sup> |
|                          |                              |                |                     | Canada.                         | Elsewhere and Sundries. |            |                           |                     |
|                          | \$                           | \$             | \$                  | \$                              | \$                      | \$         | \$                        | \$                  |
| 1920.....                | 24,062,521                   | 13,442,304     | 39,110,640          | 16,982,032                      | 18,451,054              | 15,257,840 | —                         | 51,302,620          |
| 1921.....                | 25,750,960                   | 14,278,619     | 40,029,689          | 17,032,083                      | 20,265,768              | 15,868,928 | 480,457                   | 54,551,433          |
| 1922.....                | 25,241,000                   | 14,740,834     | 40,013,363          | 20,360,480                      | 22,390,990              | 16,910,556 | 499,661                   | 60,386,903          |
| 1923.....                | 24,939,622                   | 14,879,516     | 41,239,712          | 22,667,861                      | 24,315,010              | 15,854,029 | 577,460                   | 63,600,093          |
| 1924.....                | 22,592,057                   | 13,734,681     | 37,122,138          | 25,426,434                      | 21,901,431              | 15,970,077 | 543,131                   | 63,989,594          |
| 1925 <sup>3</sup> .....  | 23,632,474                   | 14,555,603     | 38,461,375          | 30,052,139                      | 21,600,001              | 18,060,122 | 538,755                   | 71,066,398          |
| 1926 <sup>4</sup> .....  | 23,498,336                   | 14,861,280     | 38,977,937          | 36,613,088                      | 21,572,810              | 21,316,150 | 663,987                   | 80,447,490          |
| 1927 <sup>5</sup> .....  | 20,699,710                   | 14,887,432     | 35,596,121          | 47,818,389                      | 19,965,321              | 27,019,323 | 868,694                   | 95,855,897          |
| 1928 <sup>6</sup> .....  | 20,038,831                   | 14,112,114     | 36,067,816          | 51,269,133                      | 15,292,362              | 30,671,257 | 940,528                   | 98,408,180          |
| 1929 <sup>7</sup> .....  | 20,192,840                   | 14,427,948     | 35,694,166          | 52,857,277                      | 14,813,287              | 29,602,798 | 941,795                   | 98,482,375          |
| 1930 <sup>8</sup> .....  | 20,333,960                   | 14,615,844     | 35,634,733          | 58,058,682                      | 15,063,313              | 31,581,913 | 978,602                   | 105,895,436         |
| 1931 <sup>9</sup> .....  | 20,407,157                   | 14,717,152     | 35,765,429          | 63,158,214                      | 14,837,565              | 30,823,662 | 1,027,388                 | 110,230,658         |
| 1932 <sup>10</sup> ..... | 19,174,463                   | 14,724,020     | 35,455,456          | 61,959,437                      | 14,858,798              | 29,418,924 | 989,303                   | 107,431,181         |
| 1933 <sup>11</sup> ..... | 19,253,370                   | 15,182,125     | 35,855,209          | 60,493,299                      | 15,101,508              | 24,287,270 | 986,132                   | 101,120,948         |
| 1934 <sup>12</sup> ..... | 19,378,841                   | 15,800,582     | 36,599,186          | 61,157,372                      | 16,222,139              | 24,908,363 | 1,004,063                 | 103,536,768         |
| 1935 <sup>13</sup> ..... | 19,393,907                   | 15,618,715     | 36,404,095          | 59,386,546                      | 14,530,516              | 28,556,302 | 898,830                   | 101,578,778         |
| 1936 <sup>14</sup> ..... | 19,361,368                   | 15,262,697     | 36,005,271          | 58,918,941                      | 14,939,518              | 26,250,954 | 880,115                   | 101,194,543         |

<sup>1</sup> Book value of real estate for companies' use and other real estate.

<sup>2</sup> Includes other assets.

<sup>3</sup> Includes statistics of loan companies chartered by the Government of Nova Scotia, but inspected by the Dominion Department of Insurance.

<sup>4</sup> Includes other liabilities to shareholders.

<sup>5</sup> Includes

other liabilities to the public.

<sup>6</sup> Not shown separately for this year.

### 3.—Classification of Assets and Liabilities of Trust Companies Chartered by the Dominion Government, as at Dec. 31, 1920-26.

#### COMPANY FUNDS—ASSETS.

| Year.    | Loans.                       |                               |                           | Real Estate. | Government, Municipal and School and other Securities Owned. | Stocks. | Cash on Hand and in Banks. | All other Assets belonging to the Companies. | Total Assets of the Companies. |
|----------|------------------------------|-------------------------------|---------------------------|--------------|--|---------|----------------------------|--|--------------------------------|
|          | On Real Estate, First Liens. | On Real Estate, Second Liens. | On Stocks and Securities. |              |  |         |                            |  |                                |
|          | \$                           | \$                            | \$                        | \$           | \$   | \$      | \$                         | \$   | \$                             |
| 1920.... | 4,736,064                    | Nil                           | 512,800                   | 701,564      | 2,500,942  | 349,204 | 576,125                    | 847,463                                      | 10,224,252                     |
| 1921.... | 4,408,914                    | Nil                           | 344,302                   | 908,618      | 2,400,914  | 253,779 | 603,618                    | 1,317,785                                    | 10,237,930                     |
| 1922.... | 5,254,434                    | Nil                           | 391,475                   | 973,022      | 1,584,234  | 264,186 | 473,687                    | 1,412,205                                    | 10,353,243                     |
| 1923.... | 5,402,752                    | Nil                           | 375,129                   | 1,048,682    | 1,656,304  | 282,564 | 481,672                    | 1,573,406                                    | 10,830,509                     |
| 1924.... | 5,114,753                    | Nil                           | 446,001                   | 1,561,073    | 1,598,871  | 336,818 | 524,368                    | 2,483,675                                    | 12,056,259                     |
| 1925.... | 5,143,123                    | Nil                           | 618,250                   | 1,969,737    | 2,323,064  | 432,056 | 203,431                    | 1,763,355                                    | 12,453,916                     |
| 1926.... | 5,450,907                    | Nil                           | 580,128                   | 2,091,322    | 2,318,344  | 477,917 | 705,064                    | 1,571,596                                    | 13,195,277                     |
| 1927.... | 5,668,574                    | Nil                           | 977,514                   | 2,140,344    | 1,993,823  | 494,083 | 804,469                    | 1,603,906                                    | 13,682,713                     |
| 1928.... | 5,651,201                    | Nil                           | 1,156,908                 | 2,148,354    | 2,808,630  | 495,004 | 917,019                    | 1,589,288                                    | 14,766,284                     |
| 1929.... | 5,652,084                    | Nil                           | 1,121,536                 | 1,859,581    | 3,228,722  | 425,077 | 659,466                    | 1,623,031                                    | 14,669,497                     |
| 1930.... | 5,573,596                    | Nil                           | 1,183,298                 | 2,049,255    | 3,176,348  | 458,392 | 732,025                    | 1,779,338                                    | 14,952,282                     |
| 1931.... | 6,034,794                    | Nil                           | 1,085,169                 | 2,140,792    | 3,211,183  | 488,996 | 551,665                    | 1,996,819                                    | 15,459,347                     |
| 1932.... | 6,057,330                    | Nil                           | 628,586                   | 2,306,950    | 3,105,079  | 447,940 | 773,537                    | 2,042,228                                    | 15,361,656                     |
| 1933.... | 5,413,800                    | Nil                           | 709,146                   | 2,655,924    | 3,415,374  | 451,552 | 624,363                    | 2,081,259                                    | 15,351,418                     |
| 1934.... | 5,034,509                    | Nil                           | 973,532                   | 3,008,327    | 3,681,872  | 454,075 | 667,932                    | 2,060,072                                    | 15,901,219                     |
| 1935.... | 5,162,632                    | Nil                           | 666,465                   | 3,163,130    | 3,591,823  | 471,431 | 1,008,869                  | 1,906,543                                    | 15,970,893                     |
| 1936.... | 5,105,167                    | Nil                           | 894,014                   | 3,304,918    | 3,960,552  | 461,014 | 914,439                    | 1,744,454                                    | 16,374,565                     |

#### GUARANTEED FUNDS—ASSETS.

| Year.     | Loans.          |                           | Government, Municipal, School and other Securities Owned. | Stocks. | Cash on Hand and in Banks. | All other Assets. | Total Assets held against Guaranteed Funds. |
|-----------|-----------------|---------------------------|---|---------|----------------------------|-------------------|---|
|           | On Real Estate. | On Stocks and Securities. |   |         |                            |                   |   |
|           | \$              | \$                        | \$  | \$      | \$                         | \$                | \$  |
| 1920..... | 4,247,183       | Nil                       | 2,437,106   | 329,801 | 853,832                    | 941,588           | 8,809,510                                   |
| 1921..... | 4,159,355       | Nil                       | 2,508,197   | Nil     | 550,011                    | 1,556,622         | 8,774,185                                   |
| 1922..... | 5,241,872       | Nil                       | 1,823,290   | 150,951 | 546,929                    | 1,022,363         | 8,785,405                                   |
| 1923..... | 8,552,368       | 220,717                   | 1,010,225   | 137,791 | 251,508                    | 476,375           | 10,649,004                                  |
| 1924..... | 12,278,138      | 345,892                   | 989,050   | 137,791 | 404,999                    | 152,807           | 14,808,737                                  |
| 1925..... | 12,897,630      | 490,528                   | 1,463,920   | 85,062  | 636,526                    | 323,373           | 15,897,339                                  |
| 1926..... | 14,005,093      | 1,334,078                 | 1,488,070   | 85,062  | 813,344                    | 253,765           | 17,979,412                                  |
| 1927..... | 16,596,737      | 2,407,158                 | 1,978,136   | 85,062  | 1,067,790                  | 329,870           | 22,464,753                                  |
| 1928..... | 17,095,284      | 2,337,415                 | 2,376,728   | 85,062  | 1,911,962                  | 299,275           | 24,105,724                                  |
| 1929..... | 18,447,949      | 1,804,750                 | 2,089,069   | 3,288   | 1,132,633                  | 387,574           | 24,465,263                                  |
| 1930..... | 19,513,691      | 2,075,322                 | 2,491,089   | Nil     | 1,948,592                  | 380,155           | 26,408,829                                  |
| 1931..... | 20,812,176      | 887,015                   | 2,598,587   | 18,300  | 919,982                    | 482,159           | 25,718,219                                  |
| 1932..... | 19,336,735      | 1,480,454                 | 3,286,467   | Nil     | 668,136                    | 431,121           | 25,222,913                                  |
| 1933..... | 19,141,820      | 2,551,966                 | 4,072,131   | 23,400  | 1,084,150                  | 523,140           | 27,396,707                                  |
| 1934..... | 19,911,247      | 3,913,332                 | 5,771,085   | Nil     | 1,444,847                  | 610,546           | 31,651,057                                  |
| 1935..... | 20,123,641      | 4,004,017                 | 8,542,061   | Nil     | 1,345,204                  | 742,469           | 34,757,392                                  |
| 1936..... | 20,474,810      | 5,748,256                 | 7,300,519   | Nil     | 1,199,866                  | 738,156           | 35,456,607                                  |

For footnotes, see end of table, p. 937.

### 3.—Classification of Assets and Liabilities of Trust Companies Chartered by the Dominion Government, as at Dec. 31, 1920-36—concluded.

#### LIABILITIES.

| Year.     | Company Funds.               |                |                    |            |                             | Guaranteed Funds. |            |                         |
|-----------|------------------------------|----------------|--------------------|------------|-----------------------------|-------------------|------------|-------------------------|
|           | Liabilities to Shareholders. |                |                    |            | Liabilities to the Public.  | Total.            | Principal. | Total.                  |
|           | Capital Paid Up.             | Reserve Funds. | Other Liabilities. | Total.     | Taxes, Borrowed Money, etc. |                   |            |                         |
|           | \$                           | \$             | \$                 | \$         | \$                          | \$                | \$         | \$                      |
| 1920..... | 7,465,376                    | 1,851,028      | 263,716            | 9,580,120  | 422,368                     | 10,002,488        | 8,673,539  | 8,809,510 <sup>2</sup>  |
| 1921..... | 7,532,777                    | 1,746,615      | 126,279            | 9,405,671  | 501,400                     | 9,907,331         | 8,424,128  | 8,549,542 <sup>2</sup>  |
| 1922..... | 7,678,401                    | 1,912,123      | 46,068             | 9,636,592  | 329,827                     | 9,966,419         | 8,473,720  | 8,600,538 <sup>2</sup>  |
| 1923..... | 7,775,740                    | 1,908,887      | 5,874              | 9,689,501  | 332,724                     | 10,022,225        | 10,306,787 | 10,484,833 <sup>2</sup> |
| 1924..... | 8,796,479                    | 1,918,567      | 169,390            | 10,884,436 | 766,783                     | 11,651,219        | 14,027,120 | 14,160,703 <sup>2</sup> |
| 1925..... | 9,523,618                    | 2,261,890      | 184,153            | 11,969,661 | 232,813                     | 12,202,474        | 15,897,339 | 15,897,339              |
| 1926..... | 9,666,440                    | 2,313,464      | 393,932            | 12,373,845 | 580,380                     | 12,954,225        | 17,979,412 | 17,979,412              |
| 1927..... | 9,824,031                    | 2,653,673      | 443,377            | 12,921,081 | 571,279                     | 13,492,360        | 22,464,753 | 22,464,753              |
| 1928..... | 10,424,240                   | 2,877,766      | 549,905            | 13,851,920 | 741,304                     | 14,593,284        | 24,105,724 | 24,105,724              |
| 1929..... | 10,512,879                   | 3,325,020      | 267,288            | 14,095,187 | 325,914                     | 14,421,101        | 24,465,283 | 24,465,283              |
| 1930..... | 10,260,025                   | 3,431,538      | 718,240            | 14,409,803 | 204,897                     | 14,704,700        | 26,408,829 | 26,408,829              |
| 1931..... | 10,493,008                   | 3,478,889      | 629,215            | 14,601,112 | 464,719                     | 15,065,831        | 25,718,221 | 25,718,221              |
| 1932..... | 10,601,822                   | 3,461,760      | 457,518            | 14,521,100 | 368,279                     | 14,889,379        | 25,222,913 | 25,222,913              |
| 1933..... | 10,630,336                   | 3,555,585      | 444,302            | 14,630,223 | 206,372                     | 14,836,595        | 27,396,708 | 27,396,708              |
| 1934..... | 10,652,618                   | 3,746,260      | 591,103            | 14,989,981 | 246,466                     | 15,236,447        | 31,651,057 | 31,651,057              |
| 1935..... | 10,590,333                   | 3,744,068      | 890,264            | 15,194,665 | 121,401                     | 15,316,146        | 34,757,391 | 34,757,391              |
| 1936..... | 9,808,722                    | 4,935,216      | 999,627            | 15,738,565 | 139,496                     | 15,878,061        | 35,456,007 | 35,456,007              |

<sup>1</sup> Includes statistics of trust companies chartered by the Government of Nova Scotia but inspected by the Dominion Department of Insurance for the years 1925-33, inclusive, and by the Governments of Nova Scotia and New Brunswick for 1934-36, inclusive.

<sup>2</sup> Includes interest due and accrued for the years 1920-24.

### 4.—Amount of Estate, Trust, and Agency Funds of Trust Companies Chartered by the Dominion Government as at Dec. 31, 1920-36.

| Year.     | Estate, Trust, and Agency Funds. | Year.     | Estate, Trust, and Agency Funds. |
|-----------|----------------------------------|-----------|----------------------------------|
|           | \$                               |           | \$                               |
| 1920..... | 57,225,303                       | 1929..... | 210,005,726                      |
| 1921..... | 79,252,639                       | 1930..... | 206,282,593                      |
| 1922..... | 62,449,298                       | 1931..... | 215,098,499                      |
| 1923..... | 102,764,835                      | 1932..... | 215,702,235                      |
| 1924..... | 123,082,289                      | 1933..... | 225,484,151                      |
| 1925..... | 131,420,502                      | 1934..... | 230,230,383                      |
| 1926..... | 139,777,235                      | 1935..... | 242,594,310                      |
| 1927..... | 161,040,061                      | 1936..... | 228,024,454                      |
| 1928..... | 202,655,185                      |           |                                  |

### Section 2.—Small Loans Companies.

There have been incorporated in recent years, by the Parliament of Canada, a number of companies which make small loans, usually not exceeding five hundred dollars each, on the promissory notes of the borrowers and additionally secured in most cases by endorsements or chattel mortgages. While small loans companies may, under their charter powers, make loans on the security of real estate, actually they have made only a very few of such loans. As the business of these companies has now reached considerable proportions the figures showing the same are now separated from those of the loan companies proper and are no longer included in Table 2. The figures relating to the assets and liabilities of the three companies of this class which have commenced operations are shown in summary form below.

### 5.—Classification of Assets and Liabilities of Small Loans Companies Chartered by the Dominion Government, as at Dec. 31, 1925-36.

#### ASSETS.

| Year.     | Loans Receivable. | Cash on Hand and in Banks. | Other Assets. | Total.    |
|-----------|-------------------|----------------------------|---------------|-----------|
|           | \$                | \$                         | \$            | \$        |
| 1928..... | 128,635           | 3,597                      | 17,007        | 159,239   |
| 1929..... | 434,432           | 9,621                      | 36,341        | 480,394   |
| 1930..... | 598,275           | 21,814                     | 31,551        | 651,640   |
| 1931..... | 777,414           | 13,020                     | 36,939        | 827,373   |
| 1932..... | 644,339           | 22,125                     | 13,449        | 679,913   |
| 1933..... | 1,228,180         | 327,760                    | 14,019        | 1,569,959 |
| 1934..... | 2,353,862         | 284,761                    | 22,111        | 2,660,734 |
| 1935..... | 2,962,580         | 194,406                    | 30,403        | 3,187,389 |
| 1936..... | 4,145,066         | 214,363                    | 32,961        | 4,392,390 |

#### LIABILITIES.

| Year.     | Liabilities to Shareholders. |                     |                  |                    |           | Liabilities to the Public. |        |                   |                    |           |
|-----------|------------------------------|---------------------|------------------|--------------------|-----------|----------------------------|--------|-------------------|--------------------|-----------|
|           | General Reserve.             | Reserve for Losses. | Capital Paid Up. | Other Liabilities. | Total.    | Borrowed Money.            | Taxes. | Un-earned Income. | Other Liabilities. | Total.    |
|           | \$                           | \$                  | \$               | \$                 | \$        | \$                         | \$     | \$                | \$                 | \$        |
| 1928..... | Nil                          | 1,757               | 101,000          | 2,650              | 105,407   | 45,000                     | Nil    | 6,540             | 397                | 51,946    |
| 1929..... | Nil                          | 10,075              | 101,000          | 1,399              | 112,474   | 340,924                    | 40     | 16,656            | 1,531              | 355,151   |
| 1930..... | Nil                          | 15,284              | 141,150          | 7,418              | 164,852   | 450,659                    | 506    | 22,211            | 8,343              | 482,219   |
| 1931..... | Nil                          | 36,029              | 273,150          | 3,992              | 313,170   | 474,959                    | 55     | 24,532            | 10,704             | 509,950   |
| 1932..... | Nil                          | 14,722              | 331,800          | 1,776              | 348,097   | 295,930                    | Nil    | 18,596            | 12,376             | 326,901   |
| 1933..... | Nil                          | 22,945              | 976,750          | 10,871             | 1,010,566 | 445,352                    | 2,933  | 95,248            | 1,142              | 545,705   |
| 1934..... | Nil                          | 65,559              | 976,750          | 75,518             | 1,118,827 | 1,350,797                  | 13,661 | 171,817           | 3,520              | 1,519,795 |
| 1935..... | Nil                          | 91,061              | 976,750          | 163,923            | 1,231,734 | 1,681,062                  | 17,482 | 222,643           | 4,260              | 1,925,447 |
| 1936..... | 300,000                      | 146,658             | 976,750          | 2,771              | 1,426,179 | 2,581,710                  | 33,490 | 315,678           | 4,099              | 2,934,947 |

### Section 3.—Sales of Canadian Bonds.

Interesting aspects of public financing and of the investment of capital in Canadian development since 1911 are illustrated by the sales of Canadian bonds by classes, shown in Table 6. (The figures are reproduced from the *Monetary Times Annual*, 1938.) In the first part of this table, the bonds sold in each year are divided according to whether the financing was for Dominion or Provincial Governments, or for municipalities, railways or other corporations, while in the second part of the table the sales in each year are distributed according to sales in Canada, the United States and the United Kingdom.

The total sales of Canadian bonds naturally reached a very high mark toward the close of the War, owing to the Dominion Government financing required to cover the war expenditures. However, the total sales were greater in 1937 than in any other year, owing largely to the Dominion Government's conversion loans.

Dominion Government financing through bond sales since 1907 may be divided into three periods: the first from 1908 to 1914, when the money was required largely for internal development of the country, public works and Government railways; the second from 1915 to 1919, when war expenditures required very large borrowings; and the third since the War, when the issues have been largely required for refunding former loans at lower interest rates and for expenditures in connection with public works and railways.

Provincial bond issues have been on a much larger scale since the War than formerly, probably due to the development of provincially-owned public utilities and of improved highways. Sales of the bonds of Canadian municipalities, on the other hand, were greater in 1913, toward the end of the 'land boom', than

they have been in any other year, although sales in 1930 almost reached the record. However, allowing for the increased population in cities and towns, there has not been the same marked increase in the average annual sales of municipal bonds in the period since the War, as compared with the period before the War, that is noticeable in the case of provincial bonds.

Sales of corporation bonds, which from 1926 to 1930 had averaged over \$257,000,000 per year, dropped to \$10,550,000 in 1932, and to \$4,385,000 in 1933, this being largely due to the uncertainty of the industrial outlook. Railway bonds also showed a precipitate decline to \$12,500,000 in 1932, and fell to \$1,000,000 in 1933. From 1934 to 1937 substantial recoveries were shown in both classes, the 1936 figures being particularly high.

A very striking change has taken place during the present century in the market in which Canadian bond issues are principally sold. Prior to the War, a great part of the capital required for Canadian development came from the United Kingdom, and the major portion of Canadian bond issues was sold there. The outbreak of war temporarily eliminated that market, and Canadians turned largely to the United States for outside capital. However, the great increase in wealth during and since the War has enabled a much greater proportion of public and industrial financing to be done at home, and beginning with the Victory Loan Campaigns, Canadians not only learned how to invest their money in bonds, but had the necessary funds to invest on a large scale in bond issues. These facts are reflected in the latter part of Table 4 showing that since 1915 a greatly increased proportion of the total issues of Canadian bonds has been sold within Canada. Thus, in 1937, 93 p.c. of all bonds issued were sold in Canada, and 7 p.c. in the United States.

#### 6.—Sales of Canadian Bonds, by Class of Bond and Country of Sale, calendar years 1911-37.

(From the *Monetary Times Annual*.)

NOTE.—Figures for 1904-10, inclusive, will be found at p. 921 of the 1933 Year Book.

##### CLASSES OF BONDS.

| Calendar Year. | Dominion.   | Provincial. | Municipal.  | Railway.    | Corporation. | Total.                     |
|----------------|-------------|-------------|-------------|-------------|--------------|----------------------------|
|                | \$          | \$          | \$          | \$          | \$           | \$                         |
| 1911.....      | 1           | 11,375,000  | 30,295,838  | 85,011,205  | 139,530,885  | 266,812,938                |
| 1912.....      | 25,000,000  | 25,039,700  | 47,159,288  | 45,014,925  | 130,124,069  | 272,937,982                |
| 1913.....      | 34,000,000  | 36,850,000  | 110,600,000 | 65,895,880  | 126,381,813  | 373,795,295                |
| 1914.....      | 45,000,000  | 50,100,000  | 79,133,996  | 59,719,000  | 20,515,405   | 272,935,007                |
| 1915.....      | 170,000,000 | 49,105,000  | 87,303,338  | 33,679,000  | 15,083,000   | 335,100,328                |
| 1916.....      | 175,000,000 | 33,173,000  | 93,977,542  | 22,240,000  | 32,492,000   | 356,882,542                |
| 1917.....      | 650,000,000 | 15,300,000  | 24,189,079  | 17,700,000  | 18,850,000   | 726,039,079                |
| 1918.....      | 689,016,000 | 18,605,000  | 43,570,361  | 19,600,000  | 4,565,000    | 775,356,361                |
| 1919.....      | 753,000,000 | 52,374,000  | 26,274,089  | 35,359,133  | 42,930,000   | 909,937,222                |
| 1920.....      | 1           | 125,993,000 | 56,371,391  | 96,500,000  | 46,050,276   | 324,914,667                |
| 1921.....      | 1           | 160,745,400 | 84,776,931  | 96,733,000  | 61,335,825   | 403,591,156                |
| 1922.....      | 200,000,000 | 114,918,000 | 87,088,877  | 13,505,100  | 76,836,500   | 462,397,477                |
| 1923.....      | 200,000,000 | 106,279,000 | 33,686,422  | 27,500,000  | 97,352,320   | 514,817,742                |
| 1924.....      | 175,000,000 | 89,640,000  | 88,731,612  | 137,875,000 | 69,170,180   | 579,925,792                |
| 1925.....      | 169,333,333 | 106,970,000 | 46,218,987  | 40,925,195  | 120,085,833  | 433,533,343                |
| 1926.....      | 105,000,000 | 76,633,207  | 65,020,194  | 34,500,000  | 250,919,200  | 532,072,601                |
| 1927.....      | 45,000,000  | 114,795,500 | 72,742,114  | 80,000,000  | 289,680,067  | 602,217,681                |
| 1928.....      | 1           | 92,962,500  | 27,120,588  | 48,396,000  | 285,083,000  | 453,592,088                |
| 1929.....      | 1           | 119,960,500 | 95,667,809  | 199,200,000 | 243,330,600  | 661,158,909                |
| 1930.....      | 140,000,000 | 160,004,000 | 109,048,063 | 137,238,000 | 220,355,000  | 767,245,063                |
| 1931.....      | 558,109,300 | 120,239,205 | 85,290,066  | 121,750,000 | 59,432,000   | 1,250,820,571              |
| 1932.....      | 226,250,000 | 128,217,000 | 95,000,632  | 12,500,000  | 10,550,000   | 473,117,632                |
| 1933.....      | 440,000,000 | 52,899,000  | 41,282,513  | 1,000,000   | 4,385,000    | 509,556,513                |
| 1934.....      | 400,000,000 | 139,868,000 | 24,690,122  | 22,500,000  | 40,902,696   | 637,960,822                |
| 1935.....      | 739,300,000 | 123,407,000 | 44,773,000  | 48,400,000  | 60,005,700   | 1,019,505,900              |
| 1936.....      | 793,000,000 | 118,735,000 | 34,356,087  | 133,000,000 | 219,983,224  | 1,299,074,311 <sup>1</sup> |
| 1937.....      | 883,500,000 | 174,362,000 | 52,137,475  | 65,880,000  | 91,298,800   | 1,267,178,275              |

<sup>1</sup> Not reported for this year.

<sup>2</sup> Revised since the publication of the 1937 Year Book.

**6.—Sales of Canadian Bonds, by Class of Bond and Country of Sale, calendar years 1911-37—concluded.**

**DISTRIBUTION OF SALES, BY COUNTRIES.**

| Calendar Year. | Sold in Canada.            | Sold in United States. | Sold in United Kingdom. | Total.                     |
|----------------|----------------------------|------------------------|-------------------------|----------------------------|
|                | \$                         | \$                     | \$                      | \$                         |
| 1911.....      | 44,989,878                 | 17,553,967             | 204,269,143             | 266,813,988                |
| 1912.....      | 37,735,182                 | 30,986,406             | 204,236,394             | 272,937,982                |
| 1913.....      | 45,603,753                 | 50,720,762             | 277,470,780             | 373,795,295                |
| 1914.....      | 32,999,860                 | 53,944,548             | 185,990,659             | 272,935,067                |
| 1915.....      | 115,325,214                | 178,006,114            | 41,175,000              | 335,106,328                |
| 1916.....      | 102,938,778                | 206,943,764            | 47,000,000              | 356,882,542                |
| 1917.....      | 546,330,714                | 174,708,365            | 5,000,000               | 726,039,079                |
| 1918.....      | 727,446,361                | 33,310,000             | 14,600,000              | 775,356,361                |
| 1919.....      | 705,385,419                | 199,446,670            | 5,106,133               | 909,937,222                |
| 1920.....      | 101,330,067                | 223,084,000            | Nil                     | 324,414,067                |
| 1921.....      | 213,326,543                | 178,113,513            | 12,151,000              | 403,591,156                |
| 1922.....      | 250,184,984                | 242,212,493            | Nil                     | 492,397,477                |
| 1923.....      | 427,868,742                | 84,517,000             | 2,432,000               | 514,817,742                |
| 1924.....      | 336,758,887                | 239,544,405            | 3,622,500               | 579,925,792                |
| 1925.....      | 271,251,882                | 181,870,000            | 30,411,866              | 483,533,348                |
| 1926.....      | 263,862,718                | 259,209,943            | 9,000,000               | 532,072,661                |
| 1927.....      | 373,637,014                | 223,714,000            | 4,866,867               | 602,217,681                |
| 1928.....      | 278,080,088                | 159,512,000            | 10,000,000              | 453,592,088                |
| 1929.....      | 378,395,909                | 263,654,000            | 19,109,000              | 661,158,909                |
| 1930.....      | 368,968,063                | 393,632,000            | 4,745,000               | 767,245,063                |
| 1931.....      | 1,090,800,571              | 155,920,000            | 4,100,000               | 1,250,820,571              |
| 1932.....      | 377,752,632                | 81,015,000             | 14,350,000              | 473,117,632                |
| 1933.....      | 434,556,513                | 60,000,000             | 75,000,000              | 569,556,513                |
| 1934.....      | 529,630,828                | 50,000,000             | 58,330,000              | 637,960,828                |
| 1935.....      | 853,940,900                | 162,065,000            | 500,000                 | 1,016,505,900              |
| 1936.....      | 1,211,824,311 <sup>1</sup> | 86,000,000             | 1,250,000               | 1,299,074,311 <sup>1</sup> |
| 1937.....      | 1,178,928,275              | 88,250,000             | Nil                     | 1,267,178,275              |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

**Section 4.—Corporation Dividends.**

(From the *Financial Post Business Year Book*.)

The 1937 improvement in Canadian business, as indicated by higher corporate earnings, was reflected in the total annual dividend payments of \$319,804,000, compared with \$260,641,000 in 1936, or a gain of 22.7 p.c. The 1936 dividend disbursements amounted to over double those of 1933, the lowest year of the depression in this respect. Of the total disbursements for the year, mining companies accounted for \$104,600,000 or 32.8 p.c. In Table 7 there is given an eight-year record of aggregate monthly dollar payments and yearly totals for all companies paying dividends in Canada.

**7.—Dividend Payments by Canadian Companies, 1930-37.**

| Month.         | 1930.                | 1931.                | 1932.   | 1933.   | 1934.                | 1935.                | 1936.   | 1937.   |
|----------------|----------------------|----------------------|---------|---------|----------------------|----------------------|---------|---------|
|                | \$'000               | \$'000               | \$'000  | \$'000  | \$'000               | \$'000               | \$'000  | \$'000  |
| January.....   | 30,310               | 27,959               | 20,401  | 13,855  | 14,417               | 14,785               | 16,032  | 22,442  |
| February.....  | 7,946                | 6,101                | 4,095   | 3,336   | 3,783                | 3,496                | 4,811   | 5,722   |
| March.....     | 22,771               | 24,373 <sup>1</sup>  | 18,945  | 10,754  | 17,267               | 9,440                | 19,176  | 21,500  |
| April.....     | 32,835               | 32,053 <sup>1</sup>  | 21,274  | 11,602  | 12,200               | 14,621               | 16,101  | 20,917  |
| May.....       | 6,581                | 6,301                | 4,674   | 2,931   | 4,793                | 4,025                | 3,332   | 5,847   |
| June.....      | 33,847               | 28,331 <sup>1</sup>  | 19,343  | 17,497  | 41,939               | 55,804 <sup>1</sup>  | 61,333  | 67,842  |
| July.....      | 29,301               | 18,702 <sup>1</sup>  | 16,008  | 12,672  | 16,423 <sup>1</sup>  | 18,679               | 23,408  | 31,212  |
| August.....    | 7,037                | 4,301 <sup>1</sup>   | 4,392   | 3,260   | 4,464                | 4,362                | 3,580   | 4,585   |
| September..... | 23,669               | 19,187 <sup>1</sup>  | 16,049  | 14,271  | 9,732                | 12,315               | 14,610  | 19,226  |
| October.....   | 35,886               | 23,894 <sup>1</sup>  | 15,920  | 11,807  | 13,849               | 14,801               | 16,018  | 19,489  |
| November.....  | 6,738                | 4,679 <sup>1</sup>   | 3,852   | 3,656   | 4,188                | 3,601                | 4,680   | 9,046   |
| December.....  | 50,000 <sup>1</sup>  | 26,073 <sup>1</sup>  | 20,209  | 23,038  | 42,639               | 66,700 <sup>1</sup>  | 78,000  | 91,176  |
| Totals.....    | 286,721 <sup>1</sup> | 226,959 <sup>1</sup> | 164,962 | 134,679 | 185,760 <sup>1</sup> | 222,629 <sup>1</sup> | 260,641 | 319,804 |

<sup>1</sup> Revised since the publication of the 1937 Year Book.

### Section 5.—Foreign Exchange.

The Canadian dollar, adopted as our currency in 1857, was equivalent to 15/73 of the pound sterling; in other words, the pound was equal to \$4.866 in Canadian currency at par, and remained so, with minor variations between the import and export gold points representing the cost of shipping gold in either direction, until the outbreak of the Great War. During the first eleven years after Confederation, the Canadian dollar was at a premium in the United States, as the United States dollar was not, after the Civil War, redeemable in gold until 1878. From the latter date, the dollar in the two countries was equivalent at par, and variation was only between the import and export gold points or under \$2 per \$1,000.

At the outbreak of the Great War, both the pound sterling and the Canadian dollar were made inconvertible into gold and fell to a discount in New York, though this discount was 'pegged' or kept at a moderate percentage by sales of United States securities previously held in the United Kingdom, borrowing in the United States, and, after the United States entered the War, by arrangements with the United States Government. After the War, when the exchanges were 'unpegged' about November, 1920, the British pound went as low as \$3.18 and the Canadian dollar as low as 82 cents in New York. In the course of the next year or two, exchange was brought practically back to par, and the United Kingdom resumed gold payments in 1925 and Canada on July 1, 1926. From then until 1928 the exchanges were within the gold points, but in 1929 the Canadian dollar again fell to a moderate discount in New York. The dislocation of exchange resulting from this discount persisted, with the exception of a few months in the latter half of 1930, into 1931. Dollar rates were below the gold export points, however, only for a few scattered intervals. Fluctuations since September, 1931, are dealt with below.

**Recent Movements in Canadian Exchange.\***—Because of Canada's close financial and commercial relationships with the United Kingdom and the United States, Canadian exchange rates are influenced to a large extent by the London and New York markets. The United Kingdom buys much more from Canada than Canada buys from her, but the reverse is the case as regards the trade between Canada and the United States. The result is that there is a supply of bills on London in excess of the amount needed to meet current obligations in the United Kingdom. By offering these for sale for United States funds in London or New York, a triangular balance is approximated by book transactions and the amount of gold transfers is thereby greatly reduced. The volume of sterling exchange on Canadian account thus passed to the New York market does not greatly influence New York rates of sterling exchange under normal conditions; on the contrary, the volume of the New York-London transactions is sufficient to carry the Canadian rates along with them.

In September, 1931, the equilibrium of international exchange was seriously disturbed. This unfortunate turn of events followed a period of over six years during which the nations of the world had worked steadily towards the stabilization of their currency systems upon a gold basis. Within two months of the time when the United Kingdom found it necessary to suspend free gold shipments, however, only a very small number of countries, including the United States and France, were left with currencies unshaken by preceding abnormal gold movements. The decision of the United Kingdom to go off the gold standard (Sept. 21, 1931) resulted in a sharp depreciation of sterling in New York. Canadian rates depreciated also,

\* Revised by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics.



and fluctuated broadly with sterling until the United States dollar dropped from the ranks of gold standard currencies on Apr. 19, 1933.

Since that time major adjustments have occurred in practically all currencies of the world. The United States dollar was replaced on a gold basis, but was devalued at 59.06 p.c. of its former gold parity (13 $\frac{5}{8}$  grains or  $\frac{1}{20}$  oz. of gold to the dollar as against 23.22 grains previously) on Jan. 31, 1934, with other countries following suit at irregular intervals until the final break-up of the European gold 'bloc' in September, 1936. These countries, including France, Belgium, and Switzerland, were the last to abandon post-war gold standards established between 1925 and 1927. During 1936, the United States dollar and the Canadian dollar fluctuated narrowly about par, while the pound sterling declined in the latter half of the year until it also approached its old New York and Montreal parity of \$4.866. With the exception of the last three months of the year, when readjustments within the former gold bloc were occurring, 1936 exchange fluctuations were unusually narrow. This was broadly true also for 1937, although there were considerable declines in the French franc, Spanish peseta and Brazilian milreis.

### 8.—Monthly Averages of Exchange Quotations at Montreal, 1936 and 1937.

NOTE.—The noon rates in Canadian funds upon which these averages are based have been supplied by the Bank of Canada.

| Month.         | Australia.<br>Pound. |       | Austria.<br>Schilling. |       | Belgium.<br>Belga. |       | Czecho-<br>slovakia.<br>Krone. |       | Denmark.<br>Krone. |       | Finland.<br>Markka. |       |
|----------------|----------------------|-------|------------------------|-------|--------------------|-------|--------------------------------|-------|--------------------|-------|---------------------|-------|
|                | Old par value.       |       |                        |       |                    |       |                                |       |                    |       |                     |       |
|                | 1936.                | 1937. | 1936.                  | 1937. | 1936.              | 1937. | 1936.                          | 1937. | 1936.              | 1937. | 1936.               | 1937. |
|                | \$                   | \$    | \$                     | \$    | \$                 | \$    | \$                             | \$    | \$                 | \$    | \$                  | \$    |
| January.....   | 3.973                | 3.927 | .188                   | .187  | .169               | .169  | .042                           | .035  | .222               | .219  | .022                | .022  |
| February.....  | 3.995                | 3.916 | .189                   | .187  | .170               | .169  | .042                           | .035  | .223               | .219  | .022                | .022  |
| March.....     | 3.983                | 3.906 | .189                   | .187  | .170               | .168  | .042                           | .035  | .222               | .218  | .022                | .022  |
| April.....     | 3.974                | 3.928 | .188                   | .187  | .170               | .168  | .042                           | .035  | .222               | .219  | .022                | .022  |
| May.....       | 3.984                | 3.945 | .188                   | .187  | .170               | .168  | .042                           | .035  | .222               | .220  | .022                | .022  |
| June.....      | 4.020                | 3.950 | .188                   | .187  | .170               | .169  | .042                           | .035  | .225               | .220  | .022                | .022  |
| July.....      | 4.022                | 3.979 | .189                   | .188  | .169               | .169  | .042                           | .035  | .224               | .222  | .022                | .022  |
| August.....    | 4.021                | 3.986 | .188                   | .189  | .169               | .168  | .041                           | .035  | .224               | .222  | .022                | .022  |
| September..... | 4.031                | 3.963 | .189                   | .189  | .169               | .168  | .041                           | .035  | .225               | .221  | .022                | .022  |
| October.....   | 3.918                | 3.963 | .187                   | .188  | .168               | .169  | .037                           | .035  | .219               | .221  | .022                | .022  |
| November.....  | 3.905                | 3.993 | .187                   | .189  | .169               | .170  | .035                           | .035  | .218               | .223  | .022                | .022  |
| December.....  | 3.924                | 3.999 | .187                   | .189  | .169               | .170  | .035                           | .035  | .219               | .223  | —                   | .022  |

| Month.         | France.<br>Franc. |       | Germany.<br>Reichs-<br>mark. |       | Holland.<br>Guilder. |       | Italy.<br>Lira. |       | Norway.<br>Krone. |       | Spain.<br>Peseta. |       |
|----------------|-------------------|-------|------------------------------|-------|----------------------|-------|-----------------|-------|-------------------|-------|-------------------|-------|
|                | Old par value.    |       |                              |       |                      |       |                 |       |                   |       |                   |       |
|                | 1936.             | 1937. | 1936.                        | 1937. | 1936.                | 1937. | 1936.           | 1937. | 1936.             | 1937. | 1936.             | 1937. |
|                | \$                | \$    | \$                           | \$    | \$                   | \$    | \$              | \$    | \$                | \$    | \$                | \$    |
| January.....   | .060              | .047  | .404                         | .402  | .682                 | .548  | .080            | .053  | .249              | .247  | .137              | —     |
| February.....  | .067              | .047  | .406                         | .402  | .685                 | .547  | .080            | .053  | .251              | .246  | .138              | —     |
| March.....     | .066              | .046  | .406                         | .402  | .684                 | .547  | .080            | .053  | .250              | .245  | .138              | —     |
| April.....     | .066              | .045  | .404                         | .402  | .682                 | .547  | .079            | .053  | .250              | .247  | .137              | —     |
| May.....       | .066              | .045  | .404                         | .401  | .678                 | .548  | .079            | .053  | .250              | .248  | .137              | —     |
| June.....      | .066              | .044  | .404                         | .401  | .679                 | .550  | .079            | .053  | .253              | .248  | .137              | —     |
| July.....      | .069              | .038  | .404                         | .403  | .681                 | .552  | .079            | .053  | .253              | .250  | .137              | —     |
| August.....    | .069              | .038  | .402                         | .402  | .679                 | .552  | .079            | .053  | .253              | .250  | .137              | .064  |
| September..... | .066              | .036  | .401                         | .401  | .667                 | .552  | .079            | .053  | .253              | .246  | .137              | .065  |
| October.....   | .047              | .034  | .402                         | .402  | .556                 | .553  | .055            | .053  | .246              | .249  | —                 | .063  |
| November.....  | .046              | .034  | .402                         | .403  | .559                 | .554  | .053            | .053  | .246              | .251  | —                 | .063  |
| December.....  | .047              | .034  | .402                         | .403  | .545                 | .556  | .053            | .053  | .246              | .251  | —                 | .062  |

8.—Monthly Averages of Exchange Quotations at Montreal, 1936 and 1937—  
concluded.

| Month.<br>Old par value. | Sweden.<br>Krona. |       | Switzer-<br>land.<br>Franc. |       | Argentina.<br>Peso. <sup>1</sup><br>(paper.) |       | Brasil.<br>Milreis. <sup>1</sup> |       | Mexico.<br>Peso. |       | Hong Kong.<br>Dollar. |       |
|--------------------------|-------------------|-------|-----------------------------|-------|--|-------|----------------------------------|-------|------------------|-------|-----------------------|-------|
|                          | -2680             |       | -1930                       |       | -4244  |       | -1196                            |       | -4985            |       | -3000                 |       |
|                          | 1936.             | 1937. | 1936.                       | 1937. | 1936.  | 1937. | 1936.                            | 1937. | 1936.            | 1937. | 1936.                 | 1937. |
|                          | \$                | \$    | \$                          | \$    | \$   | \$    | \$                               | \$    | \$               | \$    | \$                    | \$    |
| January.....             | .256              | .253  | .327                        | .220  | .272   | .302  | .055                             | .061  | .278             | .278  | .322                  | .306  |
| February.....            | .257              | .252  | .330                        | .223  | .275   | .300  | .057                             | .061  | .277             | .278  | .323                  | .304  |
| March.....               | .257              | .252  | .329                        | .223  | .275   | .300  | .057                             | .061  | .278             | .277  | .326                  | .304  |
| April.....               | .256              | .253  | .327                        | .223  | .276   | .303  | .057                             | .063  | .279             | .277  | .326                  | .305  |
| May.....                 | .257              | .254  | .324                        | .223  | .276   | .303  | .056                             | .064  | .278             | .277  | .325                  | .305  |
| June.....                | .260              | .255  | .325                        | .223  | .277   | .304  | .057                             | .066  | .278             | .278  | .324                  | .304  |
| July.....                | .259              | .255  | .325                        | .230  | .273   | .302  | .058                             | .067  | .278             | .278  | .322                  | .304  |
| August.....              | .259              | .257  | .325                        | .230  | .273   | .302  | .058                             | .069  | .278             | .278  | .312                  | .310  |
| September.....           | .260              | .255  | .317                        | .230  | .283   | .299  | .059                             | .064  | .278             | .278  | .312                  | .309  |
| October.....             | .253              | .253  | .230                        | .230  | .277   | .293  | .059                             | .058  | .277             | .277  | .310                  | .310  |
| November.....            | .252              | .257  | .230                        | .231  | .277   | .295  | .059                             | .057  | .277             | .277  | .304                  | .311  |
| December.....            | .253              | .258  | .230                        | .231  | .268   | .293  | .059                             | .054  | .277             | .278  | .305                  | .312  |

| Month.<br>Old par value. | India.<br>Rupee. |       | Japan.<br>Yen. |       | Shanghai.<br>Dollar. |       | London.<br>Sterling. |       | New York.<br>Dollar. |       |
|--------------------------|------------------|-------|----------------|-------|----------------------|-------|----------------------|-------|----------------------|-------|
|                          | -3650            |       | -4985          |       | -4107                |       | 4.8666               |       | 1.00                 |       |
|                          | 1936.            | 1937. | 1936.          | 1937. | 1936.                | 1937. | 1936.                | 1937. | 1936.                | 1937. |
|                          | \$               | \$    | \$             | \$    | \$                   | \$    | \$                   | \$    | \$                   | \$    |
| January.....             | .375             | .371  | .290           | .286  | .297                 | .297  | 4.956                | 4.909 | 1.001                | 1.000 |
| February.....            | .377             | .370  | .291           | .285  | .299                 | .296  | 4.994                | 4.895 | .999                 | 1.000 |
| March.....               | .376             | .369  | .290           | .285  | .296                 | .297  | 4.978                | 4.883 | 1.001                | 1.000 |
| April.....               | .375             | .371  | .290           | .286  | .299                 | .297  | 4.967                | 4.910 | 1.005                | .999  |
| May.....                 | .376             | .372  | .291           | .287  | .298                 | .298  | 4.980                | 4.931 | 1.002                | .998  |
| June.....                | .380             | .373  | .295           | .288  | .300                 | .297  | 5.033                | 4.938 | 1.003                | 1.001 |
| July.....                | .379             | .376  | .294           | .289  | .300                 | .296  | 5.027                | 4.974 | 1.001                | 1.001 |
| August.....              | .379             | .376  | .294           | .290  | .301                 | .297  | 5.027                | 4.933 | 1.000                | 1.000 |
| September.....           | .381             | .374  | .295           | .289  | .300                 | .297  | 5.089                | 4.953 | 1.000                | 1.000 |
| October.....             | .370             | .374  | .286           | .289  | .294                 | .295  | 4.897                | 4.954 | 1.000                | 1.000 |
| November.....            | .369             | .377  | .285           | .291  | .295                 | .294  | 4.832                | 4.911 | .999                 | .999  |
| December.....            | .371             | .377  | .285           | .291  | .296                 | .295  | 4.904                | 4.999 | .999                 | 1.000 |

<sup>1</sup> Free market rates.

## CHAPTER XXIII.—INSURANCE.\*

Insurance business is transacted in Canada by companies of the following classes, *viz.*, (1) companies incorporated under the laws of the Dominion of Canada or of the former "Province of Canada", (2) companies incorporated under the laws of the provinces of Canada, and (3) companies incorporated or formed under the laws of British and foreign countries. The word "companies", as here used, includes fraternal benefit societies and exchanges which transact the business of insurance. The Dominion Insurance Acts provide that companies of classes (1) and (3) above may not transact business anywhere in Canada unless registered† by the Dominion, but these Acts also provide that fire insurance on property in Canada may be effected in companies of class (3) even though not registered, if the insurance is effected without solicitation, advertising or the use of the mails, and if an office is not maintained in Canada, though property to be insured may be inspected and losses may be adjusted. Insurance so effected is generally known as 'unlicensed insurance'. Companies of class (2) above may transact business in the province of incorporation, subject to compliance with the laws thereof, or in any other province subject to compliance with the laws thereof, or, on compliance with the Dominion laws, may be granted Dominion registration. Most of these companies limit their business to the province of incorporation or to one or more other provinces; a few only have been granted Dominion registration.

What has been said above implies that jurisdiction concerning insurance Companies and insurance business is divided between the Dominion and the provinces. There have been many references to the courts and appeals to the Privy Council with a view to determining the respective legislative domains, both in respect of insurance legislation specifically and in respect of legislation affecting companies generally, including insurance companies. The latest Privy Council decision was handed down in 1931. It may now be taken as established that the Parliament of Canada may require companies formed or incorporated outside of Canada to obtain Dominion registration and to continue to be so registered as a condition of transacting business in Canada, and these companies may be required to make returns from time to time of their business and doings in Canada and to furnish evidence of their solvency. The powers of the Dominion go much further in reference to companies incorporated by the Parliament of Canada, but include all of the powers which may be exercised over companies formed or incorporated outside of Canada and registered by the Dominion. The Acts passed in 1932,‡ as since amended, implement the powers of the Dominion as determined by the Privy Council decisions.

The Dominion Acts under which companies are registered are administered by the Department of Insurance under the Minister of Finance. The chief officer of the Department of Insurance is the Superintendent of Insurance. The first Superintendent was appointed in 1875 as head of a newly created Insurance Branch of the Department of Finance. In 1910 the Insurance Branch was constituted into a separate Department, the Department of Insurance, under the Minister of Finance.

\* The statistics of Fire, Life, and Miscellaneous Insurance have been revised under the direction of G. D. Finlayson, Superintendent of Insurance, and those pertaining to Government Annuities (Section 4) under the direction of W. M. Dickson, Deputy Minister of Labour.

† Prior to 1932, the Dominion Insurance Acts provided for the "licensing" of companies; the Acts passed in 1932 provided for "registration". The change in terminology does not indicate any change in substance.

‡ The Canadian and British Insurance Companies Act, 1932 (22-23 Geo. V, c. 46). The Foreign Insurance Companies Act, 1932 (22-23 Geo. V, c. 47).

Precedent to obtaining first registration, in addition to filing certain documents, including a full and complete financial statement, a company must satisfy the Minister that it is sound and solvent and must make the required initial deposit of securities, varying from \$10,000 to \$100,000, depending on the class of business to be undertaken. Annual returns are required of all registered companies and the Acts require an examination to be made, by the Superintendent or on his behalf, of the books and records of companies with a view to substantiating the accuracy of the statements filed and the soundness of the companies. Should any company show an unsatisfactory financial condition, the Acts require remedial measures to be taken. British and foreign companies are required to maintain in Canada assets sufficient to cover all of their liabilities in Canada, while Canadian companies are required to maintain in Canada all of their assets, except such as it may be necessary to deposit outside of Canada as security for 'out of Canada' business.

The statistics herein given for companies registered by the Dominion are divided into three classes relating to: (1) insurance against fire, (2) life insurance, and (3) miscellaneous insurance, *viz.*, accident, automobile, aviation, burglary, credit, earthquake, explosion, forgery, guarantee, hail, leakage, live-stock, sickness, steam boiler, title, tornado, and weather insurance. These statistics are compiled from the reports of the Department of Insurance; throughout they apply to calendar years.

Since 1915, the Department of Insurance has collected statistics, included herein, of business transacted by provincial companies licensed by the provinces, classified as to: (1) business transacted within the province of incorporation, and (2) business transacted in other provinces.

Returns for unlicensed insurance, above referred to, were required under Sec. 16 of the Special War Revenue Act for taxation purposes, and statistics compiled from these returns were published in the Canada Year Book, prior to the 1933 edition, as Table 8. This section of the Act having been held unconstitutional by the Privy Council decision, Oct. 22, 1931, on an appeal from the Court of the King's Bench of the province of Quebec, the returns for 1930 were incomplete and were not published in the 1933 Year Book. By an amendment to the Act at the 1932 session of Parliament, a section analogous to Sec. 16 was enacted, applicable to unlicensed insurance and the information was, therefore, revived in the 1934-35 edition. This information is, however, no longer required from such companies and has been again dropped.

Statistics of Dominion Government annuities are given at the end of this chapter. The Department of Labour administers the Acts under which these annuities are sold.

### Section 1.—Fire Insurance.

Fire insurance in Canada began with the establishment by British fire insurance companies of agencies, usually situated in the seaports and operated by local merchants. The oldest existing agency of a British company is that of the Phoenix Fire Office of London, now the Phoenix Assurance Company, Ltd., which commenced business in Montreal in 1804. On account of the growth of the insurance business of these early British companies, branch offices were established and local managers were appointed, charged with directing the companies' affairs in Canada.

The Halifax Fire Insurance Co. is the first purely Canadian company of which any record is available. Founded in 1809 as the Nova Scotia Fire Association,

it was chartered in 1819 and operated in the province of Nova Scotia until 1919 when it was granted a Dominion licence. Among the other pioneer fire insurance companies still in operation, mention may be made of the following: the Quebec Fire Assurance Co., which commenced business in 1818 and was largely confined in ownership and operations to Quebec province; the British America Assurance Co., incorporated in 1833, the oldest company in Ontario; the Western Assurance Co., organized in 1851, and now, after a rapid and steady growth, one of the largest companies of its kind on the continent; two United States companies, the Aetna Insurance Co., Hartford, Conn., and the Hartford Fire Insurance Co., which commenced business in Canada in 1821 and 1836, respectively.

The report of the Superintendent of Insurance for the year ended Dec. 31, 1936, shows that at that date there were 269 fire insurance companies doing business in Canada under Dominion registration; of these 50 were Canadian, 68 were British and 151 were foreign companies. In 1875, the first year for which authentic records were collected by the Department of Insurance, 27 companies operated in Canada—11 Canadian, 13 British and 3 United States. The proportionate increase in the number of British and foreign companies from 59 p.c. to over 81 p.c. of the total number is a very marked point of difference between the fire and life insurance businesses in Canada, the latter being carried on very largely by Canadian companies.

Although in its early days the Dominion did not prove a very lucrative field for fire insurance companies, the great advance in building construction and the wide use of improved fire appliances and safety devices have materially reduced the danger of serious conflagrations and have placed the risks assumed by companies in Canada on an equality with those of other countries.

A feature of the fire insurance business, besides the large percentage of British and foreign companies, is the continued increase in the number of companies which are operating on the mutual or reciprocal plan. These companies, in which all profits or losses are directly received or paid by the policyholders, are making themselves felt as competitive factors in the fire insurance business.

**Statistics of Fire Insurance.**—Statistical tables of fire insurance in Canada, illustrative of the progress of total business since 1869, and of the operations of individual companies for the year 1936, follow. The net amount of fire insurance in force on Dec. 31, 1936, with companies holding Dominion licences, was \$9,248,273.-260,\* while the net amount in force with provincial companies on the same date was \$1,184,852,046. Thus the grand total fire insurance in force on Dec. 31, 1936, with Dominion and provincial companies was \$10,433,125,306.

Table 1 shows figures of the growth since 1869 of companies registered by the Dominion, the relationship between losses paid and net premiums written, and the variation in the cost per \$100 of insurance. It will be observed that the cost of insurance reached a maximum in 1904 and 1905; there has since been a steady decrease with the exception of the years 1921, 1922, and 1924, when temporary reversals of the downward swing were in evidence. It is noteworthy that the cost of fire insurance has decreased by 56.88 p.c. since 1905. Table 2 shows the business done in Canada by individual companies during the year 1936, while in Tables 3, 4, and 5 are given figures of the assets, liabilities, incomes and expenditures during the years 1932 to 1936, classified by nationality of companies. A further summary of

\* According to preliminary figures, fire insurance in force in companies registered by the Dominion increased by \$625,326,633 in 1937. The large increases of later years are due, in part, to Dominion registration of certain provincially registered companies.

business is given by provinces in Table 6 for the years 1935 and 1936, showing premiums and losses classified by provinces and by nationality of companies. Further, a summary of the business transacted by both Dominion and provincial licensees is given in Table 7.

1.—Summary Statistics of Fire Insurance by Companies Operating under Dominion Registration, calendar years 1869-1937.

| Year.     | Amount<br>in Force at<br>End of Year. | Net<br>Premiums<br>Received<br>during<br>Year. | Losses<br>Paid<br>during<br>Year. | Percent-<br>age of<br>Losses to<br>Premiums. | Gross Amount<br>of Risks<br>Taken<br>during Year. | Premiums<br>Charged<br>Thereon. | Average<br>Cost per<br>\$100 of<br>Insurance. |
|-----------|---------------------------------------|--|-----------------------------------|--|---|---------------------------------|---|
|           | \$                                    | \$   | \$                                | p.c.   | \$  | \$                              | \$  |
| 1869..... | 188,359,809                           | 1,785,539                                      | 1,027,720                         | 57.56  | 171,540,476                                       |                                 |   |
| 1870..... | 191,549,539                           | 1,916,779                                      | 1,024,837                         | 54.77  | 199,102,070                                       |                                 |   |
| 1871..... | 228,453,784                           | 2,321,716                                      | 1,549,199                         | 66.73  | 244,437,172                                       |                                 |   |
| 1872..... | 251,722,940                           | 2,628,710                                      | 1,909,975                         | 72.06  | 277,387,271                                       | 1                               | 1   |
| 1873..... | 278,754,835                           | 2,968,416                                      | 1,982,184                         | 55.67  | 271,085,928                                       |                                 |   |
| 1874..... | 306,844,219                           | 3,522,368                                      | 1,926,159                         | 54.68  | 329,178,974                                       |                                 |   |
| 1875..... | 364,421,029                           | 3,594,764                                      | 2,563,631                         | 71.31  | 331,098,419                                       |                                 |   |
| 1876..... | 404,008,180                           | 3,708,006                                      | 2,867,295                         | 77.33  | 401,148,747                                       |                                 |   |
| 1877..... | 420,342,681                           | 3,764,005                                      | 3,490,919                         | 225.58                                       | 385,736,560                                       | 3,817,360                       | 0.99  |
| 1878..... | 409,890,701                           | 3,368,430                                      | 1,822,674                         | 54.11  | 359,847,757                                       | 3,723,580                       | 1.05  |
| 1879..... | 407,357,958                           | 3,227,488                                      | 2,145,198                         | 66.47  | 360,704,419                                       | 3,608,501                       | 1.00  |
| 1880..... | 411,563,271                           | 3,479,577                                      | 1,666,578                         | 47.90  | 384,051,861                                       | 3,953,437                       | 1.03  |
| 1881..... | 402,210,965                           | 3,827,116                                      | 3,169,624                         | 82.83  | 441,416,238                                       | 4,414,728                       | 1.00  |
| 1882..... | 526,856,478                           | 4,229,706                                      | 2,664,986                         | 63.01  | 478,044,416                                       | 4,850,717                       | 1.01  |
| 1883..... | 572,264,041                           | 4,024,741                                      | 2,920,228                         | 63.14  | 513,580,302                                       | 5,379,950                       | 1.05  |
| 1884..... | 605,507,789                           | 4,980,128                                      | 3,245,323                         | 65.16  | 513,983,378                                       | 5,934,778                       | 1.15  |
| 1885..... | 611,794,479                           | 4,862,460                                      | 2,679,287                         | 55.22  | 486,002,908                                       | 5,684,758                       | 1.17  |
| 1886..... | 586,773,022                           | 4,932,335                                      | 3,301,388                         | 66.93  | 505,752,907                                       | 5,854,172                       | 1.16  |
| 1887..... | 634,707,337                           | 5,244,502                                      | 3,403,514                         | 64.90  | 532,757,088                                       | 6,145,198                       | 1.15  |
| 1888..... | 650,735,059                           | 5,437,263                                      | 3,078,822                         | 56.53  | 541,650,007                                       | 6,890,296                       | 1.18  |
| 1889..... | 684,538,378                           | 5,688,016                                      | 2,876,211                         | 51.47  | 572,782,104                                       | 6,623,336                       | 1.16  |
| 1890..... | 720,070,621                           | 5,836,071                                      | 3,266,567                         | 55.97  | 620,723,945                                       | 7,019,310                       | 1.13  |
| 1891..... | 759,902,191                           | 6,168,716                                      | 3,905,697                         | 63.31  | 623,418,422                                       | 7,248,405                       | 1.16  |
| 1892..... | 821,410,072                           | 6,512,327                                      | 4,377,270                         | 67.22  | 687,175,688                                       | 8,086,803                       | 1.18  |
| 1893..... | 814,087,057                           | 6,793,595                                      | 5,052,090                         | 74.37  | 687,604,239                                       | 8,115,594                       | 1.18  |
| 1894..... | 836,007,202                           | 6,711,369                                      | 4,589,363                         | 68.38  | 653,556,428                                       | 8,158,033                       | 1.25  |
| 1895..... | 837,872,864                           | 6,943,382                                      | 4,993,750                         | 71.92  | 667,639,948                                       | 8,243,605                       | 1.23  |
| 1896..... | 845,574,352                           | 7,075,850                                      | 4,173,501                         | 58.98  | 669,288,650                                       | 8,397,870                       | 1.25  |
| 1897..... | 868,522,217                           | 7,167,661                                      | 4,701,833                         | 65.69  | 663,698,309                                       | 8,304,227                       | 1.25  |
| 1898..... | 895,394,107                           | 7,350,131                                      | 4,784,437                         | 65.09  | 681,160,689                                       | 8,564,124                       | 1.26  |
| 1899..... | 936,869,698                           | 7,910,492                                      | 5,182,038                         | 65.51  | 756,257,098                                       | 9,316,655                       | 1.23  |
| 1900..... | 992,332,360                           | 8,331,948                                      | 7,774,293                         | 93.31  | 803,428,654                                       | 10,031,735                      | 1.25  |
| 1901..... | 1,088,687,619                         | 9,650,348                                      | 6,774,956                         | 70.20  | 821,522,854                                       | 11,688,958                      | 1.42  |
| 1902..... | 1,075,263,168                         | 10,577,084                                     | 4,152,289                         | 39.28  | 892,049,856                                       | 13,087,251                      | 1.47  |
| 1903..... | 1,140,463,716                         | 11,384,762                                     | 5,870,716                         | 51.57  | 983,374,764                                       | 14,038,182                      | 1.50  |
| 1904..... | 1,215,013,931                         | 13,169,882                                     | 14,099,534                        | 107.06                                       | 1,002,305,105                                     | 16,006,969                      | 1.60  |
| 1905..... | 1,318,146,495                         | 14,285,671                                     | 6,000,519                         | 42.00  | 1,140,095,372                                     | 18,262,037                      | 1.60  |
| 1906..... | 1,443,902,244                         | 14,687,063                                     | 6,584,291                         | 44.83  | 1,210,099,865                                     | 18,554,730                      | 1.53  |
| 1907..... | 1,614,703,536                         | 16,114,475                                     | 8,445,041                         | 52.41  | 1,364,204,991                                     | 20,492,803                      | 1.50  |
| 1908..... | 1,700,708,363                         | 17,067,276                                     | 10,370,456                        | 60.37  | 1,460,294,021                                     | 21,965,432                      | 1.50  |
| 1909..... | 1,863,276,504                         | 17,049,404                                     | 8,646,326                         | 50.72  | 1,579,975,807                                     | 22,203,633                      | 1.41  |
| 1910..... | 2,034,276,740                         | 18,725,631                                     | 10,262,393                        | 54.96  | 1,817,055,689                                     | 24,684,296                      | 1.36  |
| 1911..... | 2,279,868,340                         | 20,575,256                                     | 10,936,948                        | 53.16  | 1,937,640,591                                     | 26,867,170                      | 1.35  |
| 1912..... | 2,684,355,895                         | 23,194,518                                     | 12,119,581                        | 52.25  | 2,374,161,732                                     | 30,639,867                      | 1.29  |
| 1913..... | 3,151,930,389                         | 25,745,947                                     | 14,008,759                        | 54.39  | 2,925,200,553                                     | 36,032,461                      | 1.21  |
| 1914..... | 3,450,019,009                         | 27,499,158                                     | 15,347,284                        | 55.81  | 3,104,101,568                                     | 36,185,927                      | 1.17  |
| 1915..... | 3,531,630,802                         | 26,474,833                                     | 14,161,949                        | 53.40  | 3,111,552,903                                     | 36,048,346                      | 1.10  |

<sup>1</sup> Figures from 1869-76 not available.

**1.—Summary Statistics of Fire Insurance by Companies Operating under Dominion Registration, calendar years 1869-1937—concluded.**

| Year.                   | Amount in Force at End of Year. | Net Premiums Received during Year. | Losses Paid during Year. | Percentage of Losses to Premiums. | Gross Amount of Risks Taken during Year. | Premiums Charged Thereon. | Average Cost per \$100 of Insurance. |
|-------------------------|---------------------------------|------------------------------------|--------------------------|-----------------------------------|--|---------------------------|--------------------------------------|
|                         | \$                              | \$                                 | \$                       | p.c.                              | \$                                       | \$                        | \$                                   |
| 1916.....               | 3,720,058,236                   | 27,783,852                         | 15,114,063               | 54-40                             | 3,418,238,860                            | 37,231,691                | 1-09                                 |
| 1917.....               | 3,956,197,514                   | 31,246,530                         | 16,379,101               | 52-42                             | 4,049,059,999                            | 43,515,822                | 1-07                                 |
| 1918.....               | 4,523,514,841                   | 35,954,405                         | 19,359,352               | 53-84                             | 4,606,035,056                            | 48,770,112                | 1-06                                 |
| 1919.....               | 4,923,024,381                   | 40,081,474                         | 19,679,355               | 41-07                             | 5,453,569,901                            | 57,577,632                | 1-06                                 |
| 1920.....               | 5,909,372,276                   | 50,527,937                         | 21,955,387               | 43-41                             | 6,700,670,610                            | 71,143,917                | 1-05                                 |
| 1921.....               | 6,020,513,639                   | 47,312,564 <sup>1</sup>            | 27,872,560 <sup>1</sup>  | 58-28                             | 6,130,531,158                            | 68,161,789                | 1-11                                 |
| 1922.....               | 6,348,637,436                   | 48,168,310 <sup>1</sup>            | 32,848,020 <sup>1</sup>  | 68-19                             | 6,471,133,294                            | 68,347,294                | 1-06                                 |
| 1923.....               | 6,806,937,041                   | 51,190,250 <sup>1</sup>            | 32,142,494 <sup>1</sup>  | 62-82                             | 7,311,835,110                            | 79,037,471                | 1-00                                 |
| 1924.....               | 7,234,475,267                   | 49,533,718 <sup>1</sup>            | 29,186,904 <sup>1</sup>  | 58-57                             | 6,987,536,461                            | 71,149,802                | 1-03                                 |
| 1925.....               | 7,583,297,899                   | 51,040,075 <sup>1</sup>            | 26,943,089 <sup>1</sup>  | 52-79                             | 7,646,026,635                            | 74,679,130                | 0-98                                 |
| 1926.....               | 8,051,444,136                   | 52,505,923 <sup>1</sup>            | 25,705,975 <sup>1</sup>  | 48-87                             | 8,716,106,834                            | 81,104,612                | 0-93                                 |
| 1927.....               | 8,287,732,966                   | 51,375,637 <sup>1</sup>            | 20,831,931 <sup>1</sup>  | 40-55                             | 8,531,139,424                            | 76,423,855                | 0-90                                 |
| 1928.....               | 8,761,579,512                   | 54,826,851 <sup>1</sup>            | 25,544,664 <sup>1</sup>  | 46-57                             | 9,187,224,958                            | 80,413,215                | 0-88                                 |
| 1929.....               | 9,431,169,594                   | 56,112,457 <sup>1</sup>            | 30,209,839 <sup>1</sup>  | 53-84                             | 10,791,096,105                           | 87,317,411                | 0-81                                 |
| 1930.....               | 9,672,996,973                   | 52,646,520 <sup>1</sup>            | 30,427,968 <sup>1</sup>  | 57-71                             | 10,311,193,608                           | 82,700,147                | 0-80                                 |
| 1931.....               | 9,544,641,203                   | 50,342,669 <sup>1</sup>            | 29,935,469 <sup>1</sup>  | 59-47                             | 10,789,737,477                           | 86,741,056                | 0-80                                 |
| 1932.....               | 9,301,747,091                   | 49,911,929 <sup>1</sup>            | 30,068,023 <sup>1</sup>  | 60-10                             | 10,359,649,709                           | 81,829,235                | 0-79                                 |
| 1933.....               | 9,008,262,736                   | 41,873,930 <sup>1</sup>            | 21,655,460 <sup>1</sup>  | 52-00                             | 10,644,737,101                           | 78,980,010                | 0-74                                 |
| 1934.....               | 8,804,840,679                   | 41,468,119 <sup>1</sup>            | 19,968,030 <sup>1</sup>  | 49-02                             | 9,506,703,020                            | 68,739,703                | 0-72                                 |
| 1935.....               | 8,782,608,099                   | 40,884,870 <sup>1</sup>            | 14,821,465 <sup>1</sup>  | 36-25                             | 9,461,773,674                            | 67,599,146                | 0-70                                 |
| 1936.....               | 9,248,278,260                   | 40,218,290 <sup>1</sup>            | 14,072,237 <sup>1</sup>  | 34-99                             | 9,642,309,141                            | 66,831,039                | 0-69                                 |
| 1937 <sup>2</sup> ..... | 9,773,599,893                   | 42,475,604 <sup>1</sup>            | 14,811,055 <sup>1</sup>  | 34-89                             | 10,415,441,962                           | 71,908,789                | 0-69                                 |

<sup>1</sup> These figures show premiums written and losses incurred.  
revision.

<sup>2</sup> Figures for 1937 are subject to revision.

**2.—Fire Insurance Business Transacted in Canada, by Companies Operating Under Dominion Registration, 1936.**

| Company.                        | Gross Amount of Risks Taken during Year. | Premiums Charged Thereon. | Rate of Premiums per cent of Risks. | Net Premiums Written. | Net Losses Incurred, including Adjustment Expenses. | Percentage of Losses Incurred to Premiums Written. |
|---------------------------------|--|---------------------------|-------------------------------------|-----------------------|---|--|
|                                 | \$                                       | \$                        | p.c.                                | \$                    | \$  | p.c.   |
| <b>Canadian Companies.</b>      |  |                           |                                     |                       |   |  |
| Acadia.....                     | 54,845,698                               | 451,457                   | 0-82                                | 186,606               | 60,320  | 32-32  |
| Antigonish.....                 | 304,550                                  | 3,396                     | 1-12                                | 3,396                 | 2,881   | 84-84  |
| Beaver.....                     | 8,771,796                                | 63,539                    | 0-78                                | 21,702                | 7,889   | 36-35  |
| British America.....            | 62,764,440                               | 479,143                   | 0-76                                | 320,935               | 102,442   | 31-92  |
| British Canadian.....           | 8,957,671                                | 94,552                    | 1-06                                | 62,111                | 19,201  | 30-91  |
| British Empire.....             | 11,050,260                               | 116,879                   | 1-06                                | 79,473                | 26,182  | 32-94  |
| British Northwestern.....       | 53,746,798                               | 263,139                   | 0-49                                | 129,946               | 45,280  | 34-85  |
| Canada Accident.....            | 44,252,042                               | 387,348                   | 0-88                                | 153,758               | 55,403  | 36-09  |
| Canada Security.....            | 36,887,263                               | 261,839                   | 0-71                                | 31,713                | 41,564  | 31-57  |
| Canadian Fire.....              | 51,201,842                               | 395,256                   | 0-77                                | 296,719               | 74,493  | 25-21  |
| Canadian General.....           | 58,416,599                               | 408,624                   | 0-70                                | 157,170               | 52,121  | 33-16  |
| Canadian Indemnity.....         | 16,027,118                               | 139,911                   | 0-78                                | 106,529               | 29,300  | 27-50  |
| Canadian Surety.....            | 16,022,426                               | 118,578                   | 0-74                                | 52,918                | 18,527  | 25-56  |
| Casualty.....                   | 9,278,181                                | 69,156                    | 0-75                                | 37,783                | 5,330   | 14-24  |
| Commerce Mutual.....            | 26,554,953                               | 670,977                   | 2-52                                | 366,331               | 107,194   | 29-26  |
| Consolidated.....               | 18,005,529                               | 156,022                   | 0-87                                | 95,097                | 53,302  | 56-05  |
| Cumberland.....                 | 251,350                                  | 3,142                     | 1-25                                | 3,117                 | 4,736   | 151-95   |
| Dominion Fire.....              | 55,454,165                               | 456,499                   | 0-82                                | 282,415               | 75,737  | 26-82  |
| Dominion of Canada General..... | 46,839,766                               | 319,023                   | 0-68                                | 176,173               | 42,315  | 24-02  |
| Economical Mutual.....          | 45,133,862                               | 401,350                   | 0-89                                | 308,113               | 109,940   | 35-68  |
| Ensign.....                     | 11,885,575                               | 100,762                   | 0-85                                | 64,510                | 21,742  | 33-70  |
| Fire Insurance of Canada.....   | 60,439,559                               | 509,420                   | 0-94                                | 280,232               | 116,552   | 41-60  |
| General Accident of Canada..... | 23,821,126                               | 152,554                   | 0-64                                | 74,911                | 22,023  | 29-40  |
| Globe Indemnity.....            | 58,237,130                               | 565,377                   | 0-99                                | 118,489               | 43,824  | 36-99  |
| Crain.....                      | 60,401,631                               | 192,374                   | 0-31                                | 508,562               | 107,749   | 21-19  |
| Guardian Insurance.....         | 31,748,173                               | 441,433                   | 0-72                                | 241,233               | 31,821  | 34-13  |
| Halifax.....                    | 61,701,164                               | 410,627                   | 0-48                                | 148,264               | 74,749  | 50-69  |
| Hudson Bay.....                 | 85,154,955                               | 60,709                    | 0-55                                | 39,664                | 54,836  | 36-99  |
| Imperial Guarantee.....         | 12,782,785                               |                           |                                     |                       | 12,908  | 32-69  |

## 2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1936—continued.

| Company.                               | Gross Amount of Risks Taken during Year. | Premiums Charged Thereon. | Rate of Premiums per cent of Risks. | Net Premiums Written. | Net Losses Incurred, including Adjustment Expenses. | Percentage of Losses Incurred to Premiums Written. |
|--|--|---------------------------|-------------------------------------|-----------------------|---|--|
|  | \$                                       | \$                        | p.e.                                | \$                    | \$  | p.e.   |
| <b>Canadian Companies—concluded.</b>   |  |                           |                                     |                       |   |  |
| Imperial Insurance.....                | 26,501,828                               | 197,889                   | 0-75                                | 101,925               | 27,867  | 27-34  |
| Kings Mutual.....                      | 3,535,220                                | 42,944                    | 1-21                                | 42,146                | 26,967  | 63-99  |
| Liverpool-Manitoba.....                | 78,413,251                               | 511,643                   | 0-65                                | 180,583               | 70,118  | 36-99  |
| London and Lancashire                  |  |                           |                                     |                       |   |  |
| Guarantee.....                         | 9,889,107                                | 74,970                    | 0-76                                | 32,695                | 10,525  | 32-19  |
| London-Canada.....                     | 26,405,478                               | 196,204                   | 0-74                                | 100,419               | 57,665  | 52-70  |
| Mercantile.....                        | 42,541,179                               | 234,674                   | 0-55                                | 117,081               | 44,064  | 37-61  |
| National-Liverpool.....                | 35,707,125                               | 253,058                   | 0-71                                | 94,791                | 35,059  | 36-99  |
| North Empire.....                      | 29,435,490                               | 264,523                   | 0-86                                | 124,404               | 40,213  | 32-32  |
| North West.....                        | 20,909,685                               | 164,507                   | 0-78                                | 64,066                | 23,122  | 36-09  |
| Occidental.....                        | 34,893,902                               | 229,156                   | 0-66                                | 110,613               | 44,169  | 37-88  |
| Pacific Const.....                     | 34,603,979                               | 211,188                   | 0-61                                | 94,442                | 34,360  | 36-38  |
| Pictou County.....                     | 1,233,250                                | 9,418                     | 0-76                                | 9,368                 | 14-86   |  |
| Pioneer.....                           | 25,630,128                               | 207,153                   | 0-81                                | 83,399                | 30,845  | 36-99  |
| Portage la Prairie.....                | 33,628,899                               | 518,817                   | 1-54                                | 218,670               | 173,128   | 79-17  |
| Quebec.....                            | 36,978,229                               | 270,171                   | 0-73                                | 120,233               | 41,800  | 34-77  |
| Reliance.....                          | 20,106,137                               | 125,661                   | 0-62                                | 65,661                | 16,084  | 24-48  |
| Scottish Canadian.....                 | 16,649,821                               | 116,151                   | 0-70                                | 64,190                | 32,637  | 50-94  |
| Security National.....                 | 8,003,315                                | 68,062                    | 0-85                                | 29,917                | 7,967   | 26-63  |
| Wapiti.....                            | 4,551,433                                | 84,219                    | 1-84                                | 77,813                | 23,244  | 29-87  |
| Wawanesa.....                          | 170,887,244                              | 1,665,302                 | 0-97                                | 1,206,973             | 438,655   | 36-37  |
| Western.....                           | 100,300,860                              | 603,034                   | 0-60                                | 421,000               | 137,883   | 32-75  |
| <b>Totals, Canadian.....</b>           | <b>1,793,393,973</b>                     | <b>14,200,328</b>         | <b>0-79</b>                         | <b>7,925,560</b>      | <b>2,733,680</b>                                    | <b>34-49</b>                                       |
| <b>British Companies.</b>              |  |                           |                                     |                       |   |  |
| Alliance.....                          | 75,701,992                               | 398,287                   | 0-53                                | 344,655               | 99,484  | 28-86  |
| Anglo-Scottish.....                    | 30,743,195                               | 208,098                   | 0-68                                | 121,487               | 37,985  | 31-27  |
| Atlas.....                             | 92,828,287                               | 579,433                   | 0-62                                | 446,275               | 147,784   | 33-12  |
| Bankers and Traders.....               | 3,900,283                                | 40,890                    | 1-05                                | 35,242                | 4,814   | 13-66  |
| British and European.....              | 11,655,068                               | 114,286                   | 0-98                                | 38,439                | 13,373  | 36-09  |
| British Crown.....                     | 56,691,451                               | 338,591                   | 0-57                                | 243,123               | 92,302  | 37-29  |
| British General.....                   | 25,374,834                               | 192,196                   | 0-76                                | 64,066                | 23,122  | 36-60  |
| British Law.....                       | 34,099,362                               | 134,151                   | 0-39                                | 66,941                | 29,820  | 40-07  |
| British Oak.....                       | 13,718,608                               | 124,106                   | 0-90                                | 98,301                | 47,200  | 48-02  |
| British Traders.....                   | 64,535,433                               | 331,734                   | 0-51                                | 155,963               | 41,996  | 26-93  |
| Caledonian.....                        | 43,829,339                               | 337,675                   | 0-77                                | 268,398               | 125,245   | 46-66  |
| Car and General.....                   | 32,316,460                               | 211,605                   | 0-65                                | 135,772               | 30,906  | 22-76  |
| Central.....                           | 31,576,373                               | 258,722                   | 0-82                                | 94,792                | 35,059  | 36-99  |
| Century Insurance.....                 | 61,390,642                               | 352,252                   | 0-57                                | 177,886               | 70,920  | 43-24  |
| China.....                             | 5,334,993                                | 34,353                    | 0-64                                | 22,280                | 5,999   | 26-93  |
| Commercial Union Assur-<br>ance.....   | 215,031,018                              | 1,659,585                 | 0-77                                | 612,383               | 264,539   | 43-20  |
| Cornhill.....                          | 36,308,048                               | 231,456                   | 0-64                                | 193,240               | 80,033  | 41-42  |
| Eagle Star.....                        | 49,269,391                               | 359,073                   | 0-73                                | 201,747               | 91,445  | 31-34  |
| Employers' Liability.....              | 129,043,503                              | 724,558                   | 0-56                                | 517,770               | 109,213   | 32-68  |
| Essex and Suffolk.....                 | 23,375,061                               | 166,461                   | 0-71                                | 58,772                | 19,453  | 33-10  |
| Excess.....                            | 6,185,273                                | 51,201                    | 0-83                                | 43,339                | 4,571   | 10-55  |
| General Accident Fire.....             | 99,550,707                               | 416,937                   | 0-42                                | 298,599               | 123,196   | 41-26  |
| Guardian Assurance.....                | 113,329,972                              | 876,103                   | 0-77                                | 671,611               | 265,969   | 39-60  |
| Guildhall.....                         | 33,649,542                               | 154,465                   | 0-46                                | 71,859                | 23,106  | 32-16  |
| Indemnity Marine.....                  | Nil                                      |                           |                                     | Nil                   | Nil   |  |
| Law, Union and Reek.....               | 52,901,201                               | 317,513                   | 0-60                                | 263,053               | 106,416   | 40-45  |
| Legal and General.....                 | 37,614,402                               | 222,470                   | 0-59                                | 151,376               | 77,075  | 51-51  |
| Liverpool and London and<br>Globe..... | 232,098,478                              | 1,645,744                 | 0-71                                | 849,411               | 339,039   | 38-74  |
| Local Government.....                  | 11,080,396                               | 90,070                    | 0-81                                | 52,763                | 16,904  | 32-04  |
| London and County.....                 | 13,137,249                               | 117,338                   | 0-89                                | 92,585                | 29,835  | 32-22  |
| London and Lancashire.....             | 200,109,618                              | 1,181,198                 | 0-59                                | 898,825               | 489,414   | 54-45  |
| London and Provincial.....             | 6,459,807                                | 58,148                    | 0-90                                | 46,793                | 28,951  | 61-87  |
| London and Scottish.....               | 15,457,603                               | 109,430                   | 0-71                                | 74,522                | 26,858  | 36-04  |
| London Assurance.....                  | 94,754,200                               | 497,760                   | 0-53                                | 344,265               | 100,472   | 29-18  |
| London Guarantee.....                  | 35,320,763                               | 337,974                   | 0-88                                | 124,404               | 40,213  | 32-32  |
| Marine.....                            | Nil                                      |                           |                                     | Nil                   | Nil   |  |
| Mercantile Marine.....                 | 35,377,630                               | 199,530                   | 0-56                                | 162,705               | 42,306  | 26-00  |
| Motor Union.....                       | 12,538,266                               | 71,280                    | 0-57                                | 51,347                | 7,276   | 14-17  |
| National Provincial.....               | 22,165,915                               | 142,645                   | 0-64                                | 99,103                | 37,584  | 37-92  |



**2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1936—continued.**

| Company.                            | Gross Amount of Risks Taken during Year. | Premiums Charged Thereon. | Rate of Premiums per cent of Risks. | Net Premiums Written. | Net Losses Incurred, including Adjustments Expenses. | Percentage of Losses Incurred to Premiums Written. |
|-------------------------------------|--|---------------------------|-------------------------------------|-----------------------|--|--|
|                                     | \$                                       | \$                        | p.c.                                | \$                    | \$   | p.c.   |
| <b>British Companies—concluded.</b> |  |                           |                                     |                       |  |  |
| North British.....                  | 151,493,525                              | 933,901                   | 0.62                                | 634,515               | 202,964  | 31.99  |
| Northern Assurance.....             | 78,041,746                               | 505,327                   | 0.65                                | 378,828               | 140,014  | 36.96  |
| Norwich Union.....                  | 134,473,064                              | 938,816                   | 0.70                                | 702,964               | 271,868  | 38.67  |
| Ocean Accident.....                 | 43,487,232                               | 295,659                   | 0.68                                | 212,322               | 85,325   | 40.06  |
| Palatine.....                       | 47,451,084                               | 404,071                   | 0.85                                | 179,384               | 64,742   | 36.09  |
| Patriotic.....                      | 25,347,196                               | 153,310                   | 0.60                                | 106,144               | 31,394   | 29.53  |
| Pearl.....                          | 50,738,746                               | 325,301                   | 0.64                                | 274,240               | 82,970   | 30.26  |
| Phoenix of London.....              | 290,196,995                              | 1,832,192                 | 0.67                                | 798,473               | 274,328  | 34.36  |
| Planet.....                         | 28,590,582                               | 137,321                   | 0.48                                | 73,452                | 31,574   | 42.99  |
| Provincial.....                     | 35,507,260                               | 330,283                   | 0.93                                | 276,087               | 116,037  | 42.03  |
| Prudential.....                     | 190,484,472                              | 863,065                   | 0.45                                | 520,089               | 200,612  | 38.57  |
| Queensland.....                     | 1,307,621                                | 12,406                    | 0.95                                | 10,245                | 2,802  | 27.35  |
| Railway Passengers.....             | 11,135,237                               | 65,764                    | 0.60                                | 41,999                | 7,029  | 16.74  |
| Royal Exchange.....                 | 107,425,210                              | 568,729                   | 0.54                                | 405,965               | 132,343  | 32.65  |
| Royal Insurance.....                | 493,974,065                              | 3,397,061                 | 0.69                                | 1,301,716             | 462,081  | 35.50  |
| Royal Scottish.....                 | 22,799,862                               | 130,893                   | 0.53                                | 81,530                | 29,605   | 36.39  |
| Scottish Metropolitan.....          | 23,368,807                               | 107,014                   | 0.71                                | 114,475               | 32,402   | 28.26  |
| Scottish Union.....                 | 44,062,541                               | 342,585                   | 0.78                                | 288,823               | 125,354  | 43.40  |
| Sea.....                            | 24,093,313                               | 136,490                   | 0.57                                | 113,410               | 33,264   | 29.33  |
| Southern.....                       | 8,784,237                                | 56,161                    | 0.64                                | 35,552                | 11,512   | 32.84  |
| State Assurance.....                | 19,020,335                               | 65,181                    | 0.72                                | 61,742                | 19,277   | 31.22  |
| Sun Insurance.....                  | 156,046,733                              | 840,979                   | 0.54                                | 616,319               | 238,008  | 37.36  |
| Union Assurance.....                | 74,637,963                               | 556,200                   | 0.79                                | 256,263               | 92,439   | 36.09  |
| Union of Canton.....                | 72,437,082                               | 430,518                   | 0.59                                | 267,864               | 71,154   | 26.61  |
| Union Marine.....                   | 30,142,055                               | 254,925                   | 0.85                                | 108,205               | 35,801   | 33.09  |
| United British.....                 | 9,757,909                                | 70,643                    | 0.72                                | 52,550                | 22,052   | 41.96  |
| Westminster.....                    | 14,110,216                               | 91,462                    | 0.65                                | Nil                   | Nil  |  |
| World Marine.....                   | 15,975,425                               | 69,084                    | 0.43                                | 45,078                | 42,214   | 93.64  |
| Yorkshire.....                      | 29,701,311                               | 315,485                   | 1.06                                | 255,976               | 81,713   | 32.04  |
| <b>Totals, British.....</b>         | <b>4,291,911,017</b>                     | <b>27,721,292</b>         | <b>0.65</b>                         | <b>16,495,561</b>     | <b>6,116,471</b>                                     | <b>37.08</b>                                       |
| <b>Foreign Companies.</b>           |  |                           |                                     |                       |  |  |
| Ætna.....                           | 71,905,655                               | 412,765                   | 0.57                                | 346,927               | 111,324  | 32.09  |
| Affiliated Underwriters.....        | 20,424,391                               | 125,922                   | 0.62                                | 115,027               | 94,193   | 81.89  |
| Agricultural.....                   | 14,786,701                               | 84,733                    | 0.57                                | 48,750                | 15,655   | 32.11  |
| Alliance Insurance.....             | 71,342,355                               | 254,918                   | 0.36                                | 156,880               | 60,471   | 38.55  |
| American Alliance.....              | 14,751,933                               | 114,475                   | 0.77                                | 47,126                | 23,188   | 49.20  |
| American Central.....               | 16,222,024                               | 144,146                   | 0.89                                | 64,066                | 23,122   | 36.09  |
| American Equitable.....             | 33,792,540                               | 250,192                   | 0.74                                | 210,407               | 159,378  | 75.88  |
| American Exchange.....              | 3,353,510                                | 11,716                    | 0.35                                | 10,827                | 135  | 1.24   |
| American Home Fire.....             | 21,942,885                               | 203,104                   | 0.93                                | 158,837               | 74,790   | 47.07  |
| American Insurance.....             | 32,664,670                               | 136,532                   | 0.42                                | 82,426                | 21,192   | 25.58  |
| American Mutual.....                | 10,653,188                               | 61,648                    | 0.58                                | 11,111                | 6,428  | 57.85  |
| American Reserve.....               | 31,860,917                               | 180,471                   | 0.57                                | 152,817               | 60,374   | 39.51  |
| Arkwright Mutual.....               | 28,435,873                               | 175,201                   | 0.62                                | 41,808                | 24,148   | 57.76  |
| Automobile.....                     | 394,361                                  | 3,255                     | 0.83                                | 2,788                 | 101  | 3.63   |
| Baloise.....                        | 15,591,435                               | 181,934                   | 1.17                                | 123,324               | 60,271   | 48.87  |
| Baltimore American.....             | 332,555                                  | 6,039                     | 1.82                                | Nil                   | Nil  |  |
| Bankers and Shippers.....           | 12,622,300                               | 93,894                    | 0.74                                | 90,082                | 34,504   | 38.41  |
| Bea Fire.....                       | 36,765,944                               | 207,456                   | 0.56                                | 161,233               | 81,702   | 50.71  |
| Blackstone Mutual.....              | 17,521,720                               | 107,733                   | 0.61                                | 25,249                | 12,431   | 49.23  |
| Boston.....                         | 14,106,257                               | 73,900                    | 0.52                                | 52,504                | 20,902   | 39.81  |
| Boston Manufacturers.....           | 35,063,594                               | 214,113                   | 0.61                                | 45,212                | 30,527   | 67.52  |
| Caledonian American.....            | 9,326,491                                | 84,192                    | 0.90                                | 51,593                | 17,543   | 34.00  |
| California.....                     | 14,965,253                               | 107,203                   | 0.72                                | 38,439                | 13,573   | 36.06  |
| Camden.....                         | 19,767,265                               | 97,779                    | 0.49                                | 69,913                | 21,380   | 30.58  |
| Cannets Exchange.....               | 12,001,016                               | 97,631                    | 0.80                                | 39,394                | 12,952   | 32.90  |
| Central Manufacturers.....          | 10,315,965                               | 88,579                    | 0.86                                | 70,719                | 25,521   | 36.00  |
| Central Union.....                  | 5,780,762                                | 45,656                    | 0.79                                | 11,437                | 3,451  | 30.44  |
| Citizens.....                       | 15,341,081                               | 61,743                    | 0.40                                | 21,732                | 6,790  | 31.25  |
| City of New York.....               | 8,645,058                                | 73,334                    | 0.85                                | Nil                   | Nil  |  |
| Columbia.....                       | 24,973,205                               | 191,397                   | 0.77                                | 62,202                | 20,107   | 32.32  |
| Commerce Insurance.....             | 3,220,455                                | 9,326                     | 0.29                                | 6,372                 | 3,671  | 57.61  |
| Commercial Union of N.Y.....        | 2,253,202                                | 21,298                    | 0.95                                | 12,813                | 4,625  | 36.09  |
| Connecticut.....                    | 42,211,086                               | 245,558                   | 0.58                                | 139,859               | 45,718   | 32.69  |
| Continental.....                    | 52,576,802                               | 369,366                   | 0.69                                | 266,688               | 94,080   | 35.28  |

## 2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1936—continued.

| Company.   | Gross Amount of Risks Taken during Year. | Premiums Charged Thereon. | Rate of Premiums per cent of Risks. | Net Premiums Written. | Net Losses Incurred, including Adjustment Expenses. | Percentage of Losses Incurred to Premiums Written. |
|--|--|---------------------------|-------------------------------------|-----------------------|---|--|
|  | \$                                       | \$                        | p.c.                                | \$                    | \$  | p.c.   |
| <b>Foreign Companies—continued.</b>                        |  |                           |                                     |                       |   |  |
| Cotton and Woollen Manufacturers Mutual.....               | 6,660,005                                | 43,239                    | 0-65                                | 9,513                 | 4,601   | 48-27  |
| County Fire.....   | 33,096,007                               | 244,450                   | 0-74                                | 9,425                 | 4,638   | 49-20  |
| Eagle Fire.....  | Nil                                      | -                         | -                                   | Nil                   | Nil   | -  |
| Enterprise Mutual.....                                     | 10,653,188                               | 61,948                    | 0-58                                | 11,111                | 6,428   | 57-85  |
| Equitable Fire and Marine.....                             | 17,432,824                               | 117,848                   | 0-68                                | 27,972                | 9,144   | 32-99  |
| Euroka Security.....                                       | 3,262,563                                | 16,626                    | 0-51                                | 9,058                 | 352   | 3-89   |
| Fall River Manufacturers Mutual.....                       | 10,117,146                               | 61,710                    | 0-61                                | 3,156                 | 9,210   | 291-82   |
| Federal.....   | Nil                                      | -                         | -                                   | Nil                   | Nil   | -  |
| Fidelity-Phenix.....                                       | 49,013,910                               | 358,405                   | 0-73                                | 280,813               | 91,689  | 32-65  |
| Fire Association.....                                      | 30,674,120                               | 179,208                   | 0-58                                | 126,277               | 63,993  | 50-68  |
| Firemans Fund.....   | 45,718,304                               | 204,604                   | 0-45                                | 149,536               | 42,722  | 28-57  |
| Firemens Insurance.....                                    | 21,289,687                               | 193,975                   | 0-91                                | 150,445               | 51,655  | 34-34  |
| Firemens Mutual.....                                       | 32,709,294                               | 210,687                   | 0-64                                | 77,082                | 9,805   | 12-72  |
| Fireproof Sprinklered.....                                 | 6,829,250                                | 8,645                     | 0-13                                | 8,484                 | 724   | 8-53   |
| First American.....  | 7,169,669                                | 53,277                    | 0-81                                | 44,431                | 16,543  | 37-23  |
| First National.....  | 13,932,100                               | 106,401                   | 0-76                                | Nil                   | Nil   | -  |
| La Foncière.....   | 26,220,059                               | 316,043                   | 1-21                                | 222,202               | 74,835  | 33-68  |
| Franklin.....  | 19,078,283                               | 127,107                   | 0-67                                | Nil                   | Nil   | -  |
| General Fire and Marine, of General Insurance America..... | 37,862,832                               | 262,533                   | 0-69                                | 130,103               | 51,550  | 39-63  |
| Chard.....   | 55,242,463                               | 421,298                   | 0-76                                | 265,264               | 141,274   | 53-36  |
| Glens Falls.....   | 4,279,373                                | 36,659                    | 0-86                                | 30,016                | 11,501  | 38-32  |
| Granite State.....   | 28,844,577                               | 145,029                   | 0-50                                | 91,013                | 30,404  | 33-41  |
| Great American.....  | 8,910,002                                | 51,096                    | 0-57                                | 32,402                | 21,850  | 67-43  |
| Hanover.....   | 91,182,636                               | 575,615                   | 0-63                                | 421,940               | 211,014   | 50-01  |
| Hardware Dealers.....                                      | 19,436,376                               | 122,463                   | 0-63                                | 82,012                | 49,571  | 59-71  |
| Hardware Mutual.....                                       | 26,946,525                               | 261,079                   | 1-26                                | 121,668               | 54,788  | 45-00  |
| Hartford Fire.....   | 21,950,918                               | 272,652                   | 1-24                                | 228,633               | 50,114  | 25-80  |
| Home Fire and Marine.....                                  | 105,928,409                              | 641,725                   | 0-61                                | 530,320               | 192,327   | 36-37  |
| Home Insurance.....  | 14,435,721                               | 74,194                    | 0-51                                | 58,753                | 20,057  | 35-16  |
| Homestead.....   | 168,964,276                              | 1,465,710                 | 0-87                                | 1,177,226             | 479,283   | 40-71  |
| Hope Mutual.....   | 6,683,121                                | 74,150                    | 1-11                                | Nil                   | Nil   | -  |
| Imperial Assurance.....                                    | 7,851,986                                | 49,681                    | 0-62                                | 11,056                | 4,701   | 42-63  |
| Indiana Lumbermen.....                                     | 34,453,551                               | 245,518                   | 0-71                                | 124,404               | 40,213  | 32-32  |
| Individual Underwriters.....                               | 8,738,401                                | 84,850                    | 0-97                                | 59,051                | 27,088  | 45-87  |
| Industrial Mutual.....                                     | 38,355,006                               | 81,819                    | 0-21                                | 75,625                | 20,086  | 26-58  |
| Insurance Co. of North America.....                        | 3,330,002                                | 21,620                    | 0-65                                | 4,756                 | 2,301   | 48-38  |
| Insurance Co. of State of Pennsylvania.....                | 140,124,835                              | 665,489                   | 0-47                                | 469,422               | 172,189   | 36-68  |
| International.....   | Nil                                      | -                         | -                                   | -13                   | 155   | -  |
| Lumbermens Insurance.....                                  | 425,000                                  | 1,815                     | 0-43                                | 982                   | 89  | 4-00   |
| Lumbermen Mutual Insurance.....                            | 6,493,863                                | 74,698                    | 1-15                                | 47,644                | 30,802  | 64-65  |
| Lumbermens Underwriting Alliance.....                      | 10,505,969                               | 76,006                    | 0-72                                | 64,911                | 37,097  | 57-15  |
| Lumber Mutual.....   | 4,580,344                                | 55,194                    | 1-21                                | 43,692                | 17,671  | 40-44  |
| Manufacturers Mutual.....                                  | 23,402,410                               | 293,423                   | 1-25                                | 217,351               | 151,662   | 69-78  |
| Manufacturing Lumbermen.....                               | 9,349,882                                | 126,280                   | 1-35                                | 85,180                | 46,331  | 53-72  |
| Maryland Insurance.....                                    | 18,328,312                               | 108,247                   | 0-58                                | 15,519                | 10,715  | 67-85  |
| Mechanics Mutual.....                                      | Nil                                      | -                         | -                                   | Nil                   | Nil   | -  |
| Merchants and Manufacturers.....                           | 11,170,514                               | 86,798                    | 0-78                                | 65,430                | 31,621  | 48-33  |
| Merchants Fire.....  | 10,653,188                               | 61,948                    | 0-58                                | 11,111                | 6,428   | 57-85  |
| Merchants Mutual Fire.....                                 | 29,088,500                               | 247,199                   | 0-85                                | 193,801               | 67,132  | 34-64  |
| Metropolitan Fire.....                                     | 28,157,039                               | 208,806                   | 0-74                                | 183,539               | 53,776  | 29-30  |
| Metropolitan Inter-Insurers.....                           | 10,255,132                               | 63,477                    | 0-62                                | 14,607                | 8,804   | 60-85  |
| Michigan Fire.....   | 14,328,334                               | 74,597                    | 0-69                                | 74,597                | 15,287  | 20-41  |
| Millers National.....                                      | 12,328,762                               | 87,690                    | 0-71                                | 69,053                | 21,060  | 30-50  |
| Mill Owners Mutual of Chicago.....                         | 18,953,926                               | 48,813                    | 0-26                                | 45,014                | 19,690  | 44-36  |
| Mill Owners Mutual of Iowa.....                            | 11,681,552                               | 91,561                    | 0-78                                | 26,657                | 11,238  | 42-10  |
| Minnesota Implement.....                                   | 25,461,105                               | 176,444                   | 0-75                                | 125,903               | 51,045  | 40-54  |
| National-Ben Franklin.....                                 | 3,008,832                                | 20,455                    | 0-68                                | 5,664                 | 1,302   | 22-98  |
| National-Ben Franklin.....                                 | 27,343,216                               | 304,517                   | 1-83                                | 248,496               | 49,133  | 19-77  |
| National-Ben Franklin.....                                 | 24,153,238                               | 289,842                   | 1-20                                | 224,610               | 59,472  | 26-88  |
| National-Ben Franklin.....                                 | 19,536,672                               | 181,460                   | 0-93                                | 144,815               | 52,354  | 36-15  |

**2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1936—concluded.**

| Company.                             | Gross Amount of Risks Taken during Year. | Premiums Charged Thereon. | Rate of Premiums per cent of Risks. | Net Premiums Written. | Net Losses Incurred, including Adjustment Expenses. | Percentage of Losses Incurred to Premiums Written. |
|--------------------------------------|--|---------------------------|-------------------------------------|-----------------------|---|--|
|                                      | \$                                       | \$                        | p.c.                                | \$                    | \$  | p.c.   |
| <b>Foreign Companies—concluded.</b>  |  |                           |                                     |                       |   |  |
| National Fire of Hartford...         | 55,521,341                               | 332,726                   | 0-60                                | 251,760               | 91,651  | 36-40  |
| Nationale Fire of Paris...           | 48,199,026                               | 492,629                   | 1-02                                | 427,740               | 152,751   | 35-71  |
| National Liberty...                  | 10,500,611                               | 93,332                    | 0-89                                | Nil                   | Nil   | -  |
| National Security...                 | 683,181                                  | 6,222                     | 0-91                                | 5,491                 | 83  | 1-52   |
| National Union...                    | 23,072,981                               | 152,426                   | 0-66                                | 123,530               | 51,280  | 41-51  |
| Newark...                            | 26,520,208                               | 192,597                   | 0-73                                | 102,324               | 37,700  | 36-84  |
| New Brunswick...                     | 8,014,738                                | 62,437                    | 0-78                                | Nil                   | Nil   | -  |
| New Hampshire...                     | 26,468,650                               | 173,131                   | 0-65                                | 122,120               | 53,187  | 43-55  |
| New Jersey...                        | 11,081,100                               | 83,751                    | 0-76                                | 75,096                | 24,845  | 33-08  |
| New York Fire...                     | 25,083,300                               | 228,882                   | 0-91                                | 188,727               | 85,839  | 45-48  |
| New York Reciprocal...               | 32,080,383                               | 59,854                    | 0-19                                | 56,318                | 6,350   | 11-29  |
| New York Underwriters...             | 38,902,790                               | 250,159                   | 0-64                                | 102,114               | 29,284  | 28-68  |
| Niagara...                           | 28,824,926                               | 144,591                   | 0-50                                | 110,253               | 43,500  | 39-45  |
| North River...                       | 23,651,999                               | 137,948                   | 0-58                                | 109,360               | 17,758  | 16-24  |
| North Star...                        | 11,582,247                               | 128,172                   | 1-11                                | 72,201                | 32,854  | 45-50  |
| Northwestern Mutual...               | 67,301,180                               | 865,198                   | 1-29                                | 597,135               | 128,828   | 21-57  |
| Northwestern National...             | 25,923,577                               | 238,239                   | 0-92                                | 145,452               | 38,509  | 26-68  |
| Ohio Farmers...                      | 5,155,893                                | 40,821                    | 0-95                                | 42,900                | 19,550  | 44-59  |
| Pacific Fire...                      | 40,928,120                               | 295,038                   | 0-72                                | 133,685               | 53,596  | 40-00  |
| Paper Mill Mutual...                 | 3,507,758                                | 21,389                    | 0-61                                | 5,733                 | 2,909   | 50-74  |
| Pennsylvania Lumbermens...           | 6,888,138                                | 85,202                    | 1-24                                | 64,958                | 17,056  | 26-26  |
| Phoenix of Paris...                  | 31,752,751                               | 230,798                   | 0-73                                | 115,912               | 47,563  | 41-03  |
| Philadelphia Fire and Marine...      | 20,135,520                               | 96,139                    | 0-48                                | 58,505                | 24,424  | 41-75  |
| Philadelphia Manufacturers Mutual... | 8,785,897                                | 50,700                    | 0-65                                | 14,127                | 4,396   | 31-12  |
| Phoenix of Hartford...               | 84,512,157                               | 521,189                   | 0-62                                | 231,707               | 75,703  | 32-69  |
| Pilot Reinsurance...                 | Nil                                      | -                         | -                                   | Nil                   | Nil   | -  |
| Protection Mutual...                 | 4,512,872                                | 30,683                    | 0-68                                | 8,496                 | 1,952   | 22-98  |
| Providence of Paris...               | 27,163,151                               | 218,342                   | 0-80                                | 154,714               | 70,245  | 45-40  |
| Providence Washington...             | 23,046,414                               | 145,875                   | 0-63                                | 89,814                | 31,173  | 34-71  |
| Queen of America...                  | 113,848,798                              | 836,333                   | 0-73                                | 427,250               | 157,654   | 36-90  |
| Retail Lumbermens...                 | 3,760,212                                | 31,413                    | 0-84                                | 28,517                | 7,809   | 27-38  |
| Rhode Island...                      | 18,575,942                               | 132,832                   | 0-72                                | 85,471                | 28,045  | 32-81  |
| Rhode Island Mutual...               | 17,755,312                               | 103,247                   | 0-58                                | 18,519                | 10,713  | 57-85  |
| Rossia...                            | 17,397,329                               | 131,853                   | 0-76                                | 103,016               | 22,359  | 21-70  |
| Rubber Manufacturers Mutual...       | 6,660,005                                | 43,239                    | 0-65                                | 9,513                 | 4,001   | 48-37  |
| St. Paul Fire...                     | 35,070,700                               | 220,400                   | 0-61                                | 145,921               | 43,473  | 29-79  |
| Security...                          | 21,684,490                               | 118,437                   | 0-55                                | 72,220                | 21,743  | 30-11  |
| Sentinel...                          | 13,574,724                               | 86,555                    | 0-64                                | 6,664                 | 2,810   | 42-17  |
| Springfield...                       | 61,403,495                               | 400,861                   | 0-65                                | 262,536               | 109,522   | 41-72  |
| State Mutual...                      | 21,306,374                               | 123,897                   | 0-58                                | 22,223                | 12,856  | 57-85  |
| Sussex...                            | 10,796,818                               | 104,183                   | 0-96                                | 87,992                | 31,264  | 35-56  |
| Svea...                              | 8,233,547                                | 50,593                    | 0-61                                | 27,338                | 3,251   | 11-68  |
| Switzerland General...               | 29,939,907                               | 269,045                   | 0-90                                | 141,895               | 11,881  | 8-37   |
| Tokio...                             | 9,283,813                                | 43,123                    | 0-47                                | 33,198                | 12,988  | 39-12  |
| Transcontinental...                  | 3,414,855                                | 10,640                    | 0-31                                | 5,579                 | 83  | 2-45   |
| Travelers Fire...                    | 68,186,898                               | 346,796                   | 0-51                                | 286,155               | 83,897  | 29-31  |
| Underwriters Exchange...             | 4,077,736                                | 9,363                     | 0-23                                | 8,427                 | 292   | 3-11   |
| Union of Paris...                    | 37,240,097                               | 290,533                   | 0-80                                | 245,834               | 99,651  | 40-54  |
| United Firemen's...                  | 13,420,727                               | 100,445                   | 0-75                                | 62,202                | 30,107  | 32-33  |
| United Mutual...                     | 15,503,509                               | 173,470                   | 1-12                                | 118,021               | 19,562  | 16-57  |
| United States Fire...                | 35,753,517                               | 218,155                   | 0-61                                | 164,821               | 49,490  | 30-03  |
| Urbaine...                           | 19,829,363                               | 98,709                    | 0-50                                | 77,022                | 41,503  | 53-58  |
| Warner Reciprocal...                 | 830,524                                  | 2,373                     | 0-29                                | 1,874                 | Nil   | -  |
| Westchester...                       | 27,742,689                               | 159,894                   | 0-58                                | 94,945                | 33,623  | 35-41  |
| What Cheer Mutual...                 | 7,951,987                                | 49,681                    | 0-62                                | 11,055                | 4,701   | 42-52  |
| Worcester Manufacturers Mutual...    | 10,106,247                               | 61,657                    | 0-61                                | 8,330                 | 9,052   | 102-63   |
| World Fire and Marine...             | 9,611,688                                | 73,669                    | 0-77                                | 81,206                | 12,581  | 20-56  |
| <b>Totals, Foreign...</b>            | <b>3,556,964,151</b>                     | <b>24,900,496</b>         | <b>0-70</b>                         | <b>15,797,164</b>     | <b>5,891,975</b>                                    | <b>37-30</b>                                       |
| <b>Grand Totals...</b>               | <b>9,642,269,141</b>                     | <b>66,831,026</b>         | <b>0-69</b>                         | <b>40,218,285</b>     | <b>14,742,126</b>                                   | <b>36-66</b>                                       |

**3.—Assets of Canadian Companies Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Assets in Canada of Companies other than Canadian Transacting such Business in Canada, 1932-36.**

| Item.  | 1932.              | 1933.              | 1934.              | 1935.              | 1936.              |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
|  | \$                 | \$                 | \$                 | \$                 | \$                 |
| <b>Canadian Companies.</b>                     |                    |                    |                    |                    |                    |
| Real estate.....                               | 2,525,736          | 2,085,756          | 2,020,588          | 1,989,144          | 1,533,914          |
| Loans on real estate.....                      | 1,623,502          | 1,220,132          | 1,116,048          | 1,801,885          | 1,938,969          |
| Stocks, bonds and debentures.....              | 44,960,198         | 44,080,324         | 45,611,133         | 50,515,906         | 56,674,057         |
| Agents' balances and premiums outstanding..... | 3,378,107          | 3,200,097          | 3,220,983          | 3,179,405          | 3,259,318          |
| Cash on hand and in banks <sup>1</sup> .....   | 4,429,893          | 4,782,809          | 5,451,675          | 5,857,871          | 5,587,889          |
| Interest and rents.....                        | 537,858            | 511,366            | 504,444            | 530,024            | 524,483            |
| Other assets.....                              | 4,049,393          | 4,295,782          | 3,899,758          | 3,448,895          | 3,064,360          |
| <b>Totals, Assets.....</b>                     | <b>61,504,387</b>  | <b>60,176,266</b>  | <b>61,824,629</b>  | <b>67,323,130</b>  | <b>72,882,988</b>  |
| <b>British Companies.</b>                      |                    |                    |                    |                    |                    |
| Real estate.....                               | 2,914,810          | 2,935,910          | 2,995,983          | 3,020,175          | 2,290,810          |
| Loans on real estate.....                      | 2,879,540          | 2,738,679          | 2,733,535          | 2,535,040          | 1,999,965          |
| Stocks, bonds and debentures.....              | 46,047,883         | 46,925,785         | 50,857,791         | 50,353,268         | 49,196,088         |
| Agents' balances and premiums outstanding..... | 4,181,109          | 3,890,121          | 3,967,856          | 3,807,444          | 3,872,727          |
| Cash on hand and in banks <sup>1</sup> .....   | 3,224,750          | 3,916,951          | 4,514,297          | 4,579,638          | 4,462,608          |
| Interest and rents.....                        | 330,703            | 293,393            | 292,177            | 284,484            | 266,540            |
| Other assets in Canada.....                    | 1,235,939          | 1,022,852          | 978,444            | 922,161            | 804,109            |
| <b>Totals, Assets in Canada.....</b>           | <b>61,414,734</b>  | <b>61,723,691</b>  | <b>66,340,983</b>  | <b>65,592,240</b>  | <b>62,893,447</b>  |
| <b>Foreign Companies.</b>                      |                    |                    |                    |                    |                    |
| Real estate.....                               | —                  | —                  | 13,000             | 13,000             | 13,000             |
| Loans on real estate.....                      | 13,000             | 13,000             | 13,000             | 13,000             | 13,000             |
| Stocks, bonds and debentures.....              | 36,808,509         | 34,133,891         | 33,369,124         | 33,969,892         | 35,387,700         |
| Agents' balances and premiums outstanding..... | 3,000,938          | 2,095,116          | 2,788,018          | 2,682,621          | 2,892,533          |
| Cash on hand and in banks <sup>1</sup> .....   | 6,842,272          | 5,409,339          | 6,111,374          | 7,137,333          | 6,740,761          |
| Interest and rents.....                        | 319,977            | 296,283            | 262,193            | 245,152            | 272,387            |
| Other assets in Canada.....                    | 256,425            | 199,810            | 150,190            | 170,809            | 95,450             |
| <b>Totals, Assets in Canada.....</b>           | <b>46,741,122</b>  | <b>42,747,439</b>  | <b>42,693,905</b>  | <b>44,218,807</b>  | <b>45,401,831</b>  |
| <b>All Companies.</b>                          |                    |                    |                    |                    |                    |
| Real estate.....                               | 5,440,546          | 5,021,666          | 5,016,572          | 5,009,319          | 4,124,724          |
| Loans on real estate.....                      | 4,516,042          | 3,971,811          | 3,862,535          | 4,349,925          | 3,951,634          |
| Stocks, bonds and debentures.....              | 128,416,590        | 128,140,000        | 129,838,047        | 134,839,096        | 141,258,745        |
| Agents' balances and premiums outstanding..... | 10,560,154         | 9,785,334          | 9,976,857          | 9,609,470          | 10,024,576         |
| Cash on hand and in banks <sup>1</sup> .....   | 13,996,616         | 14,109,099         | 16,077,346         | 17,574,842         | 16,791,258         |
| Interest and rents.....                        | 1,188,538          | 1,101,042          | 1,058,814          | 1,059,600          | 1,063,410          |
| Other assets in Canada.....                    | 5,541,757          | 5,518,444          | 5,038,398          | 4,841,865          | 3,963,919          |
| <b>Totals, Assets in Canada.....</b>           | <b>169,660,243</b> | <b>164,647,396</b> | <b>170,858,617</b> | <b>177,044,177</b> | <b>181,178,266</b> |

<sup>1</sup> Or deposited with the Government.

**4.—Liabilities of Canadian Companies Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Liabilities in Canada of Companies other than Canadian Transacting such Business in Canada, 1932-36.**

| Item.   | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
|   | \$                | \$                | \$                | \$                | \$                |
| <b>Canadian Companies.</b>                                |                   |                   |                   |                   |                   |
| Reserve for unsettled losses.....                         | 5,135,795         | 4,871,034         | 4,976,772         | 4,970,058         | 4,644,185         |
| Reserve of unearned premiums.....                         | 13,747,055        | 12,765,072        | 12,598,953        | 12,589,143        | 13,033,448        |
| Sundry items.....   | 7,590,953         | 7,197,726         | 6,540,093         | 6,640,900         | 8,055,097         |
| <b>Totals, Liabilities, Not Including Capital.....</b>    | <b>26,473,803</b> | <b>24,833,832</b> | <b>24,115,818</b> | <b>24,200,101</b> | <b>25,732,730</b> |
| Excess of assets over liabilities, excluding capital..... | 35,030,584        | 35,342,433        | 37,708,811        | 43,123,029        | 47,150,259        |
| Capital stock paid up.....                                | 17,076,446        | 16,741,004        | 16,772,229        | 17,201,092        | 17,412,854        |

4.—Liabilities of Canadian Companies Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Liabilities in Canada of Companies other than Canadian Transacting such Business in Canada, 1932-36—concluded.

| Item.  | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
|  | \$                | \$                | \$                | \$                | \$                |
| <b>British Companies.</b>  |                   |                   |                   |                   |                   |
| Reserve for unsettled losses.....                                | 4,639,231         | 4,225,657         | 3,400,951         | 3,190,800         | 3,188,672         |
| Reserve of unearned premiums.....                                | 18,058,163        | 16,774,248        | 16,225,608        | 15,838,479        | 15,568,239        |
| Sundry items.....  | 3,009,101         | 1,959,979         | 1,888,313         | 1,996,588         | 1,751,518         |
| <b>Totals, Liabilities in Canada.....</b>                        | <b>25,706,495</b> | <b>22,959,884</b> | <b>21,514,882</b> | <b>21,015,867</b> | <b>20,508,429</b> |
| Excess of assets over liabilities, excluding capital.....        | 35,708,239        | 38,763,807        | 44,825,202        | 44,486,373        | 42,385,018        |
| Capital stock paid up.....                                       | —                 | —                 | —                 | —                 | —                 |
| <b>Foreign Companies.</b>  |                   |                   |                   |                   |                   |
| Reserve for unsettled losses.....                                | 2,411,555         | 1,832,977         | 1,059,395         | 1,254,840         | 1,100,262         |
| Reserve of unearned premiums.....                                | 12,334,525        | 10,678,271        | 10,531,393        | 10,720,929        | 12,322,459        |
| Sundry items.....  | 990,333           | 918,349           | 989,749           | 1,102,783         | 1,247,252         |
| <b>Totals, Liabilities in Canada.....</b>                        | <b>15,736,413</b> | <b>13,429,597</b> | <b>12,577,537</b> | <b>13,138,549</b> | <b>14,669,973</b> |
| Excess of assets over liabilities, excluding capital.....        | 31,004,709        | 29,317,842        | 30,116,308        | 31,080,258        | 30,731,858        |
| Capital stock paid up.....                                       | —                 | —                 | —                 | —                 | —                 |
| <b>All Companies.</b>  |                   |                   |                   |                   |                   |
| Reserve for unsettled losses.....                                | 12,186,581        | 10,929,668        | 9,437,128         | 9,415,698         | 8,933,119         |
| Reserve of unearned premiums.....                                | 44,139,743        | 40,217,591        | 39,355,954        | 39,138,548        | 40,924,146        |
| Sundry items.....  | 11,590,387        | 10,076,054        | 9,415,155         | 9,800,271         | 11,068,867        |
| <b>Totals, Liabilities in Canada, Not including Capital.....</b> | <b>67,916,711</b> | <b>61,223,313</b> | <b>58,208,237</b> | <b>58,354,517</b> | <b>60,911,132</b> |
| Excess of assets over liabilities, excluding capital.....        | 101,743,532       | 108,424,082       | 112,650,380       | 118,639,660       | 120,267,135       |
| Capital stock paid up <sup>1</sup> .....                         | 17,076,446        | 16,741,004        | 16,772,229        | 17,201,092        | 17,412,854        |

<sup>1</sup> Canadian companies only.

5.—Income and Expenditure of Canadian Companies Operating under Dominion Registration Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Income and Expenditure in Canada of Companies other than Canadian Transacting such Business in Canada, 1932-36.

| Item  | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
|   | \$                | \$                | \$                | \$                | \$                |
| <b>INCOME.</b>                                      |                   |                   |                   |                   |                   |
| <b>Canadian Companies.</b>                          |                   |                   |                   |                   |                   |
| Net premiums written, fire and other insurance..... | 24,197,136        | 22,304,621        | 23,121,983        | 22,082,758        | 22,911,717        |
| Interest and dividends earned.....                  | 2,429,914         | 2,243,109         | 2,261,329         | 2,369,553         | 2,500,051         |
| Sundry items.....                                   | 1,011,964         | 1,667,657         | 3,205,661         | 4,071,625         | 4,770,420         |
| <b>Totals, Income.....</b>                          | <b>27,639,014</b> | <b>26,215,387</b> | <b>28,588,973</b> | <b>28,523,936</b> | <b>30,182,188</b> |

<sup>1</sup> Income and expenditure in Canada.

**5.—Income and Expenditure of Canadian Companies Operating under Dominion Registration Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Income and Expenditure in Canada of Companies other than Canadian Transacting such Business in Canada, 1932-36—concluded.**

| Item.  | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
|  | \$                | \$                | \$                | \$                | \$                |
| <b>INCOME—concluded.</b>                             |                   |                   |                   |                   |                   |
| <b>British Companies.<sup>1</sup></b>                |                   |                   |                   |                   |                   |
| Net cash for premiums .....                          | 28,944,515        | 26,482,370        | 26,243,241        | 25,474,312        | 25,210,739        |
| Interest and dividends on stocks, etc. ....          | 1,660,370         | 1,418,394         | 1,523,613         | 1,108,045         | 907,527           |
| Sundry items .....                                   | 6,697             | 7,644             | 11,096            | 1,878             | 84,338            |
| <b>Totals, Income<sup>1</sup> .....</b>              | <b>30,611,782</b> | <b>27,908,908</b> | <b>27,778,555</b> | <b>26,584,235</b> | <b>26,202,604</b> |
| <b>Foreign Companies.<sup>1</sup></b>                |                   |                   |                   |                   |                   |
| Net premiums written .....                           | 21,013,521        | 17,020,224        | 17,611,181        | 18,605,796        | 19,260,146        |
| Interest and dividends earned, etc. ....             | 1,463,149         | 1,434,697         | 1,244,377         | 1,165,140         | 1,114,610         |
| Sundry items .....                                   | 40,120            | 12,007            | 8,440             | 145               | 2,222             |
| <b>Totals, Income<sup>1</sup> .....</b>              | <b>22,517,090</b> | <b>18,466,988</b> | <b>18,863,998</b> | <b>19,771,081</b> | <b>20,376,978</b> |
| <b>EXPENDITURE.</b>                                  |                   |                   |                   |                   |                   |
| <b>Canadian Companies.</b>                           |                   |                   |                   |                   |                   |
| Incurred for losses (fire) .....                     | 7,334,323         | 5,535,097         | 5,023,355         | 4,271,020         | 4,179,480         |
| General expenses (fire) .....                        | 6,863,370         | 7,022,317         | 7,113,962         | 6,959,212         | 6,837,887         |
| On account of branches other than fire or life ..... | 12,267,206        | 11,535,019        | 12,176,171        | 11,629,827        | 11,207,478        |
| Dividends or bonuses to shareholders .....           | 1,474,712         | 953,223           | 1,049,407         | 1,257,937         | 2,044,143         |
| Taxes .....  | 1,042,411         | 1,008,538         | 1,014,006         | 1,018,238         | 1,259,924         |
| <b>Totals, Expenditure .....</b>                     | <b>28,922,022</b> | <b>26,056,194</b> | <b>26,376,901</b> | <b>25,146,251</b> | <b>25,528,717</b> |
| Excess of income over expenditure .....              | -1,283,008        | 159,193           | 2,212,072         | 3,377,682         | 4,653,471         |
| <b>British Companies.<sup>1</sup></b>                |                   |                   |                   |                   |                   |
| Incurred for losses (fire) .....                     | 12,495,764        | 9,689,271         | 7,267,241         | 6,251,193         | 5,839,751         |
| General expenses (fire) .....                        | 8,626,703         | 8,584,709         | 8,217,314         | 8,074,949         | 7,755,018         |
| On account of branches other than fire or life ..... | 8,170,740         | 7,670,487         | 8,004,002         | 8,033,050         | 8,721,614         |
| Taxes .....  | 1,233,827         | 1,129,150         | 1,106,570         | 1,297,532         | 1,267,445         |
| <b>Totals, Expenditure<sup>1</sup> .....</b>         | <b>30,527,034</b> | <b>27,073,617</b> | <b>24,685,133</b> | <b>23,656,724</b> | <b>23,583,828</b> |
| Excess of income over expenditure .....              | 84,748            | 835,291           | 3,093,422         | 2,927,511         | 2,618,776         |
| <b>Foreign Companies.<sup>1</sup></b>                |                   |                   |                   |                   |                   |
| Incurred for losses (fire) .....                     | 12,960,086        | 8,272,440         | 6,492,204         | 5,942,098         | 5,629,936         |
| General expenses (fire) <sup>2</sup> .....           | 7,692,132         | 7,187,426         | 7,041,693         | 7,098,073         | 7,105,345         |
| On account of branches other than fire or life ..... | 2,308,319         | 1,737,754         | 1,943,418         | 2,639,652         | 2,651,588         |
| Taxes .....  | 1,030,117         | 919,544           | 851,998           | 1,003,448         | 1,107,679         |
| <b>Totals, Expenditure<sup>1, 2</sup> .....</b>      | <b>23,999,654</b> | <b>18,117,164</b> | <b>16,329,313</b> | <b>16,675,871</b> | <b>16,794,548</b> |
| Excess of income over expenditure .....              | -1,482,564        | 349,824           | 2,534,685         | 3,095,210         | 3,582,350         |

<sup>1</sup> Income and expenditure in Canada.<sup>2</sup> Including dividends returned to policyholders.

**6.—Amounts of Net Premiums Written and Net Losses Incurred in Canada by Canadian Companies Operating under Dominion Registration, and by British and Foreign Companies Transacting Fire Insurance Business, by Provinces, 1935 and 1936.**

(Registered reinsurance deducted.)

| Province.                      | Canadian.        |                  | British.          |                  | Foreign.          |                  |
|--------------------------------|------------------|------------------|-------------------|------------------|-------------------|------------------|
|                                | Premiums.        | Losses.          | Premiums.         | Losses.          | Premiums.         | Losses.          |
|                                | \$               | \$               | \$                | \$               | \$                | \$               |
| <b>1935.</b>                   |                  |                  |                   |                  |                   |                  |
| Prince Edward Island.....      | 35,947           | 17,493           | 152,846           | 60,624           | 67,272            | 22,495           |
| Nova Scotia.....               | 327,808          | 154,062          | 828,120           | 308,455          | 736,977           | 324,461          |
| New Brunswick.....             | 236,412          | 76,688           | 807,890           | 303,616          | 603,547           | 306,382          |
| Quebec.....                    | 1,409,814        | 713,167          | 4,301,770         | 1,919,885        | 4,667,439         | 2,164,403        |
| Ontario.....                   | 3,425,217        | 1,144,501        | 6,234,407         | 2,027,103        | 4,918,053         | 1,703,704        |
| Manitoba.....                  | 837,332          | 266,727          | 1,112,440         | 295,243          | 959,388           | 236,007          |
| Saskatchewan.....              | 1,036,145        | 230,648          | 1,976,927         | 308,609          | 912,454           | 299,038          |
| Alberta.....                   | 895,014          | 213,222          | 1,195,436         | 307,353          | 1,136,393         | 348,505          |
| British Columbia.....          | 633,910          | 188,261          | 1,822,983         | 634,275          | 1,517,917         | 566,068          |
| Yukon.....                     | 11,238           | 10,253           | 8,177             | 1,039            | 11,222            | 2,082            |
| <b>Totals<sup>1</sup>.....</b> | <b>8,939,715</b> | <b>3,026,112</b> | <b>17,443,350</b> | <b>6,251,192</b> | <b>15,511,626</b> | <b>5,942,691</b> |
| <b>1936.</b>                   |                  |                  |                   |                  |                   |                  |
| Prince Edward Island.....      | 36,621           | 8,775            | 146,101           | 41,885           | 63,161            | 20,123           |
| Nova Scotia.....               | 346,153          | 166,260          | 838,358           | 265,848          | 780,337           | 376,025          |
| New Brunswick.....             | 293,044          | 65,535           | 871,145           | 226,101          | 610,834           | 259,389          |
| Quebec.....                    | 1,526,122        | 607,678          | 4,002,432         | 1,707,141        | 4,606,249         | 2,166,433        |
| Ontario.....                   | 3,300,627        | 1,154,493        | 5,788,478         | 2,232,229        | 5,116,258         | 1,700,628        |
| Manitoba.....                  | 865,355          | 298,535          | 1,013,484         | 233,805          | 935,549           | 206,061          |
| Saskatchewan.....              | 1,065,382        | 270,576          | 879,557           | 252,956          | 925,634           | 203,993          |
| Alberta.....                   | 830,979          | 242,347          | 1,072,829         | 231,474          | 1,095,216         | 263,214          |
| British Columbia.....          | 624,921          | 169,185          | 1,787,092         | 507,940          | 1,504,998         | 417,151          |
| Yukon.....                     | 3,456            | 13,260           | 23,498            | 637              | 10,672            | 2,297            |
| <b>Totals<sup>1</sup>.....</b> | <b>8,988,537</b> | <b>2,984,664</b> | <b>16,495,563</b> | <b>5,839,749</b> | <b>15,744,170</b> | <b>5,626,186</b> |

<sup>1</sup> Totals include, in many cases, small items unapportioned by provinces.

**Summary of Fire Insurance in Canada, 1936.**—Of the total amount of fire insurance effected in Canada during each year, a part is sold by companies holding provincial licences and permits. Such companies generally confine their operations to the province of incorporation, but may be allowed to sell insurance in other provinces. The bulk of fire insurance business, however, is transacted by companies registered by the Dominion. Operations in 1936 are summarized in Table 7.

**7.—Dominion and Provincial Fire Insurance in Canada, 1936.**

| Item.  | Gross Insurance Written. | Net in Force at End of Year. | Net Premiums Received. | Net Losses Paid.  |
|--|--------------------------|------------------------------|------------------------|-------------------|
|  | \$                       | \$                           | \$                     | \$                |
| Dominion Licensees.....  | 9,642,266,141            | 9,248,273,260                | 40,218,296             | 14,072,237        |
| Provincial Licensees—  |                          |                              |                        |                   |
| (a) Provincial companies within provinces by which they are incorporated.....                  | 636,794,823              | 1,092,185,530                | 4,510,467              | 1,979,716         |
| (b) Provincial companies within provinces other than those by which they are incorporated..... | 94,164,836               | 92,666,516                   | 492,136                | 210,908           |
| <b>Totals, Provincial Licensees.....</b>   | <b>730,959,659</b>       | <b>1,184,852,046</b>         | <b>5,002,603</b>       | <b>2,190,624</b>  |
| <b>Grand Totals, 1936.....</b>   | <b>10,373,228,800</b>    | <b>10,433,125,306</b>        | <b>45,220,899</b>      | <b>16,262,861</b> |
| <b>Grand Totals, 1935.....</b>   | <b>10,566,640,152</b>    | <b>10,426,722,052</b>        | <b>46,134,014</b>      | <b>17,234,463</b> |

## Section 2.—Life Insurance.

An article descriptive of the growth and development of life insurance in Canada, more particularly with reference to insurance legislation, contributed by A. D. Watson, of the Department of Insurance, Ottawa, appeared on pp. 937-944 of the Canada Year Book, 1933.

**Life Insurance Statistics.**—Life insurance business was transacted in Canada in 1936 by 42 companies registered by the Dominion, including 28 Canadian, 6 British, and 8 foreign companies. There were also 6 British and 7 foreign companies registered to write insurance which had practically ceased to write new insurance, while 2 other British and 3 other foreign companies were authorized under the Act to transact business in connection only with policies written prior to Mar. 31, 1878. One foreign company was licensed to transact business in 1931, but has not yet written any life insurance business in Canada, except by way of reinsurance.

As shown by the chronological statistics of Table 8, life insurance business in Canada has expanded from very small beginnings, the total net life insurance in force in all companies licensed by the Dominion in 1869 being only \$35,680,082, while in 1936 it was \$6,403,037,477,\* the amount per head of the estimated population of Canada having more than doubled since 1919—an evidence of the general recognition of the value of life insurance for the adequate protection of dependants against misfortune. Notable also from these statistics is the fact that in this field British companies, the leaders in 1869, have fallen far behind the Canadian and the foreign companies. The total net amount of new insurance effected during the year 1936 was \$618,264,819,† as compared with \$588,353,277 in 1935, \$595,194,820 in 1934, \$578,585,659 in 1933, \$653,249,366 in 1932, \$782,716,064 in 1931, \$884,749,748 in 1930, and \$978,141,485 in 1929, while the premiums paid were \$200,541,265, as compared with \$200,157,567 in 1935, \$202,583,536 in 1934, \$206,954,224 in 1933, \$216,132,957 in 1932, \$225,100,571 in 1931, \$220,523,727 in 1930, and \$210,728,479 in 1929.

In Table 9 detailed statistics are given of the business of Canadian, British, and foreign companies, respectively, by companies, in 1936, while Table 10 is a summary showing the business of Canadian, British, and foreign companies for the past 5 years. Table 11 shows the ordinary and industrial policies in force and effected during the year ended Dec. 31, 1936. Table 12 gives the insurance death rates by classes of companies, and Tables 13, 14 and 15 show, respectively, the assets, liabilities, cash income, and expenditure of Canadian and other life insurance companies for the years 1932-36. Statistics of Dominion fraternal insurance are given in Table 16 and of Dominion and provincial insurance combined in Table 17, which shows that on Dec. 31, 1936, the total life insurance in force in Canada was \$6,701,667,839.

\* This total does not include \$168,586,134 of fraternal insurance. Preliminary figures for 1937 indicate \$6,542,789,202 of life insurance in force in Dominion companies not including \$174,384,095 of fraternal insurance.

† The net amount of new insurance effected in 1937 was \$672,794,293 according to preliminary figures.



**8.—Life Insurance in Force and Effectuated in Canada by Companies Operating under Dominion Registration, calendar years 1869-1937.<sup>1</sup>**

| Year.     | Net Amounts in Force. |                    |                    |               | Insurance in Force per Head of Estimated Population. <sup>2</sup> | Net Amount of New Insurance Effectuated during Year. |
|-----------|-----------------------|--------------------|--------------------|---------------|---|--|
|           | Canadian Companies.   | British Companies. | Foreign Companies. | Total.        |   |  |
|           | \$                    | \$                 | \$                 | \$            | \$  | \$   |
| 1869..... | 5,476,358             | 16,318,475         | 13,885,249         | 35,680,082    | 10.01   | 12,654,132   |
| 1870..... | 6,464,437             | 17,391,923         | 16,895,853         | 40,694,712    | 11.78   | 12,194,606   |
| 1871..... | 8,711,111             | 18,405,325         | 18,709,499         | 45,825,935    | 12.42   | 13,332,626   |
| 1872..... | 13,070,811            | 19,258,166         | 34,905,707         | 67,234,684    | 17.91   | 21,070,101   |
| 1873..... | 15,777,197            | 18,862,191         | 42,861,508         | 77,500,896    | 20.26   | 21,053,618   |
| 1874..... | 19,634,319            | 19,803,867         | 46,218,139         | 85,716,325    | 22.01   | 19,105,221   |
| 1875..... | 21,957,296            | 19,465,607         | 43,596,361         | 85,009,264    | 21.60   | 15,074,358   |
| 1876..... | 24,849,284            | 18,873,173         | 40,728,401         | 84,350,815    | 21.02   | 13,890,127   |
| 1877..... | 26,870,224            | 19,349,204         | 39,468,475         | 85,687,903    | 21.08   | 13,534,667   |
| 1878..... | 28,656,556            | 20,078,533         | 36,016,848         | 84,751,937    | 20.57   | 12,169,755   |
| 1879..... | 33,246,543            | 19,410,829         | 33,616,330         | 86,273,702    | 20.62   | 11,354,224   |
| 1880..... | 37,838,518            | 19,789,869         | 33,643,745         | 91,272,126    | 21.45   | 13,006,887   |
| 1881..... | 40,941,501            | 20,985,092         | 36,266,249         | 103,292,832   | 23.83   | 17,618,011   |
| 1882..... | 53,655,051            | 22,329,368         | 38,857,629         | 115,042,045   | 26.30   | 20,112,755   |
| 1883..... | 69,213,606            | 25,611,712         | 41,471,554         | 134,196,876   | 28.04   | 21,572,980   |
| 1884..... | 66,519,958            | 24,317,172         | 44,616,596         | 135,453,726   | 30.19   | 23,303,412   |
| 1885..... | 74,891,139            | 25,930,272         | 49,440,735         | 149,962,146   | 33.06   | 26,707,488   |
| 1886..... | 88,181,890            | 27,225,607         | 55,908,230         | 171,315,696   | 37.41   | 34,800,598   |
| 1887..... | 101,796,784           | 28,163,329         | 61,734,187         | 191,694,270   | 41.44   | 37,881,810   |
| 1888..... | 114,034,279           | 30,093,210         | 67,724,094         | 211,761,585   | 46.07   | 40,923,529   |
| 1889..... | 128,125,692           | 30,488,618         | 70,340,392         | 228,954,702   | 49.65   | 44,101,593   |
| 1890..... | 135,218,990           | 31,613,730         | 81,591,847         | 248,424,567   | 51.98   | 39,802,950   |
| 1891..... | 143,368,817           | 32,407,937         | 85,098,475         | 261,475,229   | 54.10   | 37,609,287   |
| 1892..... | 154,709,077           | 33,662,706         | 90,708,482         | 279,110,265   | 57.16   | 44,062,440   |
| 1893..... | 167,475,872           | 33,543,884         | 94,602,960         | 295,622,722   | 59.95   | 44,802,847   |
| 1894..... | 177,811,846           | 33,911,855         | 96,737,706         | 308,151,436   | 61.89   | 46,111,010   |
| 1895..... | 188,830,357           | 34,341,172         | 98,500,352         | 319,257,581   | 63.82   | 47,101,593   |
| 1896..... | 195,303,042           | 34,837,448         | 97,600,009         | 327,500,499   | 64.00   | 42,293,322   |
| 1897..... | 208,655,459           | 35,293,134         | 100,063,684        | 344,012,277   | 67.16   | 47,710,165   |
| 1898..... | 226,209,636           | 36,606,105         | 105,708,184        | 368,523,925   | 71.21   | 54,387,303   |
| 1899..... | 259,291,516           | 38,025,948         | 113,943,209        | 404,170,673   | 77.21   | 66,184,063   |
| 1900..... | 267,151,050           | 39,485,344         | 124,433,416        | 431,069,810   | 81.32   | 67,729,115   |
| 1901..... | 284,684,621           | 40,216,196         | 135,769,634        | 460,670,455   | 86.02   | 72,101,593   |
| 1902..... | 308,202,596           | 41,556,245         | 150,653,464        | 508,812,305   | 99.61   | 79,638,914   |
| 1903..... | 335,638,940           | 42,127,260         | 170,676,800        | 548,443,000   | 97.05   | 90,732,415   |
| 1904..... | 364,040,166           | 42,698,738         | 180,031,886        | 587,880,790   | 100.50  | 97,617,402   |
| 1905..... | 397,946,902           | 43,809,211         | 188,875,127        | 630,334,240   | 106.02  | 104,719,885  |
| 1906..... | 420,804,847           | 45,655,951         | 188,740,102        | 655,200,900   | 109.40  | 98,722,610   |
| 1907..... | 450,676,724           | 46,462,314         | 188,487,447        | 685,626,485   | 109.93  | 88,704,250   |
| 1908..... | 480,296,921           | 46,161,957         | 193,087,126        | 719,516,014   | 108.61  | 98,644,410   |
| 1909..... | 515,416,437           | 46,885,102         | 217,956,351        | 780,356,950   | 114.76  | 102,122,008  |
| 1910..... | 565,667,110           | 47,816,775         | 242,629,174        | 856,113,059   | 122.51  | 150,785,305  |
| 1911..... | 620,770,154           | 50,919,678         | 272,540,942        | 950,220,771   | 131.85  | 173,341,738  |
| 1912..... | 706,636,117           | 54,537,725         | 309,114,827        | 1,070,308,669 | 144.85  | 212,772,151  |
| 1913..... | 760,637,902           | 58,176,795         | 359,776,330        | 1,180,590,027 | 158.12  | 225,606,787  |
| 1914..... | 794,520,423           | 60,770,658         | 386,869,397        | 1,242,160,478 | 157.62  | 212,977,484  |
| 1915..... | 829,072,809           | 58,087,018         | 423,566,850        | 1,311,616,677 | 164.34  | 218,205,427  |
| 1916..... | 895,528,435           | 59,151,931         | 467,499,266        | 1,422,179,632 | 177.75  | 227,210,162  |
| 1917..... | 996,099,282           | 58,617,506         | 529,726,775        | 1,585,443,563 | 190.60  | 277,532,095  |
| 1918..... | 1,105,500,447         | 60,296,113         | 519,261,713        | 1,785,061,273 | 207.06  | 307,679,769  |
| 1919..... | 1,302,611,562         | 66,908,064         | 577,487,017        | 2,147,006,643 | 263.26  | 317,891,839  |
| 1920..... | 1,664,348,605         | 76,883,090         | 915,793,798        | 2,657,025,493 | 310.55  | 630,110,900  |
| 1921..... | 1,800,026,952         | 84,940,938         | 989,875,958        | 2,934,843,848 | 333.96  | 514,664,111  |
| 1922..... | 2,013,722,848         | 93,791,180         | 1,063,874,968      | 3,171,388,996 | 355.58  | 502,279,333  |
| 1923..... | 2,187,434,147         | 98,022,020         | 1,148,051,590      | 3,433,508,673 | 381.03  | 540,440,800  |
| 1924..... | 2,433,833,480         | 108,519,238        | 1,246,623,757      | 3,789,966,473 | 411.64  | 515,372,703  |
| 1925..... | 2,672,838,677         | 108,566,248        | 1,377,454,924      | 4,159,019,848 | 447.44  | 719,091,839  |
| 1926..... | 2,979,946,768         | 111,375,336        | 1,518,874,220      | 4,610,196,324 | 487.65  | 767,940,029  |
| 1927..... | 3,277,050,348         | 113,883,716        | 1,653,474,770      | 5,044,408,834 | 523.44  | 838,475,057  |
| 1928..... | 3,671,326,188         | 115,340,577        | 1,820,979,858      | 5,607,645,623 | 570.16  | 918,742,064  |
| 1929..... | 4,081,612,489         | 116,545,637        | 1,989,104,071      | 6,167,262,207 | 613.94  | 978,141,455  |
| 1930..... | 4,319,876,298         | 117,410,860        | 2,055,502,125      | 6,492,235,194 | 630.00  | 864,749,748  |
| 1931..... | 4,409,707,638         | 119,262,511        | 2,063,523,244      | 6,622,957,793 | 639.17  | 789,716,964  |
| 1932..... | 4,311,747,692         | 115,831,319        | 2,044,029,555      | 6,471,608,546 | 615.99  | 553,249,365  |
| 1933..... | 4,160,351,570         | 113,807,916        | 1,878,466,488      | 6,247,625,974 | 584.93  | 578,585,596  |
| 1934..... | 4,139,796,088         | 118,745,642        | 1,904,184,109      | 6,222,725,929 | 574.13  | 595,194,820  |
| 1935..... | 4,164,893,298         | 123,148,855        | 1,971,116,291      | 6,259,158,404 | 571.60  | 588,353,277  |
| 1936..... | 4,256,850,150         | 129,840,311        | 2,016,247,010      | 6,403,087,471 | 580.62  | 618,294,210  |
| 1937..... | 4,305,506,010         | 137,849,456        | 2,099,180,736      | 6,542,736,202 | 588.38  | 672,794,298  |

<sup>1</sup> Figures do not include insurance in force and effectuated by fraternal societies operating under Dominion charters. The amount of insurance in force in such societies amounted to \$174,384,035 in 1937, according to preliminary figures. Corresponding figures for the years 1932-36 are given in Table 16, pp. 905-966.

<sup>2</sup> For estimates of populations upon which these figures are based, see p. 155.

<sup>3</sup> Subject to revision.

## 9.—Life Insurance in Force and Effectuated in Canada by Companies Operating under Dominion Registration, 1935.

NOTE.—The statistics of this table do not include the business of Canadian companies outside of Canada.

| Company.                             | Policies Effectuated. |                    | Policies in Force. |                      | Net Premium Income. | Net Amount of Policies Become Claimants. |
|--------------------------------------|-----------------------|--------------------|--------------------|----------------------|---------------------|--|
|                                      | No.                   | Net Amount.        | No.                | Net Amount.          |                     |  |
| <b>Canadian Companies—</b>           |                       | \$                 |                    | \$                   | \$                  | \$                                       |
| Ancient Foresters.....               | 5,063                 | 1,037,875          | 14,612             | 6,293,464            | 189,110             | 57,611                                   |
| Canada.....                          | 7,407                 | 21,352,053         | 119,077            | 378,540,411          | 10,605,893          | 4,801,963                                |
| Commercial.....                      | 1,234                 | 1,242,560          | 5,672              | 10,002,843           | 309,055             | 100,955                                  |
| Confederation.....                   | 9,123                 | 21,435,264         | 107,026            | 235,222,065          | 3,032,456           | 2,199,676                                |
| Continental of Canada.....           | 3,013                 | 4,986,072          | 22,259             | 36,357,192           | 1,115,220           | 299,696                                  |
| Crown.....                           | 6,068                 | 14,712,668         | 51,893             | 111,325,712          | 3,247,824           | 923,797                                  |
| Dominion.....                        | 4,343                 | 16,130,193         | 55,318             | 140,988,267          | 4,487,065           | 1,430,447                                |
| Dominion of Canada.....              | 771                   | 1,106,554          | 5,135              | 5,264,332            | 235,394             | 80,233                                   |
| P. Eaton.....                        | 1,155                 | 2,500,752          | 12,999             | 25,799,066           | 635,110             | 165,278                                  |
| Equitable of Canada.....             | 770                   | 2,311,377          | 16,338             | 35,064,433           | 1,004,268           | 311,941                                  |
| Excelsior.....                       | 6,202                 | 14,478,859         | 45,254             | 91,143,602           | 2,750,068           | 815,039                                  |
| Great-West.....                      | 10,940                | 27,988,605         | 200,322            | 453,726,077          | 13,619,632          | 3,781,290                                |
| Imperial.....                        | 5,352                 | 15,308,793         | 55,655             | 205,977,506          | 6,917,699           | 1,996,324                                |
| London.....                          | 125,145               | 34,312,396         | 618,198            | 641,365,307          | 15,595,572          | 2,922,948                                |
| Manufacturers.....                   | 8,193                 | 16,939,673         | 121,437            | 257,775,836          | 7,060,100           | 2,031,031                                |
| Maritime.....                        | 705                   | 1,520,680          | 4,033              | 8,446,702            | 227,402             | 42,619                                   |
| Monarch.....                         | 4,234                 | 6,971,903          | 30,933             | 53,992,136           | 1,589,990           | 338,001                                  |
| Montreal.....                        | 2,150                 | 4,784,065          | 15,708             | 32,204,686           | 1,047,302           | 379,703                                  |
| Mutual of Canada.....                | 17,122                | 39,008,202         | 207,655            | 497,304,890          | 10,037,559          | 5,213,032                                |
| National.....                        | 2,707                 | 6,693,309          | 24,582             | 51,239,298           | 1,534,840           | 475,100                                  |
| North American.....                  | 7,858                 | 18,550,756         | 79,356             | 171,171,647          | 5,860,490           | 1,772,626                                |
| Northern.....                        | 2,163                 | 4,970,605          | 25,103             | 41,721,431           | 1,232,061           | 352,158                                  |
| Royal Guardians.....                 | 1,363                 | 697,323            | 6,554              | 3,434,014            | 125,472             | 69,355                                   |
| Saskatchewan.....                    | 1,357                 | 1,758,195          | 6,294              | 5,537,354            | 222,065             | 84,756                                   |
| Sauvagegarde.....                    | 7,419                 | 9,304,550          | 24,578             | 31,970,548           | 975,371             | 269,655                                  |
| Sovereign.....                       | 2,777                 | 5,212,451          | 14,139             | 27,785,579           | 901,455             | 177,499                                  |
| Sun.....                             | 15,426                | 44,008,920         | 239,930            | 784,102,275          | 22,382,936          | 6,624,390                                |
| Western.....                         | 1,396                 | 1,608,827          | 3,573              | 5,531,728            | 135,614             | 15,225                                   |
| <b>Totals.....</b>                   | <b>262,200</b>        | <b>359,949,385</b> | <b>2,156,693</b>   | <b>4,256,850,156</b> | <b>129,259,250</b>  | <b>37,937,790</b>                        |
| <b>British Companies —</b>           |                       |                    |                    |                      |                     |  |
| Commercial Union.....                | 2                     | -                  | 60                 | 285,247              | 4,000               | 73                                       |
| Gresham.....                         | 2                     | -                  | 674                | 1,406,997            | 35,977              | 83,722                                   |
| Life Association of Scotland.....    | 2                     | -                  | 1                  | 1,547                | Nil                 | 4,996                                    |
| Liverpool and London and Globe.....  | 2                     | -                  | 2                  | 8,924                | 22                  | Nil                                      |
| London and Scottish.....             | 1,091                 | 2,558,328          | 0,959              | 16,736,018           | 544,405             | 349,117                                  |
| Mutual and Citizens (Australia)..... | 17,882                | 5,235,714          | 115,398            | 30,724,183           | 1,087,704           | 393,242                                  |
| North British and Mercantile.....    | 2                     | -                  | 165                | 714,469              | 20,926              | 39,030                                   |
| Norwich Union.....                   | 2                     | -                  | 1                  | 2,208                | 421                 | -  |
| Phoenix of London.....               | 30                    | 63,000             | 1,260              | 4,552,613            | 124,277             | 199,019                                  |
| Prudential of London.....            | 1,922                 | 4,584,265          | 7,054              | 15,143,487           | 350,262             | 30,160                                   |
| Royal.....                           | 776                   | 2,538,877          | 6,235              | 24,563,239           | 652,108             | 340,512                                  |
| Scottish Amicable.....               | 2                     | -                  | 2                  | 6,552                | 106                 | 559                                      |
| Standard.....                        | 1,249                 | 3,588,557          | 10,743             | 32,448,599           | 916,619             | 451,332                                  |
| Star.....                            | 2                     | -                  | 22                 | 40,048               | 518                 | 2,422                                    |
| <b>Totals.....</b>                   | <b>23,050</b>         | <b>18,623,741</b>  | <b>148,612</b>     | <b>129,940,311</b>   | <b>3,975,367</b>    | <b>1,394,351</b>                         |
| <b>Foreign Companies—</b>            |                       |                    |                    |                      |                     |  |
| Aetna.....                           | 765                   | 3,096,973          | 12,084             | 101,734,552          | 1,656,773           | 1,080,651                                |
| Connecticut Mutual.....              | 2                     | -                  | 1                  | 2,000                | 43                  | Nil                                      |
| Continental of Illinois.....         | 2                     | -                  | 5,662              | 15,592,552           | 422,510             | 428,399                                  |
| Equitable of U.S.....                | 1                     | 5,000              | 34                 | 140,044              | 4,493               | 59                                       |
| Guardian.....                        | 11                    | 11,000             | 11                 | 11,000               | 535                 | Nil                                      |
| Loyal.....                           | 309,752               | 123,711,042        | 2,606,930          | 1,064,893,175        | 30,510,064          | 9,334,200                                |
| Metropolitan.....                    | 19,719                | 7,179,719          | 12,135,893         | 1,761,770            | 1,761,770           | 1,761,770                                |
| Mutual of New York.....              | 2,446                 | 4,557,700          | 65,055             | 145,717,425          | 4,696,441           | 1,811,400                                |
| New York.....                        | 2                     | -                  | 6                  | 7,149                | 31                  | 1,029                                    |
| Northwestern Mutual.....             | 463                   | 2,558,791          | 3,024              | 8,679,259            | 216,298             | 88,500                                   |
| Occidental.....                      | 2                     | -                  | 12                 | 64,343               | 1,318               | Nil                                      |
| Pan-American.....                    | 2                     | -                  | 6                  | 2,978                | 48                  | 55                                       |
| Phoenix Mutual.....                  | 2                     | -                  | 144                | 192,544              | 4,445               | 8,000                                    |
| Provident Savings.....               | 198,717               | 70,330,421         | 1,369,094          | 506,036,247          | 18,770,899          | 3,613,821                                |
| Prudential of America.....           | 1                     | 2,500              | 106                | 859,349              | 16,570              | 10,000                                   |
| State.....                           | 1,501                 | 5,377,266          | 23,710             | 114,794,059          | 3,107,694           | 1,362,010                                |
| Travelers.....                       |                       |                    |                    |                      |                     |  |

¹ Including matured endowments.  
² Not yet active.

³ Ceased transacting new business in Canada.

⁴ Registered.

**9.—Life Insurance in Force and Effected in Canada by Companies Operating under Dominion Registration, 1936—concluded.**

| Company.                        | Policies Effected. |                    | Policies in Force. |                      | Net Premium Income. | Net Amount of Policies Become Claims. <sup>1</sup> |
|---------------------------------|--------------------|--------------------|--------------------|----------------------|---------------------|--|
|                                 | No.                | Net Amount.        | No.                | Net Amount.          |                     |  |
| <b>Foreign Companies—concl.</b> |                    | \$                 |                    | \$                   | \$                  | \$   |
| Union Labor.....                | 1                  | —                  | 40                 | 76,500               | 2,736               | Nil  |
| Union Mutual.....               | 39                 | 56,000             | 2,108              | 4,999,316            | 122,760             | 64,053   |
| United States.....              | 1                  | —                  | 142                | 320,556              | 10,226              | 28,206   |
| <b>Totals.....</b>              | <b>513,696</b>     | <b>209,731,693</b> | <b>4,107,888</b>   | <b>2,016,247,016</b> | <b>67,307,639</b>   | <b>18,855,083</b>                                  |
| <b>SUMMARY.</b>                 |                    |                    |                    |                      |                     |  |
| Canadian companies.....         | 262,200            | 389,909,385        | 2,156,693          | 4,256,850,150        | 129,253,259         | 37,337,200   |
| British companies.....          | 23,050             | 18,623,741         | 148,012            | 129,940,311          | 3,575,367           | 1,894,351  |
| Foreign companies.....          | 513,696            | 209,731,693        | 4,107,888          | 2,016,247,016        | 67,307,639          | 18,855,083   |
| <b>Grand Totals.....</b>        | <b>798,946</b>     | <b>618,264,819</b> | <b>6,413,183</b>   | <b>6,403,037,477</b> | <b>200,541,265</b>  | <b>58,086,634</b>                                  |

<sup>1</sup> Including matured endowments.

<sup>2</sup> Ceased transacting new business in Canada.

**10.—Progress of Life Insurance Effected under Dominion Registration, calendar years 1932-36.**

| Item.                                      | 1932.            | 1933.            | 1934.            | 1935.            | 1936.            |
|--|------------------|------------------|------------------|------------------|------------------|
| <b>Canadian Companies—<sup>1</sup></b>     |                  |                  |                  |                  |                  |
| Policies effected.....No.                  | 247,256          | 237,655          | 256,204          | 241,514          | 262,200          |
| Policies in force at end of each year..    | 2,131,524        | 2,059,000        | 2,077,236        | 2,100,310        | 2,156,693        |
| Policies become claims.....                | 23,207           | 21,851           | 20,471           | 20,284           | 20,818           |
| Net amounts of policies effected....       | \$ 399,498,023   | \$ 353,725,137   | \$ 366,634,749   | \$ 365,542,246   | \$ 389,909,385   |
| Net amounts of policies in force....       | \$ 4,311,747,692 | \$ 4,160,351,570 | \$ 4,189,799,088 | \$ 4,164,893,288 | \$ 4,256,850,150 |
| Net amounts of policies become claims..... | \$ 37,800,400    | \$ 36,776,004    | \$ 35,102,636    | \$ 34,395,990    | \$ 37,337,200    |
| Amounts of premiums.....                   | \$ 138,805,014   | \$ 133,693,742   | \$ 131,407,513   | \$ 128,714,106   | \$ 129,253,259   |
| Claims paid <sup>2</sup> .....             | \$ 30,148,951    | \$ 38,514,102    | \$ 36,246,115    | \$ 36,114,865    | \$ 38,207,604    |
| Unsettled Claims—                          |                  |                  |                  |                  |                  |
| Not resisted.....                          | \$ 4,051,937     | \$ 4,082,544     | \$ 4,537,956     | \$ 4,780,181     | \$ 5,437,204     |
| Resisted.....                              | \$ 142,650       | \$ 136,977       | \$ 150,785       | \$ 104,192       | \$ 132,156       |
| <b>British Companies—</b>                  |                  |                  |                  |                  |                  |
| Policies effected.....No.                  | 15,690           | 23,457           | 31,437           | 25,690           | 23,050           |
| Policies in force at end of each year..    | 132,835          | 135,484          | 143,132          | 145,111          | 148,012          |
| Policies become claims.....                | 1,561            | 1,814            | 1,672            | 1,654            | 2,244            |
| Net amounts of policies effected....       | \$ 13,054,196    | \$ 13,930,045    | \$ 17,131,400    | \$ 17,901,436    | \$ 18,623,741    |
| Net amounts of policies in force....       | \$ 115,831,319   | \$ 113,807,910   | \$ 116,745,442   | \$ 123,148,855   | \$ 129,940,311   |
| Net amounts of policies become claims..... | \$ 2,134,503     | \$ 1,931,200     | \$ 2,158,000     | \$ 1,550,289     | \$ 1,894,351     |
| Amounts of premiums.....                   | \$ 3,821,016     | \$ 3,671,235     | \$ 3,682,637     | \$ 3,733,100     | \$ 3,875,367     |
| Claims paid <sup>2</sup> .....             | \$ 2,041,201     | \$ 1,959,965     | \$ 1,800,638     | \$ 1,432,354     | \$ 1,910,261     |
| Unsettled Claims—                          |                  |                  |                  |                  |                  |
| Not resisted.....                          | \$ 342,714       | \$ 257,540       | \$ 445,952       | \$ 466,822       | \$ 453,075       |
| Resisted.....                              | \$ —             | \$ —             | \$ —             | \$ —             | \$ —             |
| <b>Foreign Companies—</b>                  |                  |                  |                  |                  |                  |
| Policies effected.....No.                  | 546,053          | 497,794          | 518,617          | 510,090          | 513,696          |
| Policies in force at end of each year..    | 4,322,793        | 4,158,354        | 4,120,156        | 4,106,275        | 4,107,888        |
| Policies become claims.....                | 40,650           | 39,202           | 39,464           | 47,394           | 49,772           |
| Net amounts of policies effected....       | \$ 240,097,204   | \$ 210,930,477   | \$ 211,428,671   | \$ 204,849,595   | \$ 209,731,693   |
| Net amounts of policies in force....       | \$ 2,044,029,535 | \$ 1,973,466,488 | \$ 1,964,184,199 | \$ 1,971,116,251 | \$ 2,016,247,016 |
| Net amounts of policies become claims..... | \$ 17,817,735    | \$ 16,769,945    | \$ 16,821,059    | \$ 17,842,159    | \$ 18,855,083    |
| Amounts of premiums.....                   | \$ 73,506,927    | \$ 69,589,247    | \$ 67,493,336    | \$ 66,710,361    | \$ 67,307,639    |
| Claims paid <sup>2</sup> .....             | \$ 18,903,444    | \$ 18,250,412    | \$ 17,856,617    | \$ 19,281,966    | \$ 20,315,814    |
| Unsettled Claims—                          |                  |                  |                  |                  |                  |
| Not resisted.....                          | \$ 1,173,282     | \$ 1,167,959     | \$ 1,325,690     | \$ 1,443,126     | \$ 1,633,570     |
| Resisted.....                              | \$ 136,706       | \$ 195,266       | \$ 108,093       | \$ 80,333        | \$ 67,148        |

<sup>1</sup> Figures of Canadian business only.

<sup>2</sup> Death claims, matured endowments, and disability claims.

## 10.—Progress of Life Insurance Effected under Dominion Registration, calendar years 1932-36—concluded.

| Item.   | 1932.         | 1933.         | 1934.         | 1935.         | 1936.         |
|---|---------------|---------------|---------------|---------------|---------------|
| <b>All Companies—</b>                         |               |               |               |               |               |
| Policies effected..... No.                    | 808,999       | 756,906       | 806,348       | 777,294       | 798,946       |
| Policies in force at end of each year. "      | 6,587,452     | 6,350,907     | 6,340,524     | 6,351,699     | 6,413,193     |
| Policies become claims..... "                 | 65,478        | 62,957        | 61,907        | 60,632        | 72,594        |
| Net amounts of policies effected.... \$       | 653,249,366   | 578,558,659   | 595,194,820   | 568,353,277   | 618,264,819   |
| Net amounts of policies in force.... \$       | 6,471,608,546 | 6,247,628,974 | 6,220,725,929 | 6,259,158,404 | 6,408,037,477 |
| Net amounts of policies become claims..... \$ | 57,752,647    | 55,477,239    | 53,882,595    | 53,798,438    | 58,086,634    |
| Amounts of premiums..... \$                   | 216,132,957   | 206,954,224   | 202,583,536   | 200,157,567   | 200,541,265   |
| Claims paid <sup>1</sup> ..... \$             | 60,093,586    | 58,754,479    | 56,063,270    | 56,829,085    | 60,433,679    |
| <b>Unsettled Claims—</b>                      |               |               |               |               |               |
| Not resisted..... \$                          | 5,567,933     | 5,508,049     | 6,308,598     | 6,090,129     | 7,523,849     |
| Resisted..... \$                              | 279,356       | 322,243       | 253,853       | 184,525       | 199,307       |

<sup>1</sup> Death claims, matured endowments, and disability claims.

## 11.—Ordinary and Industrial Life Insurance Policies in Force and Issued in Canada by Companies Operating under Dominion Registration, 1936.

| Type of Policy and Nationality of Company. | Newly Issued.  |                    |                             | In Force.        |                      |                             |
|--|----------------|--------------------|-----------------------------|------------------|----------------------|-----------------------------|
|  | Number.        | Total Amount.      | Average Amount of a Policy. | Number.          | Total Amount.        | Average Amount of a Policy. |
|  |                | \$                 | \$                          |                  | \$                   | \$                          |
| <b>Ordinary Policies—</b>                  |                |                    |                             |                  |                      |                             |
| Canadian companies.....                    | 158,380        | 350,841,397        | 2,272                       | 1,662,271        | 3,841,729,412        | 2,311                       |
| British companies.....                     | 7,218          | 16,148,633         | 2,237                       | 43,237           | 115,985,940          | 2,683                       |
| Foreign companies.....                     | 71,210         | 113,561,015        | 1,595                       | 727,606          | 1,186,580,340        | 1,631                       |
| <b>Totals, All Companies</b>               | <b>236,814</b> | <b>489,551,065</b> | <b>2,067</b>                | <b>2,433,114</b> | <b>5,144,295,692</b> | <b>2,114</b>                |
| <b>Industrial Policies—</b>                |                |                    |                             |                  |                      |                             |
| Canadian companies.....                    | 113,980        | 47,110,107         | 413                         | 402,442          | 154,813,379          | 375                         |
| British companies.....                     | 16,285         | 3,529,308          | 217                         | 105,370          | 16,971,207           | 161                         |
| Foreign companies.....                     | 451,122        | 106,798,697        | 235                         | 3,379,913        | 652,745,203          | 193                         |
| <b>Totals, All Companies</b>               | <b>581,387</b> | <b>156,438,112</b> | <b>269</b>                  | <b>3,977,725</b> | <b>854,529,789</b>   | <b>215</b>                  |

## 12.—Insurance Death Rates in Canada, 1933-36.

| Type of Insurer.               | Number of Policies Exposed to Risk. | Number of Policies Terminated by Death. | Death Rate per 1,000. | Number of Policies Exposed to Risk. | Number of Policies Terminated by Death. | Death Rate per 1,000. |
|--------------------------------|-------------------------------------|---|-----------------------|-------------------------------------|---|-----------------------|
|                                | 1933.                               |   |                       | 1934.                               |   |                       |
| All companies, ordinary.....   | 2,462,073                           | 14,301                                  | 5.8                   | 2,417,547                           | 14,040                                  | 5.8                   |
| All companies, industrial..... | 4,024,931                           | 26,855                                  | 6.7                   | 3,946,152                           | 26,333                                  | 6.7                   |
| Fratern benefit societies..... | 207,843                             | 3,068                                   | 14.8                  | 204,078                             | 3,062                                   | 15.0                  |
| <b>Totals.....</b>             | <b>6,695,447</b>                    | <b>44,224</b>                           | <b>6.6</b>            | <b>6,568,497</b>                    | <b>43,435</b>                           | <b>6.6</b>            |
|                                | 1935.                               |   |                       | 1936.                               |   |                       |
| All companies, ordinary.....   | 2,408,858                           | 14,473                                  | 6.0                   | 2,433,360                           | 15,108                                  | 6.2                   |
| All companies, industrial..... | 3,961,037                           | 26,701                                  | 6.7                   | 3,970,250                           | 27,103                                  | 6.8                   |
| Fratern benefit societies..... | 195,827                             | 3,218                                   | 16.4                  | 202,181                             | 3,234                                   | 16.2                  |
| <b>Totals.....</b>             | <b>6,565,722</b>                    | <b>44,392</b>                           | <b>6.8</b>            | <b>6,611,791</b>                    | <b>45,445</b>                           | <b>6.9</b>            |

### 13.—Assets of Canadian Life Companies with Dominion Registration, and Assets in Canada of Life Companies other than Canadian Companies, 1932-36.

NOTE.—Certain British companies transacting fire insurance in Canada transact also life insurance in Canada, and inasmuch as a separation of assets has not been made between these two classes, their assets in Canada are not included here, but are included in the assets of British companies shown in Table 3 on p. 953.

| Item.  | 1932.                | 1933.                | 1934.                | 1935.                | 1936.                |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|
|  | \$                   | \$                   | \$                   | \$                   | \$                   |
| <b>Canadian Companies—<sup>1</sup></b>         |                      |                      |                      |                      |                      |
| Real estate.....                               | 58,337,559           | 63,073,581           | 69,379,472           | 75,503,841           | 80,405,129           |
| Real estate held under agreements of sale..... | 13,037,063           | 13,932,171           | 14,538,336           | 15,134,489           | 17,658,093           |
| Loans on real estate.....                      | 335,551,887          | 323,148,767          | 310,791,592          | 300,707,103          | 297,992,429          |
| Loans on collaterals.....                      | 133,165              | 138,574              | 128,010              | 809,128              | 223,113              |
| Policy loans.....                              | 295,133,868          | 294,299,076          | 284,406,595          | 272,158,063          | 261,172,055          |
| Stocks, bonds and debentures.....              | 853,612,304          | 855,174,008          | 993,039,478          | 1,100,025,516        | 1,250,954,287        |
| Interest and rent due and accrued.....         | 31,683,251           | 31,780,768           | 31,591,490           | 31,115,498           | 29,413,032           |
| Cash on hand and in banks.....                 | 17,130,234           | 31,424,004           | 32,249,720           | 40,240,011           | 31,289,540           |
| Outstanding and deferred premiums.....         | 47,408,313           | 44,596,013           | 42,499,654           | 41,464,834           | 40,578,240           |
| Other assets.....                              | 3,067,348            | 3,475,114            | 2,625,116            | 3,585,954            | 3,127,374            |
| <b>Totals, Assets<sup>2</sup>.....</b>         | <b>1,655,104,637</b> | <b>1,691,041,674</b> | <b>1,781,307,469</b> | <b>1,880,745,026</b> | <b>2,013,204,133</b> |
| <b>British Companies—</b>                      |                      |                      |                      |                      |                      |
| Real estate.....                               | 766,285              | 765,390              | 892,058              | 933,158              | 1,049,529            |
| Real estate held under agreements of sale..... | 68,268               | 72,328               | 37,813               | 31,304               | 24,010               |
| Loans on real estate.....                      | 12,120,340           | 11,099,041           | 11,325,817           | 10,897,000           | 10,161,001           |
| Loans on collaterals.....                      | 10,773               | 13,850               | 13,610               | 35,510               | 13,510               |
| Policy loans.....                              | 4,846,743            | 4,061,193            | 4,568,307            | 4,307,499            | 4,041,957            |
| Stocks, bonds and debentures.....              | 40,807,801           | 42,767,734           | 52,949,097           | 51,151,817           | 53,390,211           |
| Interest and rent due and accrued.....         | 607,922              | 620,861              | 638,897              | 594,190              | 575,502              |
| Cash on hand and in banks.....                 | 812,017              | 845,193              | 1,175,226            | 987,736              | 832,282              |
| Outstanding and deferred premiums.....         | 540,977              | 505,370              | 480,535              | 451,784              | 476,225              |
| Other assets.....                              | 14,468               | 20,673               | 18,482               | 26,204               | 17,215               |
| <b>Totals, Assets in Canada.....</b>           | <b>60,595,597</b>    | <b>61,971,633</b>    | <b>72,106,432</b>    | <b>69,399,292</b>    | <b>71,078,642</b>    |
| <b>Foreign Companies—</b>                      |                      |                      |                      |                      |                      |
| Real estate.....                               | 2,562,060            | 2,581,001            | 2,588,944            | 5,209,027            | 5,090,573            |
| Real estate held under agreements of sale..... |                      |                      |                      |                      |                      |
| Loans on real estate.....                      | 30,339,447           | 29,550,019           | 23,007,828           | 26,619,081           | 24,981,149           |
| Loans on collaterals.....                      |                      |                      |                      |                      |                      |
| Policy loans.....                              | 57,986,328           | 60,478,765           | 61,198,305           | 60,095,186           | 60,290,544           |
| Stocks, bonds and debentures.....              | 340,762,120          | 340,788,017          | 372,056,124          | 376,622,542          | 391,066,447          |
| Interest and rent due and accrued.....         | 6,000,489            | 6,224,729            | 6,292,263            | 6,196,987            | 6,203,412            |
| Cash on hand and in banks.....                 | 6,018,138            | 6,641,751            | 8,114,505            | 8,396,188            | 9,918,566            |
| Outstanding and deferred premiums.....         | 8,812,455            | 8,538,095            | 8,676,335            | 8,510,123            | 8,320,073            |
| Other assets.....                              | 7,200                | 6,527                | 8,747                | 10,119               | 11,549               |
| <b>Totals, Assets in Canada.....</b>           | <b>452,488,237</b>   | <b>454,809,504</b>   | <b>486,943,611</b>   | <b>492,819,853</b>   | <b>506,494,313</b>   |

<sup>1</sup> A detailed classification of assets showing investments of Canadian companies and giving the percentage of the total in each group and sub-group for 1935 and 1936 will be found at p. iii of the report of the Superintendent of Insurance, Vol. II, for the year ended Dec. 31, 1936. <sup>2</sup> The figures in the table give the book values. The market (or authorized) values of these assets were: \$1,632,528,293 in 1932, \$1,073,787,245 in 1933, \$1,769,443,643 in 1934, \$1,868,987,055 in 1935, and \$2,012,215,355 in 1936. <sup>3</sup> None reported.

### 14.—Liabilities of Canadian Life Companies with Dominion Registration, and Liabilities in Canada of Life Companies other than Canadian Companies, 1932-36.

| Item.  | 1932.                | 1933.                | 1934.                | 1935.                | 1936.                |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|
|  | \$                   | \$                   | \$                   | \$                   | \$                   |
| <b>Canadian Companies—</b>                             |                      |                      |                      |                      |                      |
| Unsettled claims.....                                  | 11,364,699           | 12,100,194           | 11,871,872           | 13,050,445           | 14,181,886           |
| Net reinsurance reserve.....                           | 1,382,510,308        | 1,435,125,109        | 1,505,819,533        | 1,558,098,044        | 1,687,181,453        |
| Sundry liabilities.....                                | 195,435,568          | 193,018,372          | 208,560,357          | 219,453,533          | 240,686,777          |
| <b>Totals, Liabilities, not including Capital.....</b> | <b>1,589,310,575</b> | <b>1,630,243,675</b> | <b>1,724,547,762</b> | <b>1,820,602,022</b> | <b>1,948,050,146</b> |
| Surplus of assets, excluding capital.....              | 43,217,718           | 43,543,570           | 44,895,881           | 48,385,043           | 64,165,209           |
| Capital stock paid up.....                             | 10,917,714           | 10,849,899           | 10,851,079           | 10,714,606           | 11,091,148           |

**14.—Liabilities of Canadian Life Companies with Dominion Registration, and Liabilities in Canada of Life Companies other than Canadian Companies, 1932-36—concluded.**

| Item.  | 1932.                   | 1933.                   | 1934.              | 1935.              | 1936.              |
|--|-------------------------|-------------------------|--------------------|--------------------|--------------------|
|  | \$                      | \$                      | \$                 | \$                 | \$                 |
| <b>British Companies—<sup>1</sup></b>                              |                         |                         |                    |                    |                    |
| Unsettled claims.....  | 342,715                 | 257,546                 | 445,052            | 406,822            | 453,075            |
| Net reinsurance reserve.....                                       | 33,477,700              | 33,164,530              | 32,732,196         | 34,193,194         | 35,044,871         |
| Sundry liabilities.....  | 1,086,249               | 572,033                 | 496,863            | 553,201            | 715,504            |
| <b>Totals, Liabilities, not including Capital<sup>1</sup>.....</b> | <b>34,906,724</b>       | <b>33,949,109</b>       | <b>33,675,011</b>  | <b>35,215,217</b>  | <b>36,213,450</b>  |
| Surplus of assets in Canada.....                                   | 25,665,188              | 28,028,830              | 38,431,736         | 34,190,390         | 34,872,208         |
| <b>Foreign Companies—<sup>1</sup></b>                              |                         |                         |                    |                    |                    |
| Unsettled claims.....  | 1,309,988               | 1,363,223               | 1,428,789          | 1,523,458          | 1,700,718          |
| Net reinsurance reserve.....                                       | 363,342,701             | 368,550,207             | 379,364,705        | 391,152,923        | 404,775,817        |
| Sundry liabilities.....  | 19,748,735              | 19,350,178              | 19,250,375         | 19,161,479         | 21,518,845         |
| <b>Totals, Liabilities, not including Capital<sup>1</sup>.....</b> | <b>384,401,424</b>      | <b>389,249,633</b>      | <b>400,043,869</b> | <b>411,837,860</b> | <b>427,904,380</b> |
| Surplus of assets in Canada.....                                   | 68,086,753 <sup>1</sup> | 65,559,811 <sup>1</sup> | 86,899,742         | 80,481,093         | 78,400,933         |

<sup>1</sup> Liabilities in Canada.
**15.—Totals of Cash Income and Expenditure of Canadian Life Companies with Dominion Registration, and Cash Income and Expenditure in Canada of British and Foreign Life Companies, by Principal Items, 1932-35.**

| Item.   | 1932.              | 1933.              | 1934.              | 1935.              | 1936.              |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|
|   | \$                 | \$                 | \$                 | \$                 | \$                 |
| <b>INCOME.</b>                                    |                    |                    |                    |                    |                    |
| <b>Canadian Companies—<sup>1</sup></b>            |                    |                    |                    |                    |                    |
| Net premium income (including sinking funds)..... | 268,073,016        | 248,064,820        | 247,688,370        | 242,592,120        | 241,855,580        |
| Consideration for annuities.....                  | 18,818,166         | 27,896,580         | 38,411,121         | 24,082,052         | 25,508,449         |
| Interest, dividends and rents.....                | 73,702,893         | 72,963,331         | 76,764,793         | 79,205,749         | 84,402,395         |
| Sundry items.....                                 | 31,273,618         | 30,446,735         | 30,242,669         | 37,822,442         | 53,954,295         |
| <b>Totals, Cash Income<sup>1</sup>.....</b>       | <b>391,867,693</b> | <b>379,460,472</b> | <b>393,096,923</b> | <b>384,303,363</b> | <b>405,720,719</b> |
| <b>British Companies—<sup>2</sup></b>             |                    |                    |                    |                    |                    |
| Net premium income (including sinking funds)..... | 3,823,905          | 3,674,124          | 3,685,576          | 4,735,989          | 3,978,180          |
| Consideration for annuities.....                  | 31,891             | 130,674            | 150,100            | 236,353            | 416,589            |
| Interest, dividends and rents.....                | 2,488,544          | 2,278,363          | 2,577,378          | 2,627,766          | 2,461,065          |
| Sundry items.....                                 | 125,961            | 142,771            | 123,065            | 93,109             | 200,745            |
| <b>Totals, Cash Income<sup>2</sup>.....</b>       | <b>6,470,301</b>   | <b>6,325,932</b>   | <b>6,536,118</b>   | <b>7,693,217</b>   | <b>7,056,579</b>   |
| <b>Foreign Companies—<sup>2</sup></b>             |                    |                    |                    |                    |                    |
| Net premium income.....                           | 73,506,927         | 69,589,247         | 67,493,336         | 66,710,361         | 67,307,639         |
| Consideration for annuities.....                  | 739,367            | 969,074            | 1,197,298          | 1,272,035          | 1,609,131          |
| Interest, dividends and rents.....                | 25,043,772         | 25,074,984         | 25,190,898         | 24,569,493         | 21,456,301         |
| Sundry items.....                                 | 2,075,486          | 2,404,369          | 3,191,575          | 2,706,000          | 3,238,487          |
| <b>Totals, Cash Income<sup>2</sup>.....</b>       | <b>101,365,582</b> | <b>98,637,674</b>  | <b>97,673,107</b>  | <b>95,257,879</b>  | <b>93,611,558</b>  |
| <b>EXPENDITURE.</b>                               |                    |                    |                    |                    |                    |
| <b>Canadian Companies—<sup>1</sup></b>            |                    |                    |                    |                    |                    |
| Payments to policyholders.....                    | 240,290,876        | 232,651,353        | 210,376,762        | 194,269,254        | 190,307,438        |
| General expenses.....                             | 62,764,123         | 55,818,105         | 54,521,943         | 54,788,898         | 56,078,411         |
| Dividends to stockholders.....                    | 1,284,255          | 978,401            | 1,032,675          | 1,042,022          | 1,123,781          |
| Other disbursements.....                          | 27,673,482         | 22,083,535         | 19,315,106         | 21,170,341         | 23,463,163         |
| <b>Totals, Expenditure<sup>1</sup>.....</b>       | <b>332,012,736</b> | <b>311,531,394</b> | <b>285,246,491</b> | <b>271,370,515</b> | <b>271,572,793</b> |
| Excess of income over expenditure.....            | 59,854,957         | 67,929,078         | 107,850,432        | 113,032,848        | 134,147,926        |

<sup>1</sup> Includes income on business outside of Canada.<sup>2</sup> Income in Canada.

**15.—Totals of Cash Income and Expenditure of Canadian Life Companies with Dominion Registration, and Cash Income and Expenditure in Canada of British and Foreign Life Companies, by Principal Items, 1932-36—concluded.**

| Item.                                       | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
|   | \$                | \$                | \$                | \$                | \$                |
| <b>EXPENDITURE—concluded.</b>               |                   |                   |                   |                   |                   |
| <b>British Companies—<sup>1</sup></b>       |                   |                   |                   |                   |                   |
| Payments to policyholders.....              | 3,982,297         | 4,115,046         | 3,348,684         | 3,791,435         | 3,373,878         |
| General expenses.....                       | 1,076,476         | 1,057,672         | 1,113,153         | 1,140,283         | 1,267,760         |
| Other disbursements.....                    | 79,529            | 178,513           | 102,629           | 122,985           | 80,687            |
| <b>Totals, Expenditure<sup>1</sup>.....</b> | <b>5,138,302</b>  | <b>5,351,831</b>  | <b>4,564,466</b>  | <b>5,063,703</b>  | <b>4,723,325</b>  |
| Excess of income over expenditure.....      | 1,331,999         | 974,101           | 1,971,653         | 2,629,514         | 2,328,254         |
| <b>Foreign Companies—<sup>2</sup></b>       |                   |                   |                   |                   |                   |
| Payments to policyholders.....              | 58,311,755        | 60,200,889        | 55,176,652        | 53,897,929        | 53,586,710        |
| General expenses.....                       | 14,310,784        | 13,511,680        | 13,342,997        | 13,617,539        | 13,494,715        |
| Other disbursements.....                    | 1,995,514         | 2,018,185         | 1,888,402         | 1,790,883         | 1,914,591         |
| <b>Totals, Expenditure<sup>2</sup>.....</b> | <b>74,618,053</b> | <b>75,730,754</b> | <b>70,407,751</b> | <b>69,306,351</b> | <b>68,996,016</b> |
| Excess of income over expenditure.....      | 26,747,499        | 22,246,920        | 26,665,356        | 25,951,528        | 24,615,542        |

<sup>1</sup> Includes income on business outside of Canada.

<sup>2</sup> Expenditure in Canada.

**Life Insurance Effected through Fraternal Benefit Societies.**—In addition to life insurance, some fraternal benefit societies grant other insurance benefits to members, notably sickness benefits, but these are relatively unimportant. Table 16 gives statistics of life insurance effected with fraternal benefit societies by Canadian members, together with statistics of assets, liabilities, income and expenditure relating to the whole business of Canadian societies and to the business in Canada of foreign societies. The rates charged by these societies are computed to be sufficient to provide the benefits granted, having regard for actuarial principles. Each benefit fund of every society must be valued annually by a qualified actuary (Fellow, by examination, of the Institute of Actuaries, London; of the Faculty of Actuaries in Scotland; of the Actuarial Society of America; or of the American Institute of Actuaries); and unless the actuary certifies to the solvency of each fund a readjustment of rates or benefits must be made. The statistics in the first part of this table relate to the Canadian societies reporting to the Insurance Department of the Dominion Government. These numbered 9 in 1936, *viz.*, Alliance Nationale, Ancient Order of Foresters, Artisans Canadiens Français, Canadian Woodmen of the World, Catholic Mutual Benefit Association, Commercial Travellers' Association of Canada, the Grand Orange Lodge of British America, Independent Order of Foresters, and Ukrainian Mutual Benefit Association of St. Nicholas.

Under an amendment to the Insurance Act, effective Jan. 1, 1920, all foreign fraternal benefit societies were required to obtain Dominion authority precedent to transacting business in Canada, but any such societies which at that date were transacting business under provincial licences, while forbidden to accept new members, were permitted to continue all necessary transactions in respect of the insurance of their then members. Most of these societies have since obtained Dominion authority to transact business, also some foreign societies which had not previously been licensed by the provinces. Of both classes of society, 27 transacted business in Canada in 1936, *viz.*, Aid Association for Lutherans, Association Canado-Américaine, Brotherhood of R. R. Trainmen Insurance Department, Catholic Order of Foresters, Commercial Travelers' Mutual Accident Association of America (accident business only), Croatian Fraternal Union, Expressmen's Mutual Life Insurance

Company (which is continuing the business issued by the Expressmen's Mutual Benefit Association), First Catholic Slovak Ladies Union, First Catholic Slovak Union, Jewish National Workers' Alliance, Knights of Columbus, Ladies' Catholic Benevolent Association, Lutheran Brotherhood, Lutheran Mutual Aid Society, Maccabees, Ministers Life and Casualty Union, Modern Woodmen of America, National Fraternal Society of the Deaf, National Slovak Society of U.S.A., Royal Arcanum, Slovene National Benefit Society, Sons of Norway, United Commercial Travelers of America (accident business only), Woman's Benefit Association, Women's Catholic Order of Foresters, Workmen's Circle, and Yeomen Mutual Life Insurance Company (which is continuing the business issued by the Brotherhood of American Yeomen).

**16.—Statistics of Insurance of Fraternal Benefit Societies Reporting to the Dominion Insurance Department, 1932-36.**

| Item.   | 1932.             | 1933.             | 1934.             | 1935.             | 1936.             |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
| <b>CANADIAN SOCIETIES.</b><br>(Life Insurance in Canada.) |                   |                   |                   |                   |                   |
| Numbers of certificates effected.....                     | 9,661             | 9,836             | 16,167            | 11,382            | 9,356             |
| Numbers of certificates become claims...                  | 3,272             | 3,202             | 3,021             | 2,907             | 2,946             |
|   | \$                | \$                | \$                | \$                | \$                |
| Amounts paid by members.....                              | 2,707,106         | 2,460,916         | 2,371,386         | 1,882,790         | 1,802,479         |
| Amounts of certificates effected.....                     | 7,447,664         | 7,895,886         | 9,760,802         | 9,335,867         | 9,343,950         |
| Net amounts in force.....                                 | 123,608,742       | 118,005,740       | 116,738,500       | 106,882,394       | 103,673,233       |
| Amounts of certificates become claims...                  | 2,978,092         | 2,806,586         | 2,704,716         | 2,569,401         | 2,562,490         |
| Benefits paid.....  | 3,474,082         | 3,576,423         | 3,458,208         | 3,381,297         | 3,505,486         |
| Unsettled Claims—   |                   |                   |                   |                   |                   |
| Not resisted.....   | 202,585           | 189,781           | 217,026           | 189,672           | 227,166           |
| Resisted.....   | 3,500             | 1,760             | 7,000             | 10,000            | 5,000             |
| Amounts Terminated by—                                    |                   |                   |                   |                   |                   |
| Death.....  | 2,205,094         | 2,050,143         | 2,067,427         | 1,944,665         | 1,998,792         |
| Surrender, expiry, lapse, etc.....                        | 14,288,163        | 13,851,151        | 13,175,227        | 14,200,452        | 11,880,571        |
| Totals, Terminated.....                                   | 16,493,247        | 15,910,294        | 15,242,654        | 16,235,117        | 13,385,303        |
| <b>Assets (whole business)—</b>                           |                   |                   |                   |                   |                   |
| Real estate.....  | 5,494,042         | 7,033,220         | 8,585,993         | 10,397,022        | 11,183,500        |
| Loans on real estate.....                                 | 22,067,172        | 21,189,042        | 18,515,117        | 15,554,444        | 14,204,277        |
| Policy loans.....   | 10,361,483        | 10,832,167        | 10,255,490        | 9,694,277         | 9,075,259         |
| Stocks, bonds and debentures.....                         | 40,649,374        | 39,673,098        | 40,877,813        | 41,510,080        | 43,744,256        |
| Cash on hand and in banks.....                            | 964,143           | 768,455           | 1,287,571         | 1,597,591         | 1,389,769         |
| Interest and rent due and accrued.....                    | 1,047,379         | 1,160,153         | 1,083,875         | 875,755           | 872,229           |
| Dues from members.....                                    | 347,324           | 224,523           | 358,250           | 206,475           | 223,175           |
| Other assets.....   | 2,562,840         | 1,756,630         | 1,547,646         | 1,387,957         | 1,227,336         |
| <b>Totals, Assets<sup>1</sup>.....</b>                    | <b>83,513,757</b> | <b>82,186,967</b> | <b>82,511,695</b> | <b>81,263,610</b> | <b>81,914,921</b> |
| <b>Liabilities (whole business)—</b>                      |                   |                   |                   |                   |                   |
| Claims, unsettled.....                                    | 467,986           | 287,377           | 328,645           | 262,719           | 310,891           |
| Reserves.....   | 69,184,229        | 67,413,206        | 67,004,964        | 64,959,678        | 64,861,647        |
| Other liabilities.....                                    | 4,764,128         | 3,672,270         | 3,808,321         | 4,386,740         | 5,339,604         |
| <b>Totals, Liabilities.....</b>                           | <b>74,416,343</b> | <b>71,372,853</b> | <b>71,141,930</b> | <b>69,609,137</b> | <b>70,512,142</b> |
| <b>Income (whole business)—</b>                           |                   |                   |                   |                   |                   |
| Assessments.....  | 5,730,869         | 5,183,021         | 5,075,066         | 4,006,059         | 3,913,675         |
| Fees and dues.....  | 471,719           | 402,595           | 474,741           | 1,227,896         | 1,290,622         |
| Interest and rents.....                                   | 3,822,615         | 3,556,741         | 3,647,972         | 3,582,387         | 3,430,954         |
| Other receipts.....                                       | 50,217            | 98,626            | 139,281           | 213,156           | 375,074           |
| <b>Totals, Income.....</b>                                | <b>10,081,420</b> | <b>9,300,983</b>  | <b>9,337,660</b>  | <b>8,976,498</b>  | <b>9,008,325</b>  |
| <b>Expenditure (whole business)—</b>                      |                   |                   |                   |                   |                   |
| Paid to members.....                                      | 7,379,724         | 7,460,236         | 6,508,369         | 6,619,470         | 6,589,420         |
| General expenses.....                                     | 1,658,318         | 1,606,328         | 1,448,178         | 1,338,747         | 1,415,766         |
| Other expenditures.....                                   | 204,442           | 124,464           | 90,045            | 109,240           | 169,567           |
| <b>Totals, Expenditure.....</b>                           | <b>9,302,484</b>  | <b>9,191,018</b>  | <b>8,050,592</b>  | <b>8,156,466</b>  | <b>8,165,753</b>  |
| Excess of income over expenditure.....                    | 778,936           | 109,965           | 1,287,068         | 820,032           | 842,572           |

<sup>1</sup> The figures given are the book values. The market (or authorized) values of these assets were: \$82,894,579 in 1932, \$80,585,739 in 1933, \$80,058,350 in 1934, \$79,520,428 in 1935, and \$80,619,838 in 1936.



**16.—Statistics of Insurance of Fraternal Benefit Societies Reporting to the Dominion Insurance Department, 1932-36—concluded.**

| Item.  | 1932.            | 1933.            | 1934.            | 1935.            | 1936.             |
|--|------------------|------------------|------------------|------------------|-------------------|
| <b>FOREIGN SOCIETIES.</b><br>(Life Insurance in Canada.) |                  |                  |                  |                  |                   |
| Numbers of certificates effected.....                    | 4,198            | 3,199            | 3,627            | 4,060            | 6,023             |
| Numbers of certificates become claims...                 | 790              | 725              | 804              | 937              | 1,018             |
|  | \$               | \$               | \$               | \$               | \$                |
| Amounts paid by members.....                             | 1,010,579        | 936,918          | 965,081          | 979,666          | 1,438,081         |
| Amounts of certificates effected.....                    | 4,308,350        | 3,569,550        | 3,437,570        | 3,836,683        | 5,350,134         |
| Net amounts in force.....                                | 53,299,968       | 52,707,770       | 50,617,201       | 50,642,333       | 64,912,851        |
| Amounts of certificates become claims...                 | 769,851          | 771,704          | 802,247          | 926,068          | 1,114,864         |
| Benefits paid.....                                       | 918,553          | 901,237          | 1,012,918        | 1,015,819        | 1,104,720         |
| Unsettled Claims—  |                  |                  |                  |                  |                   |
| Not resisted.....  | 64,253           | 95,742           | 69,263           | 68,877           | 144,723           |
| Resisted.....  | —                | —                | 384              | —                | —                 |
| Amounts Terminated by—                                   |                  |                  |                  |                  |                   |
| Death.....   | 702,685          | 712,768          | 660,431          | 782,952          | 872,797           |
| Surrender, expiry, lapse, etc.....                       | 7,201,921        | 5,660,344        | 5,640,029        | 4,887,648        | 5,297,111         |
| Totals, Terminated.....                                  | 7,904,606        | 6,373,112        | 6,300,460        | 5,670,600        | 6,169,908         |
| <b>Assets (Canadian business)—</b>                       |                  |                  |                  |                  |                   |
| Real estate.....   | —                | —                | —                | —                | —                 |
| Loans on real estate.....                                | 6,275            | 6,275            | 6,275            | 6,275            | 20,250            |
| Policy loans.....  | 279,866          | 426,319          | 463,612          | 515,440          | 617,839           |
| Stocks, bonds and debentures.....                        | 2,943,642        | 3,137,522        | 3,721,489        | 4,341,378        | 5,580,268         |
| Cash on hand and in banks.....                           | 300,433          | 291,330          | 278,463          | 386,185          | 359,497           |
| Interest and rent due and accrued.....                   | 37,019           | 37,569           | 51,981           | 58,400           | 70,349            |
| Dues from members.....                                   | 115,382          | 122,136          | 102,827          | 108,166          | 106,655           |
| Other assets.....  | -2,572           | 2                | 58               | 179              | 16                |
| <b>Totals, Assets.....</b>                               | <b>3,689,045</b> | <b>4,021,153</b> | <b>4,624,705</b> | <b>5,415,993</b> | <b>6,763,844</b>  |
| <b>Liabilities (Canadian business)—</b>                  |                  |                  |                  |                  |                   |
| Claims unsettled.....                                    | 91,250           | 118,079          | 94,681           | 94,816           | 189,947           |
| Reserves.....  | 8,550,606        | 9,132,448        | 9,268,650        | 9,780,781        | 10,646,026        |
| Other liabilities.....                                   | 32,091           | 49,586           | 53,173           | 81,137           | 221,596           |
| <b>Totals, Liabilities.....</b>                          | <b>8,673,947</b> | <b>9,300,113</b> | <b>9,416,504</b> | <b>9,962,734</b> | <b>11,057,569</b> |
| <b>Income (Canadian business)—</b>                       |                  |                  |                  |                  |                   |
| Assessments.....   | 1,121,650        | 1,041,419        | 1,088,497        | 1,126,971        | 1,503,970         |
| Fees and dues.....                                       | 246,649          | 236,640          | 211,021          | 179,500          | 304,217           |
| Interest and rents.....                                  | 130,880          | 139,769          | 118,186          | 154,376          | 190,179           |
| Other receipts.....                                      | 8,500            | 9,913            | 11,081           | 12,769           | 40,159            |
| <b>Totals, Income.....</b>                               | <b>1,507,688</b> | <b>1,427,741</b> | <b>1,428,785</b> | <b>1,473,616</b> | <b>2,128,525</b>  |
| <b>Expenditure (Canadian business)—</b>                  |                  |                  |                  |                  |                   |
| Paid to members.....                                     | 1,061,158        | 1,008,937        | 1,113,707        | 1,140,766        | 1,304,327         |
| General expenses.....                                    | 187,449          | 159,167          | 160,640          | 179,042          | 218,171           |
| Other expenditures.....                                  | 7,162            | 7,905            | 7,092            | 6,379            | 13,877            |
| <b>Totals, Expenditure.....</b>                          | <b>1,255,769</b> | <b>1,171,009</b> | <b>1,281,439</b> | <b>1,326,187</b> | <b>1,536,375</b>  |
| Excess of income over expenditure.....                   | 251,919          | 256,732          | 147,346          | 147,429          | 592,150           |

**Summary of Life Insurance in Canada, 1936.**—In addition to the business transacted by life insurance companies registered by the Dominion, a considerable volume of business is also transacted by companies licensed by the provinces. Statistics of these provincial companies have been collected since 1915 by the Department of Insurance. Table 17, showing policies effected and in force, premiums received, and losses paid, in Canada in 1936, summarizes the volume of business done by both life companies and fraternal societies, whether registered by the Dominion or licensed by the provinces.

## 17.—Dominion and Provincial Life Insurance in Canada, 1936.

| Class of Licensee.  | New Policies<br>Effectuated<br>(net). | Net<br>In Force<br>Dec. 31. | Net<br>Premiums<br>Received. | Net<br>Claims<br>Paid. |
|---|---------------------------------------|-----------------------------|------------------------------|------------------------|
|   | \$                                    | \$                          | \$                           | \$                     |
| Dominion Licensees—   |                                       |                             |                              |                        |
| (a) Life companies.....   | 618,264,819                           | 6,403,037,477               | 200,541,265                  | 60,433,670             |
| (b) Fraternal.....  | 12,694,084                            | 168,586,134                 | 3,240,560                    | 3,571,527              |
| <b>Totals for Dominion Companies.....</b>   | <b>630,958,903</b>                    | <b>6,571,623,611</b>        | <b>203,781,825</b>           | <b>64,005,206</b>      |
| Provincial Licensees—   |                                       |                             |                              |                        |
| (a) Provincial companies within province<br>by which they are incorporated—                 |                                       |                             |                              |                        |
| (1) Life companies.....   | 8,140,400                             | 37,172,383                  | 1,076,426                    | 376,085                |
| (2) Fraternal.....  | 2,773,122                             | 40,000,581                  | 942,098                      | 1,061,810              |
| (b) Provincial companies in province<br>other than those by which they are<br>incorporated— |                                       |                             |                              |                        |
| (1) Life companies.....   | 2,935,708                             | 16,354,021                  | 330,478                      | 72,374                 |
| (2) Fraternal.....  | 3,733,416                             | 36,508,243                  | 667,122                      | 685,268                |
| <b>Totals for Provincial Companies....</b>  | <b>17,582,647</b>                     | <b>130,044,228</b>          | <b>2,025,124</b>             | <b>2,195,537</b>       |
| <b>Grand Totals.....</b>  | <b>648,541,550</b>                    | <b>6,701,667,839</b>        | <b>206,806,949</b>           | <b>66,200,743</b>      |

**Summary of Life Insurance in Force Out of Canada by Canadian Companies Registered by the Dominion Government.**—Tables 18 and 19 give summary statistics of insurance in force as at Dec. 31, 1936, in currencies other than Canadian, classified by companies and by the currencies in which business was written, respectively. The data are given in Canadian dollars, mainly at par rates of exchange for the countries concerned, but there are several exceptions where, for purposes of account, certain companies have converted foreign currencies at rates other than par, particularly where the current rate differs substantially from the par rate. The major part (over 62 p.c.) of the business was written in United States currency and over 23 p.c. in sterling. From another standpoint, over 32 p.c. was written in currency of British countries outside Canada and nearly 68 p.c. in currencies of foreign countries.

Canadian life companies operating under Dominion registration had, at Dec. 31, 1936, life insurance in force in countries outside Canada amounting to \$2,915,593,936. As shown in Table 19, insurance in force in currencies other than Canadian amounted to \$2,879,656,378. The difference between these figures is presumably the net amount of non-Canadian business transacted in Canadian currency. As against the total non-Canadian business, including annuity business, the foreign investments of Canadian life insurance companies as at Dec. 31, 1936, amounted to \$691,333,950.

Since the business in force in Canada of these companies at Dec. 31, 1936, amounted to \$4,256,850,150, the total business on their books, Canadian and non-Canadian, amounted to \$7,172,444,086. Thus over 40 p.c. of the total business in force was out of Canada. If to this total are added the amounts of life insurance in force in Canadian fraternal benefit societies registered by the Dominion Government (\$103,673,283 of Canadian, and \$98,384,103 of foreign business), the total business of Canadian companies and societies operating under Dominion registration reached the amount of \$7,374,501,472 at the end of 1936. On the assumption that all provincially-licensed companies and societies are Canadian and limit their business to Canada, then, adding the amount of their business in force in Canada (\$130,044,228), the grand total of net insurance in force in Canadian companies and societies, in and out of Canada, would amount to about \$7,504,545,700 at Dec. 31, 1936.

### 18.—Life Insurance in Force by Canadian Companies<sup>1</sup> Operating under Dominion Registration in Currencies other than Canadian, by Companies, 1936.

NOTE.—Figures are given in Canadian dollars mainly at par rates of exchange.

| Company.                 | Insurance in Force. |                      |                      | Reserves.                      |                                |                                |
|--------------------------|---------------------|----------------------|----------------------|--------------------------------|--------------------------------|--------------------------------|
|                          | British Currencies. | Foreign Currencies.  | Total.               | British.                       | Foreign.                       | Total.                         |
|                          | \$                  | \$                   | \$                   | \$                             | \$                             | \$                             |
| Canada.....              | 143,607,963         | 200,927,789          | 344,625,752          | 80,473,404 <sup>2</sup>        | 54,566,184 <sup>2</sup>        | 135,039,678 <sup>2</sup>       |
| Confederation.....       | 72,204,425          | 50,714,866           | 131,919,291          | 26,091,682                     | 10,944,546                     | 37,036,228                     |
| Continental.....         | 3,750               | 62,873               | 66,623               | 652                            | 14,188 <sup>2</sup>            | 14,840 <sup>2</sup>            |
| Crown.....               | 18,374,337          | 32,273,511           | 50,647,848           | 1,822,962                      | 2,662,680                      | 4,485,642                      |
| Dominion.....            | 2,316,799           | 6,846,345            | 9,163,144            | 293,845                        | 465,063                        | 758,908                        |
| Dominion of Canada.....  | 739,136             | 7,500                | 746,636              | 27,106                         | 7,171                          | 34,277                         |
| T. Eaton.....            | 19,000              | 29,000               | 48,000               | 6,476                          | 4,877                          | 11,353                         |
| Equitable of Canada..... | Nil                 | 875,761              | 875,761              | Nil                            | 121,715                        | 121,715                        |
| Great-West.....          | Nil                 | 95,397,097           | 95,397,097           | Nil                            | 12,762,499 <sup>2</sup>        | 12,762,499 <sup>2</sup>        |
| Imperial.....            | 16,154,801          | 27,891,845           | 44,046,646           | 3,931,415                      | 6,224,642                      | 10,156,057                     |
| London.....              | Nil                 | 2,331,593            | 2,331,593            | Nil                            | 379,312                        | 379,312                        |
| Manufacturers.....       | 112,421,473         | 128,070,196          | 240,491,669          | 24,316,607                     | 26,231,804                     | 50,548,501                     |
| Maritime.....            | 2,178,832           | 96,958               | 2,275,790            | 463,544                        | 9,578                          | 473,122                        |
| Monarch.....             | 26,750              | 10,890               | 37,140               | 4,901                          | 1,277                          | 6,178                          |
| Montreal.....            | 596,710             | 401,891              | 998,601              | 1,152                          | 63,224                         | 64,376                         |
| Mutual of Canada.....    | 879,759             | 12,904,713           | 13,784,472           | 123,252                        | 1,950,613                      | 2,073,865                      |
| North American.....      | 320,408             | 10,013,292           | 10,333,700           | 79,876                         | 2,171,478                      | 2,251,354                      |
| Northern.....            | 20,000              | 178,367              | 198,367              | 2,316                          | 29,649                         | 31,965                         |
| Sun.....                 | 556,351,743         | 1,375,316,506        | 1,931,668,249        | 222,973,798 <sup>2</sup>       | 279,845,121 <sup>2</sup>       | 502,818,919 <sup>2</sup>       |
| <b>Totals.....</b>       | <b>926,305,886</b>  | <b>1,953,350,492</b> | <b>2,879,656,378</b> | <b>360,613,078<sup>2</sup></b> | <b>398,455,711<sup>2</sup></b> | <b>759,068,789<sup>2</sup></b> |

<sup>1</sup> Excluding fraternal benefit societies.

<sup>2</sup> Includes reserves for annuities with annual payments aggregating: \$4,756,010 for vested and deferred annuities in the case of the Canada Life; \$1,000 for vested annuities in the case of the Continental Life; \$517,947 for vested and deferred annuities in the case of the Great West Life; and \$20,364,605 for vested and deferred annuities in the case of the Sun Life.

### 19.—Life Insurance in Force by Canadian Companies<sup>1</sup> Operating under Dominion Registration in Currencies other than Canadian, by Currencies, 1936.

| Currency.                    | Insurance in Force.  | Reserve.                       |
|------------------------------|----------------------|--------------------------------|
|                              | \$                   | \$                             |
| <b>British—</b>              |                      |                                |
| <b>Pounds—</b>               |                      |                                |
| Sterling.....                | 666,846,035          | 290,690,005                    |
| British West Indies.....     | 14,633,693           | 4,324,311                      |
| Palestine.....               | 65,074               | 2,066                          |
| South Africa.....            | 72,533,325           | 15,161,787                     |
| Southern Rhodesia.....       | 1,347,575            | 269,150                        |
| <b>Dollars—</b>              |                      |                                |
| British Guiana.....          | 1,044,680            | 86,714                         |
| British West Indies.....     | 13,310,340           | 3,186,795                      |
| Hong Kong.....               | 8,096,295            | 963,339                        |
| Straits Settlements.....     | 7,910,438            | 1,938,806                      |
| <b>Rupees—</b>               |                      |                                |
| British India.....           | 140,468,431          | 43,670,245                     |
| <b>Foreign—</b>              |                      |                                |
| Cordobas (Nicaragua).....    | 212,950              | 38,994                         |
| Dollars (China).....         | 10,760,939           | 2,768,494                      |
| Dollars (Shanghai).....      | 9,367,765            | 965,727                        |
| Dollars (United States)..... | 1,799,530,850        | 360,889,551                    |
| Florins (Netherlands).....   | 1,280,448            | 144,187                        |
| Francs (France).....         | 633,188              | 263,569                        |
| Francs (Switzerland).....    | 5,500                | 527                            |
| Guilders (Netherlands).....  | 10,148,454           | 2,238,380                      |
| Lire (Italy).....            | 2,630                | 58                             |
| Pesos (Argentina).....       | 29,041,775           | 5,255,567                      |
| Pesos (Chile).....           | 4,999,491            | 1,690,110                      |
| Pesos (Colombia).....        | 557,128              | 146,895                        |
| Pesos (Mexico).....          | 8,611,752            | 677,940                        |
| Pesos (Philippines).....     | 14,629,728           | 3,876,499                      |
| Pounds (Egypt).....          | 14,553,419           | 2,232,101                      |
| Sol Oros (Peru).....         | 3,939,572            | 1,277,615                      |
| Taels (Shanghai).....        | 338,650              | 21,585                         |
| Ticals (Siam).....           | 1,683,951            | 487,772                        |
| Yen (Japan).....             | 42,944,018           | 15,463,076                     |
| Miscellaneous.....           | 88,294               | 6,964                          |
| <b>Totals.....</b>           | <b>2,879,656,378</b> | <b>759,068,789<sup>2</sup></b> |

<sup>1</sup> Excluding fraternal benefit societies.

<sup>2</sup> See footnote 2 to Table 18.

### Section 3.—Miscellaneous Insurance.

Since 1875 the growth of insurance business other than fire and life has been steady. The report of the Superintendent of Insurance for the calendar year 1880 shows that the number of companies licensed for the transaction of accident, guarantee, plate glass, and steam boiler insurance—the only four classes of miscellaneous insurance then transacted—was 5, 3, 1, and 1, respectively. The report for the year 1936 shows that miscellaneous insurance in Canada now includes: accident, automobile, aviation, burglary, credit, earthquake, explosion, forgery, guarantee, hail, leakage, live-stock, steam boiler, title, tornado, weather insurance, etc. In 1880, 10 companies transacted business of the miscellaneous kind, but in 1936 such insurance was issued by 235 companies, of which 51 were Canadian, 63 British, and 121 foreign; 179 of these 235 companies also transacted fire insurance. In addition, 16 fraternal orders or societies carried on accident and sickness insurance as well as life insurance business and 2 fraternal orders or societies carried on accident insurance only.

**Accident Insurance.**—The first licence of this kind was issued to the Travelers' Co., of Hartford, Conn., in 1868. The first licence to a Canadian company was issued to the Accident Insurance Co. of Canada, which was organized in 1872 and commenced business in 1874. In 1927 life companies were empowered to include in life insurance policies additional insurance, payable only in event of death from accident, up to an amount not exceeding the amount payable in event of death from other causes, commonly known as 'the double indemnity benefit'. A large proportion of life insurance policies issued in recent years includes this benefit. Seventy-six companies transacted accident insurance in 1936.

**Automobile Insurance.**—This is now one of the most important branches of the miscellaneous class of insurance. Premiums increased from \$80,446 in 1910 to \$573,604 in 1915 and to \$18,260,176 in 1930; for 1936 they were \$13,510,431, showing a very slight increase as compared with 1935 and 26.0 p.c. decrease, compared with 1930. There has been an increase in the number of companies from 7 to 149 during the 26-year period.

**Plate Glass Insurance.**—Policies were first sold in Canada by the Metropolitan Plate Glass Insurance Co., a United States concern, which withdrew from Canada during 1882. The 75 companies operating in Canada in 1936 received premiums of \$465,436 and incurred losses of \$237,257, compared with premiums of \$491,347 and losses of \$240,546 for 1935.

**Burglary Insurance.**—In 1893 only one company issued burglary policies. A second followed in 1905 and in 1910 five companies were operating, while 74 companies sold this type of insurance during 1936. The premium income of these companies amounted in 1936 to \$1,345,343, and the losses incurred amounted to \$540,325.

**Hail Insurance.**—Insurance against hailstorms is a class of business of comparatively recent development in Canada. During the year 1936, 33 companies undertook this class of risk, the premiums written amounting to \$815,228, and the losses incurred to \$273,503. The total premiums for the 27 years during which this business has been carried on in Canada amounted to \$68,816,306 and the total losses paid to \$47,079,572.

**20.—Insurance by Companies Registered by the Dominion Government to Transact Business other than Fire and Life in Canada, by Classes of Insurance, 1936.**

| Class of Insurance.                                      | Premiums Received. | Losses Incurred. | Unsettled Claims. |           |
|--|--------------------|------------------|-------------------|-----------|
|  |                    |                  | Not Resisted.     | Resisted. |
|  | \$                 | \$               | \$                | \$        |
| Accident—  |                    |                  |                   |           |
| (1) Personal.....  | 3,013,065          | 1,212,206        | 577,481           | 43,035    |
| (2) Employers' liability and workmen's compensation..... | 488,449            | 198,079          | 867,469           | Nil       |
| (3) Other.....   | 1,649,633          | 558,321          | 589,772           | 8,292     |
| Combined accident and sickness.....                      | 1,845,491          | 1,099,378        | 266,614           | 6,532     |
| Falling aircraft.....                                    | 491                | Nil              | Nil               | Nil       |
| Automobile.....  | 13,510,431         | 7,618,002        | 3,816,522         | 153,960   |
| Aviation.....  | 30,316             | 15,474           | 3,144             | Nil       |
| Burglary.....  | 1,345,343          | 540,325          | 103,052           | 325       |
| Credit.....  | 171,809            | -6,100           | 132,411           | Nil       |
| Earthquake.....  | 5,897              | Nil              | Nil               | Nil       |
| Explosion.....   | 38,013             | -13              | Nil               | Nil       |
| Forgery.....   | 65,129             | -8,038           | 10,708            | Nil       |
| Fraud.....   | 11,955             | 3,870            | 595               | Nil       |
| Guarantee (fidelity).....                                | 1,092,295          | 277,448          | 225,417           | 9,037     |
| Guarantee (surety).....                                  | 761,953            | 37,122           | 178,854           | 136,899   |
| Hail.....  | 815,228            | 273,503          | 3,037             | Nil       |
| Inland transportation.....                               | 1,355,814          | 518,933          | 105,684           | 750       |
| Live-stock.....  | 26,767             | 18,800           | 5,734             | Nil       |
| Machinery.....   | 196,665            | 92,351           | 14,131            | Nil       |
| Personal property.....                                   | 130,077            | 58,167           | 5,289             | Nil       |
| Plate glass.....   | 466,436            | 237,257          | 24,070            | Nil       |
| Property.....  | 11,424             | 1,547            | 400               | Nil       |
| Sickness.....  | 1,417,688          | 926,567          | 351,801           | 2,550     |
| Steam boiler.....  | 438,954            | 27,151           | 23,059            | Nil       |
| Tornado.....   | 161,381            | 61,890           | 5,278             | Nil       |
| Weather.....   | 6,046              | 991              | 100               | Nil       |

**21.—Income and Expenditure, and Assets and Liabilities of Canadian Companies Operating under Dominion Registration doing Insurance Business other than Fire and Life, 1936.**

| Company.                            | Income.          | Expenditure.     | Excess of Income over Expenditure. | Assets.                | Liabilities. <sup>1</sup> | Excess of Assets over Liabilities. |
|-------------------------------------|------------------|------------------|------------------------------------|------------------------|---------------------------|------------------------------------|
|                                     | \$               | \$               | \$                                 | \$                     | \$                        | \$                                 |
| Boiler Inspection.....              | 358,986          | 351,390          | 7,596                              | 1,000,510              | 430,694                   | 569,816                            |
| Chartered Trust.....                | 545,828          | 470,815          | 75,013                             | 5,329,420 <sup>2</sup> | 4,091,213                 | 1,238,207                          |
| Confederation Life.....             | 61,193           | 47,626           | 13,567                             | 112,505                | 18,765                    | 96,740                             |
| T. Eaton General.....               | 14,838           | 13,978           | 860                                | 161,673                | 9,102                     | 152,571                            |
| Fidelity Insurance.....             | 223,811          | 236,056          | -12,245                            | 497,593                | 193,592                   | 314,001                            |
| Guarantee Co. of North America..... | 875,522          | 728,866          | 146,656                            | 4,971,109              | 1,556,729                 | 3,414,380                          |
| London Life.....                    | 233,935          | 220,853          | 13,082                             | 259,292                | 144,402                   | 144,890                            |
| Merchants' Casualty.....            | 290,477          | 343,919          | -44,442                            | 207,153                | 158,095                   | 48,458                             |
| North American Accident...          | 122,997          | 91,753           | 31,244                             | 575,617                | 34,065                    | 540,952                            |
| Protective Association.....         | 340,612          | 330,402          | 10,210                             | 321,500                | 145,344                   | 176,156                            |
| Royal Guardians.....                | 3,091            | 2,773            | 318                                | 21,038                 | 11,766                    | 9,272                              |
| <b>Totals.....</b>                  | <b>3,080,290</b> | <b>2,838,631</b> | <b>241,659</b>                     | <b>13,487,410</b>      | <b>6,781,967</b>          | <b>6,705,443</b>                   |

<sup>1</sup> Not including capital stock, with trust companies for investment.

<sup>2</sup> Including \$1,187,243 loans on collateral, and \$9,013 deposits

## 22.—Income and Expenditure in Canada of Companies, other than Canadian, doing Insurance Business other than Fire and Life, 1936.

| Company.                                 | Income.    |                                 |                        | Expenditure.         |                       |                        | Excess of Income over Expenditure. |
|--|------------|---------------------------------|------------------------|----------------------|-----------------------|------------------------|------------------------------------|
|  | Pre-miums. | Interest and Divi-dends Earned. | Total Income.          | Net Losses Incurred. | General Expendi-ture. | Total Expendi-ture.    |                                    |
|  | \$         | \$                              | \$                     | \$                   | \$                    | \$                     | \$                                 |
| Ætna Casualty.....                       | 36,965     | 4,792                           | 60,633                 | 26,258               | 25,757                | 52,015                 | 8,618                              |
| Ætna Life.....                           | 61,285     | 4,905                           | 66,190                 | 40,212               | 9,701                 | 49,913                 | 16,277                             |
| American and Foreign.....                | Nil        | 1,079                           | 1,079                  | Nil                  | 12                    | 13                     | 1,067                              |
| American Automobile Fire...              | 138,636    | Nil                             | 138,636                | 50,764               | 60,074                | 110,838                | 27,798                             |
| American Automobile.....                 | 472,942    | 127                             | 473,069                | 236,123              | 187,732               | 423,855                | 49,214                             |
| American Credit.....                     | 171,809    | 13,575                          | 185,384                | -0,100               | 80,718                | 74,018                 | 110,766                            |
| American Surety.....                     | 36,066     | 5,117                           | 41,783                 | 1,908                | 18,036                | 19,944                 | 21,839                             |
| Bee Hail.....                            | 15,815     | Nil                             | 15,815                 | 6,256                | 7,080                 | 13,336                 | 2,479                              |
| British and Foreign.....                 | 3,653      | 5,525                           | 9,178                  | 2,800                | 1,912                 | 4,712                  | 4,466                              |
| Continental Casualty.....                | 574,680    | 25,788                          | 600,468                | 298,330              | 299,665               | 597,995                | 2,473                              |
| Employers' Reinsurance.....              | 195,081    | 5,902                           | 200,983                | 146,349              | 83,868                | 230,217                | -29,234                            |
| Fidelity and Casualty.....               | 6,953      | Nil                             | 6,953                  | 10,730               | 8,252                 | 18,982                 | -12,029                            |
| Foncière Transport and Acci-dent.....    | 562,436    | 9,504                           | 571,940                | 360,760              | 311,458               | 672,218                | -100,276                           |
| General Casualty of America.             | 100,489    | 6,818                           | 107,307                | 82,809               | 68,441                | 151,580                | -44,273                            |
| General Casualty of Paris...             | 362,725    | 21,035                          | 383,760                | 237,654              | 208,277               | 445,931                | -62,171                            |
| General Exchange.....                    | 641,970    | 25,222                          | 670,453                | 338,437              | 159,057               | 497,524                | 172,939                            |
| General Reinsurance.....                 | Nil        | Nil                             | Nil                    | Nil                  | Nil                   | Nil                    | -                                  |
| Great American Indemnity...              | 53,632     | 9,250                           | 62,882                 | 26,138               | 42,498                | 68,636                 | -5,754                             |
| Hartford Accident.....                   | 177,312    | 14,028                          | 191,340                | 85,960               | 83,360                | 169,320                | 22,020                             |
| Hartford Live Stock.....                 | 20,729     | 3,100                           | 23,829                 | 12,560               | 8,625                 | 21,188                 | 2,641                              |
| Hartford Steam Boiler.....               | 47,533     | 3,600                           | 51,133                 | 24,503               | 12,219                | 36,722                 | 14,411                             |
| Indemnity Insurance.....                 | 142,933    | 12,625                          | 155,558                | 41,679               | 73,827                | 115,506                | 40,052                             |
| International Fidelity.....              | 4,177      | Nil                             | 4,177                  | -196                 | 1,092                 | 896                    | 3,281                              |
| Liberty Mutual.....                      | Nil        | Nil                             | Nil                    | Nil                  | Nil                   | Nil                    | -                                  |
| Loyal Protective.....                    | 189,687    | 5,766                           | 195,455                | 111,552              | 49,908                | 162,035                | 33,420                             |
| Lumbermen's Mutual Casu-ality.....       | 209,734    | 14,830                          | 224,564                | 114,534              | 78,630                | 228,854                | -4,290                             |
| Maryland Casualty.....                   | 226,853    | Nil                             | 226,853                | 69,445               | 111,348               | 180,793                | 46,060                             |
| Metropolitan Casualty.....               | 187,600    | 23,844                          | 211,444                | 132,938              | 102,598               | 235,536                | -24,091                            |
| Metropolitan Life.....                   | 615,896    | 15,850                          | 631,756                | 333,715              | 155,293               | 589,020                | 44,836                             |
| Mutual Benefit, Health and Accident..... | 201,151    | 3,756                           | 204,907                | 89,905               | 144,334               | 231,239                | -26,332                            |
| National Surety.....                     | 50,554     | 7,633                           | 58,187                 | 70,959               | 41,043                | 112,002                | -53,815                            |
| North West Casualty.....                 | 41,932     | 2,680                           | 44,612                 | 17,386               | 17,040                | 37,429                 | 7,183                              |
| Occidental Life.....                     | 16,098     | 2,645                           | 18,343                 | 18,687               | 6,228                 | 24,915                 | -5,572                             |
| Ocean Marine.....                        | Nil        | Nil                             | Nil                    | Nil                  | Nil                   | Nil                    | -                                  |
| Prudential Insurance.....                | 7,394      | Nil                             | 7,394                  | 3,401                | 1,091                 | 5,932                  | 1,462                              |
| St. Paul-Mercury.....                    | 52,136     | 2,500                           | 54,636                 | 27,457               | 23,039                | 50,496                 | 4,140                              |
| Standard Accident.....                   | 2,219      | 2,209                           | 4,428                  | Nil                  | 816                   | 816                    | 3,612                              |
| Standard Marine.....                     | Nil        | 500                             | 500                    | Nil                  | Nil                   | Nil                    | 500                                |
| Tornado Inter-Insurance.....             | 520        | 495                             | 1,015                  | Nil                  | 247                   | 247                    | 768                                |
| Travelers' Indemnity.....                | 401,853    | 37,756                          | 439,609                | 138,929              | 227,906               | 366,835                | 72,774                             |
| Travelers' Insurance.....                | 735,278    | 61,395                          | 796,673                | 269,518              | 315,717               | 585,235                | 211,438                            |
| United Pacific Insurance.....            | 16,570     | 813                             | 17,382                 | 21,490               | 4,011                 | 25,501                 | -8,119                             |
| United States Fidelity and Guaranty..... | 548,182    | 27,075                          | 575,257                | 216,877              | 296,911               | 513,788                | 61,469                             |
| United States Guarantee.....             | 21,808     | Nil                             | 21,808                 | 7,908                | 10,210                | 18,118                 | 3,690                              |
| Zurich.....                              | 392,749    | 28,341                          | 421,091                | 186,195              | 175,760               | 361,955                | 59,136                             |
| Totals.....                              | 7,747,265  | 410,080                         | 8,179,494 <sup>1</sup> | 3,851,890            | 3,508,826             | 7,564,607 <sup>2</sup> | 674,887                            |

<sup>1</sup> Including \$22,149, sundry income.<sup>2</sup> Including \$143,891, dividends returned to policyholders.

## 23.—Dominion and Provincial Insurance in Canada, other than Fire and Life, 1936.

| Class of Business.                                       | Provincial Licensees. |   |  |                             | Grand Total. |
|--|-----------------------|---|--|-----------------------------|--------------|
|  | Dominion Licensees.   | (a)   | (b)  | Total Provincial Licensees. |              |
|  |                       | Prov. Cos. within Provinces by which they are Incorp. | Prov. Cos. in Provinces other than those by which they are Incorp. |                             |              |
|  | \$                    | \$  | \$   | \$                          | \$           |
| NET PREMIUMS WRITTEN.                                    |                       |   |  |                             |              |
| Accident—  |                       |   |  |                             |              |
| (1) Personal.....  | 3,013,065             | 31,094  | 9,363  | 40,457                      | 3,053,522    |
| (2) Employers' liability and workmen's compensation..... | 488,449               | 125,577   | 44,578   | 170,155                     | 658,604      |
| (3) Other.....   | 1,649,633             | 34,030  | 20,402   | 54,432                      | 1,704,065    |
| Combined accident and sickness.....                      | 1,845,491             | 63,787  | 80,504   | 144,291                     | 1,989,782    |
| Falling aircraft.....                                    | 491                   | Nil   | Nil  | Nil                         | 491          |
| Automobile.....  | 13,510,431            | 986,914   | 305,463  | 1,292,377                   | 14,802,808   |
| Aviation.....  | 30,316                | Nil   | Nil  | Nil                         | 30,316       |
| Burglary.....  | 1,345,343             | 30,882  | 19,314   | 50,196                      | 1,395,539    |
| Credit.....  | 171,809               | Nil   | Nil  | Nil                         | 171,809      |
| Earthquake.....  | 5,397                 | Nil   | Nil  | Nil                         | 5,397        |
| Explosion.....   | 38,013                | Nil   | Nil  | Nil                         | 38,013       |
| Forgery.....   | 65,129                | 316   | 167  | 483                         | 65,612       |
| Fraud.....   | 11,955                | Nil   | Nil  | Nil                         | 11,955       |
| Guarantee (fidelity).....                                | 1,092,295             | 56,126  | 11,537   | 67,663                      | 1,159,958    |
| Guarantee (surety).....                                  | 701,953               | 15,088  | 29,400   | 44,488                      | 806,441      |
| Hail.....  | 815,228               | 44,860  | Nil  | 44,860                      | 860,088      |
| Inland transportation.....                               | 1,355,814             | 7,114   | 7,065  | 14,179                      | 1,369,993    |
| Live-stock.....  | 26,767                | Nil   | Nil  | Nil                         | 26,767       |
| Machinery.....   | 196,665               | Nil   | Nil  | Nil                         | 196,665      |
| Personal property.....                                   | 130,077               | Nil   | Nil  | Nil                         | 130,077      |
| Plate glass.....   | 465,430               | 54,349  | 11,228   | 65,577                      | 531,013      |
| Property.....  | 11,424                | Nil   | Nil  | Nil                         | 11,424       |
| Sickness.....  | 1,417,688             | 2,254   | 12,096   | 14,350                      | 1,432,038    |
| Sprinkler.....   | 4,782                 | Nil   | Nil  | Nil                         | 4,782        |
| Steam boiler.....  | 438,954               | Nil   | 126  | 126                         | 439,080      |
| Title.....   | Nil                   | Nil   | Nil  | Nil                         | Nil          |
| Tornado.....   | 161,381               | -475  | 747  | 272                         | 161,653      |
| Weather.....   | 6,046                 | 49,870  | Nil  | 49,870                      | 55,916       |
| Totals.....  | 29,060,032            | 1,501,786   | 551,990  | 2,053,776                   | 31,113,808   |
| NET LOSSES INCURRED.                                     |                       |   |  |                             |              |
| Accident—  |                       |   |  |                             |              |
| (1) Personal.....  | 1,212,206             | 17,870  | 4,119  | 21,789                      | 1,233,995    |
| (2) Employers' liability and workmen's compensation..... | 198,079               | 89,026  | 20,436   | 109,462                     | 307,541      |
| (3) Other.....   | 558,321               | 18,307  | 7,705  | 26,012                      | 584,333      |
| Combined accident and sickness.....                      | 1,099,378             | 27,787  | 34,720   | 62,507                      | 1,161,885    |
| Falling aircraft.....                                    | Nil                   | Nil   | Nil  | Nil                         | Nil          |
| Automobile.....  | 7,618,002             | 624,629   | 243,997  | 868,626                     | 8,486,628    |
| Aviation.....  | 15,474                | Nil   | Nil  | Nil                         | 15,474       |
| Burglary.....  | 540,325               | 19,579  | 4,491  | 24,070                      | 564,395      |
| Credit.....  | -6,100                | Nil   | Nil  | Nil                         | -6,100       |
| Earthquake.....  | Nil                   | Nil   | Nil  | Nil                         | Nil          |
| Explosion.....   | -13                   | Nil   | Nil  | Nil                         | -13          |
| Forgery.....   | -8,038                | 3,000   | Nil  | 3,000                       | -5,038       |
| Fraud.....   | 3,870                 | Nil   | Nil  | Nil                         | 3,870        |
| Guarantee (fidelity).....                                | 277,448               | 14,233  | 2,945  | 17,178                      | 294,626      |
| Guarantee (surety).....                                  | 37,122                | 176   | 6,183  | 6,359                       | 43,451       |
| Hail.....  | 273,503               | 10,623  | Nil  | 10,623                      | 284,126      |
| Inland transportation.....                               | 518,933               | 1,180   | 2,096  | 3,276                       | 522,209      |
| Live-stock.....  | 18,860                | Nil   | Nil  | Nil                         | 18,860       |
| Machinery.....   | 92,351                | Nil   | Nil  | Nil                         | 92,351       |
| Personal property.....                                   | 58,167                | Nil   | Nil  | Nil                         | 58,167       |
| Plate glass.....   | 237,257               | 36,526  | 7,004  | 43,530                      | 280,787      |
| Property.....  | 1,547                 | Nil   | Nil  | Nil                         | 1,547        |
| Sickness.....  | 926,567               | 593   | 678  | 1,271                       | 927,838      |
| Sprinkler.....   | 995                   | Nil   | Nil  | Nil                         | 995          |
| Steam boiler.....  | 27,161                | Nil   | Nil  | Nil                         | 27,161       |
| Title.....   | Nil                   | Nil   | Nil  | Nil                         | Nil          |
| Tornado.....   | 61,890                | 368   | 37   | 405                         | 62,295       |
| Weather.....   | 991                   | 16,820  | Nil  | 16,820                      | 17,811       |
| Totals.....  | 13,764,296            | 880,517   | 334,411  | 1,214,928                   | 14,979,224   |

<sup>1</sup> This business was transacted by a company not holding certificates of registry to transact fire insurance.<sup>2</sup> Excluding \$1,234,428, premiums of fraternal benefit societies for accident, sickness, and funeral business.<sup>3</sup> Excluding \$780,034, losses of fraternal benefit societies for accident, sickness, and funeral business.

## Section 4.—Government Annuities.

In the early years of the 20th century, there arose throughout the civilized world a distinct movement in favour of ameliorating the living conditions of the less well-off members of society. One form which this movement took in the United Kingdom was that of old age pensions, granted by the State as a gift to its poorer citizens, whose earnings were very generally insufficient to permit of a margin of saving. In Canada, where wages were higher and a margin of saving was possible, the movement at first took the form of providing, by the establishment of Government annuities, an absolutely safe investment for such savings, which had only too often been lost through the inexperience of their owners, leaving the latter a burden upon the charity of relatives or of the public.\* The cost of administering these annuities is borne by the Dominion Government.

Under the Government Annuities Act (c. 7, R.S.C., 1927, amended by c. 33, 1931), His Majesty the King, represented by the Minister (at present the Minister of Labour), may sell to persons over the age of 5 years, domiciled or resident in Canada, immediate or deferred annuities of not less than \$10 nor more than \$1,200 (1) for the life of the annuitant, (2) for a term of years certain, not exceeding 20 years, or for the life of the annuitant, whichever period shall be the longer, or (3) to any two persons domiciled in Canada during their joint lives, and with or without continuation to the survivor. The property and interest of any annuitant in any contract for an annuity is neither transferable nor attachable. As a rule, the purchaser contracts that, in the event of the death of the annuitant before the date fixed for the annuity to begin, all money paid shall be refunded to the purchaser or his legal representatives with interest at the rate of 4 p.c., compounded yearly.

From Sept. 1, 1908, the date of the inception of the Annuities Branch, up to and inclusive of Mar. 31, 1937, the total number of annuity contracts issued was 36,899. Of these contracts, 3,214 have been cancelled, leaving in force on Mar. 31, 1937, 33,685 contracts. The total amount of purchase money received during the same period was \$101,558,694. Table 22 gives the details of annuities contracted for and purchase money received from 1909 to 1937, by years.

\* A Dominion-provincial non-contributory scheme of old age pensions, providing for the payment, to persons 70 years or over, of pensions not exceeding \$20 per month, contributed by the Dominion and the provinces which become parties to the scheme, was enacted by c. 35 of the Dominion Statutes of 1927. For further particulars, see pp. 779-781.

22.—Government Annuities Contracted for, and Purchase Money Received, fiscal years ended Mar. 31, 1909-37.

| Fiscal Year.            | Contracts. | Purchase Money Received. | Fiscal Year.       | Contracts.    | Purchase Money Received. |
|-------------------------|------------|--------------------------|--------------------|---------------|--------------------------|
|                         |            | No. \$                   |                    |               | No. \$                   |
| 1909 <sup>1</sup> ..... | 68         | 50,391                   | 1924.....          | 409           | 1,458,819                |
| 1910.....               | 566        | 434,491                  | 1925.....          | 456           | 1,608,322                |
| 1911.....               | 1,069      | 393,441                  | 1926.....          | 668           | 1,933,921                |
| 1912.....               | 1,032      | 441,601                  | 1927.....          | 503           | 1,894,885                |
| 1913.....               | 373        | 417,136                  | 1928.....          | 1,223         | 3,843,088                |
| 1914.....               | 318        | 390,887                  | 1929.....          | 1,328         | 4,272,419                |
| 1915.....               | 264        | 314,765                  | 1930.....          | 1,257         | 3,156,475                |
| 1916.....               | 325        | 441,696                  | 1931.....          | 1,772         | 3,612,234                |
| 1917.....               | 285        | 432,272                  | 1932.....          | 1,726         | 4,194,384                |
| 1918.....               | 187        | 332,792                  | 1933.....          | 1,375         | 3,547,845                |
| 1919.....               | 147        | 322,154                  | 1934.....          | 2,412         | 7,071,439                |
| 1920.....               | 204        | 408,719                  | 1935.....          | 3,330         | 13,376,400               |
| 1921.....               | 195        | 531,800                  | 1936.....          | 6,357         | 21,281,981               |
| 1922.....               | 277        | 748,160                  | 1937.....          | 7,806         | 23,614,324               |
| 1923.....               | 339        | 1,028,363                |                    |               |                          |
|                         |            |                          | <b>Totals.....</b> | <b>36,899</b> | <b>101,558,694</b>       |

<sup>1</sup> Seven months.



Statistics of the Annuities Fund and value of contracts issued are given in Tables 25 and 26. On Mar. 31, 1937, 14,418 immediate annuities and 19,267 deferred annuities were in force. The total value of these annuities on that date was \$88,224,794 and the amount of annuity under vested contracts in force on that date was \$6,104,298.

**25.—Government Annuities Fund Statement, fiscal years ended Mar. 31, 1933-37.**

| Item.   | 1933.            | 1934.            | 1935.             | 1936.             | 1937.             |
|---|------------------|------------------|-------------------|-------------------|-------------------|
|   | \$               | \$               | \$                | \$                | \$                |
| <b>ASSETS.</b>                                      |                  |                  |                   |                   |                   |
| Fund at beginning of year.....                      | 26,582,544       | 29,163,903       | 35,023,476        | 46,906,192        | 66,441,822        |
| Receipts during the year, less payments..           | 2,581,359        | 5,859,573        | 11,882,716        | 19,535,630        | 21,543,114        |
| Fund at end of year.....                            | 29,163,903       | 35,023,476       | 46,906,192        | 66,441,822        | 87,984,936        |
| <b>LIABILITIES.</b>                                 |                  |                  |                   |                   |                   |
| Net present value of all outstanding contracts..... | 29,348,141       | 35,169,533       | 47,178,019        | 60,982,654        | 88,224,794        |
| <b>RECEIPTS.</b>                                    |                  |                  |                   |                   |                   |
| For immediate annuities.....                        | 2,473,635        | 5,292,073        | 9,904,714         | 14,881,398        | 14,883,153        |
| For deferred annuities.....                         | 1,108,542        | 1,809,924        | 3,577,200         | 6,458,204         | 8,841,716         |
| Interest on fund.....                               | 1,062,640        | 1,230,751        | 1,527,547         | 2,111,374         | 3,039,106         |
| Refunds.....  | 804              | 5,057            | 3,980             | 737               | -                 |
| For amount transferred to maintain reserve.....     | 289,435          | 184,238          | 146,057           | 271,627           | 540,832           |
| <b>Totals, Receipts.....</b>                        | <b>4,933,656</b> | <b>8,522,043</b> | <b>15,159,498</b> | <b>23,723,540</b> | <b>27,304,807</b> |
| <b>PAYMENTS.</b>                                    |                  |                  |                   |                   |                   |
| Payments under vested annuity contracts             | 2,301,110        | 2,598,070        | 3,115,031         | 4,097,230         | 5,556,153         |
| Return of premiums with interest.....               | 17,756           | 33,842           | 56,237            | 33,059            | 95,496            |
| Return of premiums without interest....             | 32,331           | 30,558           | 105,514           | 57,621            | 110,044           |
| Balance at end of year.....                         | 2,581,359        | 5,859,573        | 11,882,716        | 19,535,630        | 21,543,114        |
| <b>Totals, Payments.....</b>                        | <b>4,933,656</b> | <b>8,522,043</b> | <b>15,159,498</b> | <b>23,723,540</b> | <b>27,304,807</b> |

**26.—Valuation of Annuity Contracts Issued Pursuant to the Government Annuities Act, 1908, as at Mar. 31, 1936 and 1937.**

| Description of Contract.     | 1936.                        |                    |   | 1937.                        |                    |   |
|------------------------------|------------------------------|--------------------|---|------------------------------|--------------------|---|
|                              | Number of Annuity Contracts. | Amount of Annuity. | Net Value on Mar. 31, 1936, of Outstanding Contracts. | Number of Annuity Contracts. | Amount of Annuity. | Net Value on Mar. 31, 1937, of Outstanding Contracts. |
|                              |                              | \$                 | \$  |                              | \$                 | \$  |
| Immediate annuities.....     | 6,343                        | 2,653,411          | 22,499,055  | 7,528                        | 3,115,493          | 26,867,095  |
| Immediate guaranteed.....    | 3,440                        | 1,410,563          | 16,696,003  | 4,700                        | 1,962,411          | 23,542,652  |
| Immediate last survivor..... | 1,713                        | 511,704            | 10,041,627  | 2,190                        | 1,026,424          | 12,941,387  |
| Deferred annuities.....      | 14,753                       | -                  | 17,745,769  | 19,267                       | -                  | 24,876,660  |
| <b>Totals.....</b>           | <b>26,249</b>                | <b>4,575,678</b>   | <b>66,982,654</b>                                     | <b>33,685</b>                | <b>6,104,298</b>   | <b>88,224,794</b>                                     |

<sup>1</sup> Amount of immediate annuities.

It will be seen from the statements above that Government annuities have grown steadily in favour, especially since 1921, the fund reaching a total of \$87,984,936 on Mar. 31, 1937.

## CHAPTER XXIV.—COMMERCIAL FAILURES.

According to Sec. 91 of the British North America Act, "the exclusive legislative authority of the Parliament of Canada" extends to bankruptcy and insolvency legislation, and an Insolvency Act (32-33 Vict., c. 16) was actually passed by the Dominion Parliament in 1869, applying to the four original provinces. This Act was in force for four years and was renewed by c. 46 of the Statutes of 1874, while in 1875 a new Insolvency Act (38 Vict., c. 16) applicable to the whole Dominion was passed, but was repealed in 1880. After this there was no Dominion legislation on the subject of bankruptcy until 1919. During the interval of nearly 40 years commercial failures were handled under provincial legislation, and the statistics relating to such failures during this period were compiled and published by Dun's and Bradstreet's commercial agencies. In 1919 a general Dominion Bankruptcy Act was passed (9-10 Geo. V, c. 36). Statistics of commercial failures dealt with under this Act since it came into force in 1920 have been compiled and published by the Dominion Bureau of Statistics. (See p. 978.)

Table 1 below gives summary statistics of industrial and commercial failures in Canada, by classes for 1934, 1935, and 1936 and by classes and provinces, for 1937. At p. 969 of the 1936 Year Book a historical table gives failures for Canada and Newfoundland by classes for the years 1915 to 1935. Early in 1936, however, Dun and Bradstreet, Incorporated, adopted a new method of classification. The principal changes consisted of setting up a new group of construction enterprises previously included in manufacturing and a new class for commercial service. Real estate companies, holding, and other financial companies, and agents of various kinds were dropped. These changes have had the effect of confining the failure records more to industrial and commercial lines of activity, and liabilities are reduced more in proportion to the number of failures since the companies eliminated usually ran high in indebtedness. The present figures of Table 1 are not comparable with those given at p. 969 of the 1936 Year Book, to which the reader is referred for earlier historical data, both because of the above reasons and because the earlier statistics cover Canada and Newfoundland whereas these are for Canada only.

### 1.—Industrial and Commercial Failures in Canada, by Classes, 1934-37, and by Provinces 1937.

(From Dun and Bradstreet, Incorporated.)

| Year and Province.    | Manufacturing. |              | Wholesale Trade. |              | Retail Trade. |              | Construction. |              | Commercial Service. |              | Totals. |              |
|-----------------------|----------------|--------------|------------------|--------------|---------------|--------------|---------------|--------------|---------------------|--------------|---------|--------------|
|                       | No.            | Liabilities. | No.              | Liabilities. | No.           | Liabilities. | No.           | Liabilities. | No.                 | Liabilities. | No.     | Liabilities. |
|                       |                | \$'000       |                  | \$'000       |               | \$'000       |               | \$'000       |                     | \$'000       |         | \$'000       |
| Totals, 1934.....     | 303            | 6,056        | 82               | 2,518        | 1,068         | 8,767        | 63            | 959          | 84                  | 751          | 1,690   | 19,042       |
| Totals, 1935.....     | 285            | 5,044        | 65               | 1,249        | 879           | 5,202        | 58            | 689          | 80                  | 910          | 1,367   | 13,094       |
| Totals, 1936.....     | 260            | 4,459        | 63               | 1,454        | 806           | 4,331        | 37            | 574          | 72                  | 496          | 1,235   | 11,314       |
| 1937.                 |                |              |                  |              |               |              |               |              |                     |              |         |              |
| P.E. Island.....      | Nil            | -            | Nil              | -            | 2             | 5            | Nil           | -            | Nil                 | -            | 2       | 5            |
| Nova Scotia.....      | 1              | 10           | 1                | 90           | 14            | 57           | 1             | 3            | 1                   | 20           | 13      | 180          |
| New Brunswick.....    | 1              | 20           | Nil              | -            | 14            | 71           | Nil           | -            | Nil                 | -            | 15      | 91           |
| Quebec.....           | 83             | 1,071        | 23               | 601          | 232           | 1,297        | 17            | 149          | 22                  | 123          | 377     | 3,241        |
| Ontario.....          | 76             | 1,132        | 19               | 172          | 230           | 917          | 13            | 73           | 21                  | 101          | 359     | 2,484        |
| Manitoba.....         | 12             | 175          | 3                | 27           | 49            | 140          | 1             | 2            | 3                   | 20           | 68      | 364          |
| Saskatchewan.....     | 4              | 11           | Nil              | -            | 37            | 219          | Nil           | -            | 1                   | 3            | 42      | 233          |
| Alberta.....          | 4              | 25           | 3                | 14           | 37            | 234          | Nil           | -            | Nil                 | -            | 44      | 273          |
| British Columbia..... | 9              | 431          | 2                | 21           | 15            | 101          | 1             | 2            | Nil                 | -            | 27      | 555          |
| Totals, 1937.....     | 190            | 2,875        | 51               | 925          | 630           | 3,041        | 33            | 228          | 48                  | 357          | 952     | 7,426        |

Table 2 summarizes total failures and gives assets and liabilities for such failures, by provinces.

## 2.—Industrial and Commercial Failures in Canada, by Provinces, 1935-37.

(From Dun and Bradstreet, Incorporated.)

NOTE.—Figures for 1934 will be found at p. 951 of the 1937 Year Book.

| Province.                | Failures.    |              |            | Assets.      |              |              | Liabilities.  |               |              |
|--------------------------|--------------|--------------|------------|--------------|--------------|--------------|---------------|---------------|--------------|
|                          | 1935.        | 1936.        | 1937.      | 1935.        | 1936.        | 1937.        | 1935.         | 1936.         | 1937.        |
|                          | No.          | No.          | No.        | \$'000       | \$'000       | \$'000       | \$'000        | \$'000        | \$'000       |
| Prince Edward Island.... | 10           | 8            | 2          | 53           | 20           | 1            | 107           | 84            | 5            |
| Nova Scotia.....         | 49           | 36           | 18         | 96           | 68           | 43           | 331           | 239           | 180          |
| New Brunswick.....       | 38           | 16           | 15         | 236          | 76           | 93           | 351           | 127           | 91           |
| Quebec.....              | 594          | 526          | 377        | 4,258        | 2,966        | 2,159        | 6,524         | 5,257         | 3,241        |
| Ontario.....             | 442          | 432          | 359        | 2,917        | 2,863        | 1,862        | 3,876         | 4,090         | 2,484        |
| Manitoba.....            | 89           | 90           | 68         | 502          | 348          | 229          | 777           | 536           | 364          |
| Saskatchewan.....        | 38           | 37           | 42         | 157          | 103          | 102          | 194           | 181           | 232          |
| Alberta.....             | 75           | 53           | 44         | 359          | 323          | 44           | 514           | 334           | 273          |
| British Columbia.....    | 32           | 40           | 27         | 436          | 293          | 280          | 620           | 406           | 556          |
| <b>Totals.....</b>       | <b>1,367</b> | <b>1,238</b> | <b>952</b> | <b>9,014</b> | <b>7,060</b> | <b>4,813</b> | <b>13,094</b> | <b>11,314</b> | <b>7,426</b> |

**Failures, by Divisions of Industry.**—In every year the great majority of the commercial failures of the country are found among the trading establishments, which are so much more numerous than the manufacturing. Thus, according to the records of Dun and Bradstreet, Incorporated, out of a total of 952 commercial failures in Canada in 1937, 630 were among the retail trading establishments, including 189 in foods and 96 in apparel.

Out of the 190 manufacturers who failed, 55 were in the foods business, 41 in textiles, and 20 among manufacturers of forest products. The figures of commercial failures are analysed in detail for the years 1935, 1936, and 1937, in Table 3.

## 3.—Industrial and Commercial Failures in Canada, by Divisions of Industry, 1935-37.

(From Dun and Bradstreet, Incorporated.)

NOTE.—Figures for 1934 will be found at p. 951 of the 1937 Year Book.

| Industry and Division.               | Failures.  |            |            | Liabilities. |              |              |
|--------------------------------------|------------|------------|------------|--------------|--------------|--------------|
|                                      | 1935.      | 1936.      | 1937.      | 1935.        | 1936.        | 1937.        |
|                                      | No.        | No.        | No.        | \$'000       | \$'000       | \$'000       |
| <b>Manufacturing—</b>                |            |            |            |              |              |              |
| Foods.....                           | 58         | 56         | 55         | 873          | 621          | 560          |
| Textiles.....                        | 78         | 84         | 41         | 740          | 938          | 390          |
| Forest products.....                 | 34         | 19         | 20         | 1,098        | 250          | 995          |
| Paper, printing and publishing.....  | 25         | 11         | 14         | 391          | 1,017        | 152          |
| Chemicals and drugs.....             | 10         | 8          | 11         | 115          | 33           | 39           |
| Fuels.....                           | 3          | 5          | 2          | 68           | 46           | 11           |
| Leather and leather products.....    | 17         | 14         | 9          | 242          | 245          | 171          |
| Stone, clay, glass and products..... | 5          | 9          | 5          | 56           | 114          | 174          |
| Iron and steel.....                  | 10         | 9          | 2          | 275          | 84           | 10           |
| Machinery.....                       | 7          | 3          | 6          | 481          | 264          | 72           |
| Transportation equipment.....        | 2          | 8          | 1          | 5            | 73           | 4            |
| All other.....                       | 36         | 34         | 24         | 700          | 724          | 297          |
| <b>Totals, Manufacturing.....</b>    | <b>285</b> | <b>260</b> | <b>190</b> | <b>5,444</b> | <b>4,459</b> | <b>2,875</b> |

3.—Industrial and Commercial Failures in Canada, by Divisions of Industry,  
1935-37—concluded.

| Industry and Division.                    | Failures.    |              |            | Liabilities.  |               |              |
|---|--------------|--------------|------------|---------------|---------------|--------------|
|   | 1935.        | 1936.        | 1937.      | 1935.         | 1936.         | 1937.        |
|   | No.          | No.          | No.        | \$'000        | \$'000        | \$'000       |
| <b>Wholesale Trade—</b>                   |              |              |            |               |               |              |
| Farm products, foods, groceries.....      | 25           | 17           | 15         | 556           | 129           | 526          |
| Clothing and furnishings.....             | 4            | 1            | 1          | 41            | 6             | 15           |
| Dry goods and textiles.....               | 3            | 3            | 3          | 7             | 80            | 30           |
| Lumber, building materials, hardware..... | 2            | 8            | 9          | 63            | 747           | 72           |
| Chemicals and drugs.....                  | 2            | 1            | 1          | 253           | 4             | 2            |
| Fuels.....                                | 2            | 2            | 1          | 13            | 19            | 1            |
| Automotive products.....                  | 1            | 6            | 3          | 6             | 93            | 27           |
| Supply houses.....                        | 7            | 8            | 4          | 38            | 33            | 36           |
| All other.....                            | 16           | 17           | 14         | 292           | 334           | 216          |
| <b>Totals, Wholesale Trade.....</b>       | <b>65</b>    | <b>63</b>    | <b>51</b>  | <b>1,249</b>  | <b>1,454</b>  | <b>925</b>   |
| <b>Retail Trade—</b>                      |              |              |            |               |               |              |
| Foods.....                                | 230          | 245          | 189        | 820           | 845           | 563          |
| Farm supplies, general stores.....        | 92           | 69           | 72         | 671           | 618           | 502          |
| General merchandise.....                  | 61           | 31           | 31         | 576           | 219           | 180          |
| Apparel.....                              | 146          | 153          | 96         | 973           | 969           | 472          |
| Furniture, household furniture.....       | 18           | 16           | 17         | 134           | 143           | 224          |
| Lumber, building materials, hardware..... | 46           | 46           | 41         | 392           | 389           | 246          |
| Automotive products.....                  | 65           | 46           | 37         | 463           | 292           | 326          |
| Restaurants.....                          | 82           | 74           | 63         | 376           | 226           | 137          |
| Drugs.....                                | 37           | 24           | 21         | 143           | 70            | 101          |
| All other.....                            | 93           | 72           | 63         | 649           | 605           | 284          |
| <b>Totals, Retail Trade.....</b>          | <b>879</b>   | <b>806</b>   | <b>630</b> | <b>5,202</b>  | <b>4,331</b>  | <b>3,041</b> |
| <b>Construction—</b>                      |              |              |            |               |               |              |
| General contractors.....                  | 22           | 13           | 11         | 230           | 174           | 62           |
| Carpenters and builders.....              | 15           | 5            | 4          | 124           | 201           | 34           |
| Building sub-contractors.....             | 21           | 19           | 17         | 335           | 199           | 123          |
| Other contractors.....                    | Nil          | Nil          | 1          | —             | —             | 9            |
| <b>Totals, Construction.....</b>          | <b>58</b>    | <b>37</b>    | <b>33</b>  | <b>689</b>    | <b>574</b>    | <b>228</b>   |
| <b>Commercial Service—</b>                |              |              |            |               |               |              |
| Cleaners and dyers, tailors.....          | 12           | 13           | 5          | 58            | 44            | 18           |
| Haulage, buses, taxis, etc.....           | 10           | 11           | 10         | 166           | 71            | 171          |
| Hotels.....                               | 22           | 14           | 8          | 417           | 206           | 43           |
| Laundries.....                            | 7            | 4            | 4          | 114           | 18            | 58           |
| Undertakers.....                          | 7            | 9            | 5          | 87            | 29            | 14           |
| All other.....                            | 22           | 21           | 16         | 118           | 128           | 53           |
| <b>Totals, Commercial Service.....</b>    | <b>80</b>    | <b>72</b>    | <b>48</b>  | <b>910</b>    | <b>496</b>    | <b>357</b>   |
| <b>Grand Totals.....</b>                  | <b>1,367</b> | <b>1,238</b> | <b>932</b> | <b>13,694</b> | <b>11,314</b> | <b>7,426</b> |

Assignments under the Bankruptcy and Winding Up Acts.—Under the Bankruptcy and Winding Up Acts (R.S.C., 1927, cc. 11 and 213) certain documents relating to assignments have, since 1920, been forwarded to the Dominion Statistician for statistical analysis. Table 4 gives the resulting figures of failures, by provinces, for 1922 and subsequent years, while Table 5 classifies them by branches of business. Table 6 gives the assets and liabilities of the assignors. At the time of going to press, figures for 1937 were not available. A detailed analysis of the 1936 failures, by provinces and branches of business, was made in Table 7, p. 954 of the 1937 Year Book.

## 4.—Commercial Failures in Canada, by Provinces, calendar years 1922-36.

| Year.     | P.E.I. | N.S. | N.B. | Que.  | Ont.  | Man. | Sask. | Alta. | B.C. | Total. |
|-----------|--------|------|------|-------|-------|------|-------|-------|------|--------|
| 1922..... | 15     | 121  | 131  | 1,589 | 1,058 | 284  | 272   | 209   | 156  | 3,925  |
| 1923..... | 16     | 155  | 67   | 1,181 | 970   | 258  | 280   | 323   | 158  | 3,408  |
| 1924..... | 3      | 69   | 67   | 907   | 835   | 100  | 131   | 150   | 57   | 2,319  |
| 1925..... | 4      | 71   | 67   | 758   | 721   | 85   | 77    | 139   | 74   | 1,996  |
| 1926..... | 4      | 63   | 74   | 654   | 655   | 84   | 68    | 113   | 58   | 1,773  |
| 1927..... | 4      | 66   | 74   | 658   | 681   | 97   | 54    | 135   | 72   | 1,841  |
| 1928..... | 4      | 90   | 56   | 767   | 758   | 103  | 63    | 126   | 70   | 2,037  |
| 1929..... | 1      | 71   | 61   | 927   | 762   | 91   | 84    | 101   | 69   | 2,167  |
| 1930..... | 3      | 61   | 45   | 1,011 | 776   | 113  | 146   | 152   | 95   | 2,402  |
| 1931..... | 7      | 51   | 74   | 795   | 793   | 109  | 152   | 131   | 104  | 2,216  |
| 1932..... | 9      | 62   | 80   | 968   | 889   | 85   | 91    | 131   | 104  | 2,420  |
| 1933..... | 10     | 55   | 42   | 935   | 730   | 67   | 59    | 88    | 58   | 2,044  |
| 1934..... | 8      | 42   | 38   | 779   | 474   | 56   | 36    | 42    | 57   | 1,532  |
| 1935..... | 4      | 28   | 37   | 632   | 390   | 46   | 66    | 83    | 28   | 1,314  |
| 1936..... | 6      | 29   | 15   | 589   | 384   | 33   | 57    | 48    | 37   | 1,198  |

## 5.—Commercial Failures in Canada, by Branches of Business, calendar years 1924-36.

| Year.     | Trade. | Manu-<br>fac-<br>tures. | Agri-<br>culture. | Logging<br>and<br>Fishing. | Mining. | Con-<br>struc-<br>tion. | Trans-<br>por-<br>tation<br>and<br>Public<br>Utili-<br>ties. | Finance. | Service. | Not<br>Classi-<br>fied. | Total. |
|-----------|--------|-------------------------|-------------------|----------------------------|---------|-------------------------|--|----------|----------|-------------------------|--------|
| 1924..... | 1,317  | 329                     | 204               | 14                         | 22      | 44                      | 36   | 8        | 129      | 216                     | 2,319  |
| 1925..... | 1,026  | 403                     | 158               | 14                         | 15      | 50                      | 21   | 5        | 220      | 84                      | 1,996  |
| 1926..... | 805    | 390                     | 135               | 27                         | 20      | 52                      | 34   | 1        | 225      | 84                      | 1,773  |
| 1927..... | 818    | 430                     | 116               | 30                         | 26      | 63                      | 36   | Nil      | 243      | 79                      | 1,841  |
| 1928..... | 884    | 505                     | 108               | 31                         | 23      | 70                      | 45   | 5        | 263      | 108                     | 2,037  |
| 1929..... | 1,100  | 443                     | 125               | 4                          | 11      | 61                      | 21   | 5        | 239      | 158                     | 2,167  |
| 1930..... | 1,204  | 488                     | 115               | 12                         | 9       | 55                      | 48   | 29       | 283      | 159                     | 2,402  |
| 1931..... | 1,102  | 464                     | 125               | 5                          | 7       | 61                      | 42   | 21       | 255      | 134                     | 2,216  |
| 1932..... | 1,171  | 468                     | 190               | 9                          | 6       | 83                      | 43   | 7        | 290      | 153                     | 2,420  |
| 1933..... | 1,089  | 357                     | 92                | 1                          | 5       | 57                      | 26   | 12       | 246      | 159                     | 2,044  |
| 1934..... | 799    | 217                     | 82                | 3                          | 2       | 59                      | 20   | 16       | 217      | 117                     | 1,532  |
| 1935..... | 594    | 180                     | 173               | 3                          | 10      | 62                      | 11   | 16       | 186      | 79                      | 1,314  |
| 1936..... | 536    | 191                     | 123               | 2                          | 12      | 53                      | 10   | 11       | 189      | 71                      | 1,198  |

## 6.—Estimated Assets and Liabilities of Commercial Failures in Canada, calendar years 1922-36.

| Year.     | Estimated<br>Grand Total<br>Assets. | Estimated<br>Grand Total<br>Liabilities. | Year.     | Estimated<br>Grand Total<br>Assets. | Estimated<br>Grand Total<br>Liabilities. |
|-----------|-------------------------------------|--|-----------|-------------------------------------|--|
|           | \$                                  | \$                                       |           | \$                                  | \$                                       |
| 1922..... | 52,336,488                          | 63,692,219                               | 1930..... | 44,048,171                          | 48,164,065                               |
| 1923..... | 62,127,489                          | 61,617,527                               | 1931..... | 46,839,179                          | 52,552,900                               |
| 1924..... | 43,194,035                          | 48,105,397                               | 1932..... | 40,604,208                          | 51,629,303                               |
| 1925..... | 26,968,371                          | 32,153,697                               | 1933..... | 27,033,240                          | 32,953,858                               |
| 1926..... | 24,676,661                          | 32,291,125                               | 1934..... | 19,257,469                          | 23,598,260                               |
| 1927..... | 23,197,894                          | 30,634,460                               | 1935..... | 12,174,401                          | 17,567,002                               |
| 1928..... | 26,583,462                          | 32,465,437                               | 1936..... | 10,703,620                          | 15,144,945                               |
| 1929..... | 32,094,027                          | 38,747,638                               |           |                                     |  |

**Administration of Bankrupt Estates.**—The administration of bankrupt estates is now supervised by the Superintendent of Bankruptcy, appointed in 1932, with the object of conserving as far as possible the assets of bankrupt estates for the benefit of the creditors. Figures from the first report were given at p. 1039 of the 1934-35 Year Book, and those for subsequent years are to be found in later editions. Table 7 shows the details of bankruptcy administration, by provinces, for 1937 together with totals for all years since the first report was published.

**7.—Totals of Assets, Liabilities, Assets Realized, and Costs of Administration in Bankrupt Estates Closed, calendar years, 1933-37 and by Provinces, 1937.**

(From the Annual Report of the Superintendent of Bankruptcy.)

| Year and Province or City. | Estates Closed. | Assets as Estimated by Debtor. | Liabilities as Estimated by Debtor. | Total Realization. | Cost of Administration. | Percentage of Cost. | Paid to Creditors. <sup>1</sup> |
|----------------------------|-----------------|--------------------------------|-------------------------------------|--------------------|-------------------------|---------------------|---------------------------------|
|                            | No.             | \$                             | \$                                  | \$                 | \$                      | p.c.                | \$                              |
| <b>Totals, 1933.....</b>   | 850             | 9,207,503                      | 8,629,392                           | 1,880,015          | 423,833                 | 22.6 <sup>2</sup>   | 1,449,392                       |
| <b>Totals, 1934.....</b>   | 1,620           | 14,887,298                     | 20,342,883                          | 3,800,996          | 880,803                 | 23.2                | 2,908,020                       |
| <b>Totals, 1935.....</b>   | 1,198           | 14,839,847                     | 19,402,471                          | 2,797,009          | 763,617                 | 27.3                | 2,020,868                       |
| <b>Totals, 1936.....</b>   | 1,069           | 10,314,455                     | 14,018,966                          | 2,265,125          | 603,182                 | 26.6                | 1,661,943                       |
| <b>1937.</b>               |                 |                                |                                     |                    |                         |                     |                                 |
| Prince Edward Island.....  | 27              | 104,059                        | 255,036                             | 37,104             | 9,358                   | 25.2                | 27,746                          |
| Nova Scotia.....           | 23              | 123,148                        | 200,579                             | 40,847             | 14,190                  | 35.2                | 20,157                          |
| New Brunswick.....         | 2               | 12,319                         | 14,971                              | 2,004              | 775                     | 38.7                | 1,229                           |
| Quebec <sup>1</sup> .....  | 287             | 6,747,034                      | 7,232,554                           | 1,039,017          | 227,771                 | 21.9                | 811,246                         |
| Montreal.....              | 413             | 5,371,302                      | 5,951,660                           | 631,051            | 219,150                 | 34.7                | 411,901                         |
| Ontario <sup>1</sup> ..... | 210             | 2,307,993                      | 3,500,063                           | 527,475            | 144,889                 | 27.5                | 382,586                         |
| Toronto.....               | 82              | 2,610,785                      | 1,752,987                           | 330,829            | 98,968                  | 29.9                | 231,861                         |
| Manitoba.....              | 33              | 214,286                        | 283,013                             | 52,505             | 17,355                  | 33.1                | 35,160                          |
| Saskatchewan.....          | 20              | 122,713                        | 199,725                             | 30,329             | 9,394                   | 30.9                | 20,935                          |
| Alberta.....               | 23              | 123,469                        | 227,987                             | 33,444             | 8,362                   | 25.1                | 26,051                          |
| British Columbia.....      | 29              | 759,014                        | 812,950                             | 81,638             | 20,321                  | 24.9                | 61,318                          |
| <b>Totals, 1937.....</b>   | 1,149           | 18,397,022                     | 20,431,515                          | 2,895,743          | 770,563                 | 27.5                | 2,035,180                       |

<sup>1</sup> In addition to the payments by the trustee, secured creditors valued their security or realized it themselves without the intervention of the trustee to an amount of approximately \$3,579,221. <sup>2</sup> Revised since the publication of the 1937 Year Book.

<sup>2</sup> Exclusive of the city shown separately.

## CHAPTER XXV.—EDUCATION.

### Section 1.—Schools, Colleges and Universities.\*

The British North America Act assigned public education in Canada, except in the case of the native Indian population, to the jurisdiction of the Provincial Governments. A system of public elementary and secondary education, financed mainly by local school authorities but assisted by provincial grants, has developed in each province. There are some private schools in all provinces (*i.e.*, schools that are not conducted by publicly-elected or publicly-appointed boards, and which are not financed out of public money), but their enrolment is not large in comparison with that of the public schools. At the level of higher education six provinces have each a provincially-supported university, and the remaining three have each one or more colleges supported out of provincial funds, but in most of them there are considerable numbers of students in private, endowed or denominational colleges.

Table 1 of this Chapter gives statistics of enrolment in these different categories of educational institutions: (1) Provincially-Controlled Schools; (2) Privately-Controlled Schools; (3) Dominion Indian Schools; (4) Universities and Colleges. This table corresponds to Table 1 of this chapter as it has appeared in previous Year Books, except that part 'C' of such earlier tables is now omitted. It is followed by subsections treating each of the four groups separately, except Indian Schools, for which data are given in Chapter XXVIII, Miscellaneous Administration, along with other information on Indian Affairs.

**Financial Trends.**—Chapter I of the Biennial Survey of Education in the United States, published in 1937 by the Office of Education, shows that expenditure for schools and colleges dropped almost exactly 30 p.c. between 1930 and 1934; the comparable drop in Canada was less than 25 p.c. Since 1934 there has been little change in the amount spent for Canadian education; the annual sum has been approximately equal to that of 1926 when the average daily attendance of pupils was about 17 p.c. less. Expenditures by provinces for 1936, or the latest year available, are given in Table 1.

A comparison in dollars can hardly be taken at face value, but it may be of interest to note that the yearly cost of schools and colleges in the United States, after the drop of depression years, is calculated at \$30.51 for each adult in the population; in Canada the comparable figure is about \$22. School and college debt in Canada is about \$45 per adult in the population. It has been reduced somewhat since 1934, but is still around 25 p.c. higher than in 1926.

**Rural vs. Urban.**—The loss of one-fifth or one-fourth of school revenues would not have been so hard for educational institutions to bear, had it been more evenly distributed among them. A disproportionate share of the loss was generally suffered by rural schools. Complete financial statements are not to be had for rural and

\*Revised by J. E. Robbins, M.A., Ph.D., Chief, Education Statistics Branch, Dominion Bureau of Statistics. This Branch is concerned with compiling and publishing comparable data relating to educational institutions throughout Canada, and to this end co-operates with the Provincial Departments of Education. A list of the publications of this Branch will be found in Chapter XXIX, Section 1, under "Education".

urban schools separately in all provinces, but the following statement of teachers' average salaries illustrates the point.

RURAL AND URBAN TEACHERS' POST-DEPRESSION SALARIES EXPRESSED  
AS PERCENTAGES OF PRE-DEPRESSION SALARIES.

| Province.                 | Rural. | Urban. |
|---------------------------|--------|--------|
|                           | p.c.   | p.c.   |
| Prince Edward Island..... | 91.3   | 99.5   |
| Nova Scotia.....          | 96.4   | 99.1   |
| New Brunswick.....        | 79.5   | 96.8   |
| Quebec (Protestant).....  | 73.6   | 89.3   |
| Ontario.....              | 72.3   | 92.8   |
| Manitoba.....             | 63.2   | 82.7   |
| Saskatchewan.....         | 43.2   | 69.4   |
| Alberta.....              | 71.8   | 91.0   |
| British Columbia.....     | 83.6   | 88.4   |

Rural losses as expressed by such salaries were heavier in every case than urban—in most of the provinces very much heavier. Table 4 shows that the average rural salary in a majority of the provinces is less than half of the urban salary, and only in two provinces, British Columbia and Prince Edward Island, is it considerably more than half.

Farm families are substantially larger than town families. Ten average families in rural Canada have 32 children, as compared with 27 in the same number of urban families. Hence, even if the average income of the farmer were equivalent to the average for the city-dweller, it would be harder for him to keep his children at school as long at the same cost per pupil per year, simply because he has more of them, and without taking account of the greater difficulty of bringing children together over country distances to a school.

The problem of rural school support, naturally harder than urban for these reasons, and accentuated of late years by crop failures on the prairies and low agricultural prices generally, continues to be worse than need be in the opinion of educators by reason of the inefficiency of the small administrative and financial unit. From the Atlantic to the Pacific, teachers and others have for some years been carrying on a campaign designed to demonstrate to a somewhat reluctant public the advantages of a larger unit. Results have begun to show in the past few years, particularly in Alberta and British Columbia. The former in 1937 has eleven units in operation, and eleven more in process of organization.

**Reorganizing the Grades.**—A second educational reform much discussed in recent years, and further on the way to adoption than is the larger unit of adminis-



tration, is replacement of the 8-4 division of the curriculum by the 6-3-3 division. The latest programs of study for Nova Scotia, Ontario, Manitoba, Alberta, and British Columbia present the elementary course as one of six years in place of the former eight. Pupils of the next three years, even in the larger cities, with few exceptions, are by no means all segregated in separate school buildings, but there is the unmistakable tendency to treat these years as a unit for curriculum purposes, and even in certain cities where the provincial curriculum has not been re-made on the new plan some schools that were formerly purely elementary are retaining Grade IX pupils and are taking the name of junior high school.

This group of three (in some cases four) intermediate years, has to serve the double purpose of rounding out and completing the formal schooling of a majority of children, and of preparing the remainder for studies in the senior high, technical, or commercial schools. Psychological reasons for making a break at the sixth rather than the eighth grade have become generally accepted. The attachment of an additional year to the former seventh and eighth has a solid basis in the increased length of the average school career. Comparatively few years ago, schooling for the great majority of children ended before the eighth grade but this is no longer so. The dividing line of eight years, as average length of schooling, was crossed in most of the provinces during the 1920's. It is most reasonable that in later years the change should have been recognized by relating one or two more years of schooling closely to the previous eight; in this way the curriculum is rounded off at the point where most school careers actually end.

A natural consequence of the removal of Grade VIII from the status of a turning point in school careers is a reduced use of the entrance-to-high-school examination. Considering together the eight provinces, other than Quebec, practically all students were obliged before proceeding higher, twenty years ago, to pass a standard Departmental examination at the end of Grade VIII. Ten years ago about two-thirds of students were obliged to write the examination, while one-third (by no means a uniform fraction in all provinces) were promoted by their schools. To-day the proportion is quite reversed, about one-fourth writing the examination and three-fourths being recommended. Some of those who do take the examination are under no obligation, but choose to do so in competition for scholarships or prizes. Since the partial adoption of school promotions in New Brunswick in 1936 all of the eight provinces are included in their use, and some use them exclusively.

The reduced use of Grade VIII examinations cannot, however, be entirely attributed, or perhaps not even mainly, to the reorganization of the curriculum, for it started at an earlier date. Moreover, Departmental examinations in Grades IX and X have even more completely disappeared, and they are being partially replaced even at the level of high school leaving. But it will not be possible here to review their story. This has been done in two recent studies to both of which the interested reader is referred: (1) Report of Committee on Examinations, in the *Proceedings of the 17th Convention of the Canadian Education Association*, October, 1936; (2) Examinations in Canada, a chapter in the *Year Book of Education 1938* (Evans Bros.,

London), among chapters on the same subject from other parts of the British Commonwealth.

**Interprovincial Exchange.**—The new provincial curricula have certain new emphases, such as on health teaching and social studies, in common, partly in line with the latest developments in other countries, but retaining at the same time certain characteristics which are peculiarly Canadian. One of the surprising things to many a new student of provincial school systems in Canada is the similarity they show in spite of their separate origin and independent development. The common features have had less chance of survival since the newer provinces were organized early in the present century, but to offset this there has developed a freer exchange of ideas among provinces and a better acquaintance with one another's problems.

Only two Dominion-wide organizations of educationists antedate the twentieth century, and they only by a few years. The Dominion Education Association, now the Canadian Education Association, was founded in 1892, and the Business Educators' Association of Canada in 1896. Only one other, the National Conference of Canadian Universities in 1911, had its origin before the Great War, but in the years since, more than a dozen have come into existence, each contributing something toward a national outlook on educational problems. Some of the names and dates of formation run as follows: the Canadian Teachers' Federation, and the National Council of Education, 1919; the Canadian School Trustees' Association, 1922; Canadian National Federation of Home and School Associations, 1927; Association of Headmistresses of Canada, 1932; Canadian Physical Education Association; National Federation of Kindergarteners, 1934; Canadian Association for Adult Education, 1935; Headmasters' Association; Workers' Educational Association of Canada; Division of Education and Mental Health in the Canadian National Committee for Mental Hygiene, 1936; Canadian Conference of the New Education Fellowship, 1937. Other national organizations, of which the Junior Red Cross is one of the most conspicuous, have pursued a common program through the schools of all provinces, while yet other groups, *e.g.*, the Federated Women's Institutes, the I.O.D.E., the National Council of Women, have made the schools a subject of leading interest in their national conferences.

The 'education press', with few exceptions, remains essentially provincial rather than national in range, but to some extent the wider picture is interpreted by exchanges, particularly among kindred groups of magazines like those of teachers' federations, trustees' associations, and home and school federations. The Canadian Teachers' Federation has had under consideration for several years the publication of a national magazine, and, while the project has not yet come to fruition, a central news service to all the provincial magazines is conducted.

It is not intended to assess here the extent to which different factors—improved knowledge and acquaintance as between provinces, development from a more or less common root, or geographical and social conditions, for instance—are responsible, but simply to point to the fact that education in the eight mainly English-language provinces tends to continue in these changing times to maintain a common form and content.

**1.—Enrolment in and Expenditure on Educational Institutions in Canada, by Provinces, 1936, or Latest Year Reported.<sup>1</sup>**

| Type of Institution.                                | P.E.I.           | N.S. <sup>2</sup> | N.B.              | Que.                 | Ont.                           |
|---|------------------|-------------------|-------------------|----------------------|--------------------------------|
| <b>Enrolment—</b>                                   |                  |                   |                   |                      |                                |
| Provincially-Controlled Schools—                    |                  |                   |                   |                      |                                |
| (a) Ordinary and technical day schools.....No.      | 18,183           | 116,888           | 92,956            | 582,257 <sup>1</sup> | 673,706                        |
| (b) Evening schools....."                           | Nil              | 3,511             | 1,215             | 17,434 <sup>1</sup>  | 27,067                         |
| (c) Correspondence courses....."                    | Nil              | 868               | Nil               | Nil                  | 2,000                          |
| (d) Special schools <sup>3</sup> ....."             | Nil              | 406               | Nil               | 1,431                | 2,298                          |
| (e) Normal schools....."                            | "                | 303               | 351               | 2,497                | 1,227                          |
| Privately-Controlled Schools—                       |                  |                   |                   |                      |                                |
| (a) Ordinary day schools....."                      | 547              | 3,044             | 3,079             | 56,628               | 11,809                         |
| (b) Business training schools....."                 | 175              | 585               | 360               | 3,218                | 6,790                          |
| Dominion Indian schools....."                       | 20               | 429               | 330               | 1,645                | 4,664                          |
| Universities and Colleges—                          |                  |                   |                   |                      |                                |
| (a) Preparatory courses....."                       | 517              | 207               | 285               | 13,269               | 2,250                          |
| (b) Courses of university standard....."            | 93               | 2,626             | 1,236             | 11,228               | 18,245                         |
| (c) Other courses at university <sup>4</sup> ....." | 2                | 8,737             | 8                 | 6,073                | 15,204                         |
| <b>Totals, Enrolment....."</b>                      | <b>19,537</b>    | <b>137,604</b>    | <b>99,826</b>     | <b>695,680</b>       | <b>765,279</b>                 |
| <b>Population of 1936<sup>5</sup>....."</b>         | <b>92,000</b>    | <b>537,000</b>    | <b>435,000</b>    | <b>2,096,000</b>     | <b>3,690,000</b>               |
| <b>Expenditure—</b>                                 |                  |                   |                   |                      |                                |
| Provincially-Controlled Schools—                    |                  |                   |                   |                      |                                |
| (a) By Provincial Governments.....\$                | 343,939          | 1,148,002         | 551,573           | 5,235,005            | 4,739,116                      |
| (b) By ratepayers, etc.....\$                       | 199,170          | 3,073,363         | 2,187,780         | 21,540,923           | 43,247,348                     |
| Privately-controlled schools (estimated).....\$     | 21,000           | 120,000           | 115,000           | 2,600,000            | 1,100,000                      |
| Indian schools.....\$                               | 1,428            | 34,319            | 18,748            | 85,046               | 424,638                        |
| Universities and colleges.....\$                    | 77,946           | 1,087,580         | 388,424           | 6,612,010            | 7,135,346                      |
| <b>Totals, Expenditure.....\$</b>                   | <b>643,483</b>   | <b>5,423,264</b>  | <b>3,259,525</b>  | <b>36,078,984</b>    | <b>56,646,446</b>              |
| Type of Institution.                                | Man.             | Sask.             | Alta.             | B.C.                 | Total.                         |
| <b>Enrolment—</b>                                   |                  |                   |                   |                      |                                |
| Provincially-Controlled Schools—                    |                  |                   |                   |                      |                                |
| (a) Ordinary and technical day schools.....No.      | 142,482          | 217,247           | 167,193           | 116,722              | 2,127,796 <sup>6</sup>         |
| (b) Evening schools....."                           | 4,218            | 1,258             | 1,109             | 6,980                | 62,792                         |
| (c) Correspondence courses....."                    | 3,633            | 8,274             | 1,506             | 4,712                | 20,998                         |
| (d) Special schools <sup>3</sup> ....."             | 568              | 124               | 209               | 87                   | 5,123                          |
| (e) Normal schools....."                            | 208              | 713               | 599               | 279                  | 6,187                          |
| Privately-Controlled Schools—                       |                  |                   |                   |                      |                                |
| (a) Ordinary day schools....."                      | 5,131            | 2,003             | 3,083             | 4,568                | 89,892                         |
| (b) Business training schools....."                 | 2,773            | 873               | 1,527             | 1,197                | 17,504                         |
| Dominion Indian schools....."                       | 2,468            | 2,266             | 1,954             | 3,807                | 18,038 <sup>6</sup>            |
| Universities and Colleges—                          |                  |                   |                   |                      |                                |
| (a) Preparatory courses....."                       | 473              | 972               | 319               | 1                    | 18,302                         |
| (b) Courses of university standard....."            | 3,212            | 2,807             | 2,222             | 2,916                | 44,585                         |
| (c) Other courses at university <sup>4</sup> ....." | 1,230            | 1,056             | 248               | 478                  | 33,036                         |
| <b>Totals, Enrolment....."</b>                      | <b>166,396</b>   | <b>237,593</b>    | <b>179,969</b>    | <b>141,747</b>       | <b>2,444,243<sup>6</sup></b>   |
| <b>Population of 1936<sup>5</sup>....."</b>         | <b>711,056</b>   | <b>930,977</b>    | <b>772,617</b>    | <b>750,000</b>       | <b>11,028,050<sup>7</sup></b>  |
| <b>Expenditure—</b>                                 |                  |                   |                   |                      |                                |
| Provincially-Controlled Schools—                    |                  |                   |                   |                      |                                |
| (a) By Provincial Governments.....\$                | 988,434          | 1,613,960         | 1,432,085         | 2,654,885            | 18,706,999                     |
| (b) By ratepayers, etc.....\$                       | 6,225,991        | 5,765,093         | 7,929,401         | 5,802,969            | 95,978,038                     |
| Privately-controlled schools (estimated).....\$     | 341,000          | 109,000           | 213,000           | 240,000              | 4,969,000                      |
| Indian schools.....\$                               | 216,723          | 371,447           | 319,582           | 408,494              | 1,936,744 <sup>8</sup>         |
| Universities and colleges.....\$                    | 898,094          | 1,021,132         | 903,703           | 696,067              | 18,708,302                     |
| <b>Totals, Expenditure.....\$</b>                   | <b>8,670,242</b> | <b>8,880,632</b>  | <b>10,797,771</b> | <b>9,902,415</b>     | <b>140,359,083<sup>9</sup></b> |

<sup>1</sup> The first two items for Quebec are for 1934-35; all others in the table for 1935-36, but Ontario elementary figures in years previous to 1935 have been for the calendar year, not for the school year, hence have included over 40,000 duplications which are now removed.

<sup>2</sup> Schools for the blind, deaf, or mentally defective. These are boarding schools, and many of the pupils are from a province other than the one in which they are at school.

<sup>3</sup> Included with "Universities and Colleges—Preparatory Courses".

<sup>4</sup> Includes also those in the Departmental summer schools for teachers in Ontario and British Columbia, not held at universities or colleges.

<sup>5</sup> Official estimate, see p. 155.

<sup>6</sup> Includes 162 in ordinary day schools and 450 in Dominion Indian schools for Yukon and the Northwest Territories.

<sup>7</sup> Includes 14,000 estimated population for Yukon and the Northwest Territories.

<sup>8</sup> Includes \$56,321 for Yukon and the Northwest Territories, under "expenditure".

## Subsection 1.—Provincially-Controlled Schools.

An outline of the provincial systems of school administration was given on pp. 960-962 of the 1937 Year Book, and is not repeated in this edition.

A table at p. 963 of the 1937 Year Book included the record of annual enrolment by provinces since 1911, together with the record of average daily attendance shown in Table 2 below. Figures of both enrolment and attendance for years earlier than 1911 were published on pp. 839-840 of the 1932 Year Book. The record of average daily attendance is the more comparable one, as between provinces, and probably the more significant for most purposes. Both figures have been practically at a standstill, or declining, in all provinces except Quebec, for several years, due to the annually decreasing number of younger children entering the schools. The decrease would be much more pronounced but for the tendency for older children to remain in school longer. The extent of this latter trend was indicated on pp. 956-957 of the 1937 Year Book.

## 2.—Historical Summary of Average Daily Attendance in Provincially-Controlled Schools, by Provinces, 1911-36.

| Year.   | P.E.I. | N.S.   | N.B.   | Que.    | Ont.                 | Man.                | Sask.   | Alta.   | B.C.    | Total.                 |
|---------|--------|--------|--------|---------|----------------------|---------------------|---------|---------|---------|------------------------|
| 1911... | 10,511 | 61,250 | 42,791 | 301,678 | 205,648              | 45,303              | 38,278  | 32,556  | 32,517  | 870,532                |
| 1912... | 10,916 | 63,640 | 43,685 | 314,520 | 323,358              | 46,500 <sup>1</sup> | 49,320  | 39,226  | 37,384  | 928,558 <sup>1,2</sup> |
| 1913... | 11,003 | 65,686 | 44,375 | 324,447 | 340,233              | 48,163              | 56,005  | 45,888  | 43,072  | 978,862                |
| 1914... | 11,170 | 66,599 | 44,534 | 344,657 | 357,519              | 58,778              | 65,009  | 54,582  | 49,090  | 1,051,938              |
| 1915... | 11,694 | 70,361 | 47,889 | 360,897 | 367,959              | 68,250              | 72,113  | 61,112  | 52,494  | 1,112,769              |
| 1916... | 11,347 | 69,227 | 48,069 | 373,754 | 366,891              | 66,561              | 71,522  | 60,271  | 50,880  | 1,118,522              |
| 1917... | 11,319 | 70,118 | 48,860 | 367,808 | 371,129              | 69,209              | 83,758  | 65,374  | 52,577  | 1,143,512              |
| 1918... | 11,334 | 67,923 | 49,515 | 369,426 | 392,506              | 69,908              | 91,010  | 68,480  | 54,748  | 1,161,919              |
| 1919... | 10,908 | 65,906 | 45,797 | 370,710 | 391,539              | 72,072              | 98,791  | 74,776  | 56,092  | 1,187,181              |
| 1920... | 10,991 | 66,442 | 46,950 | 379,319 | 398,264              | 88,563              | 101,355 | 82,417  | 59,791  | 1,234,092              |
| 1921... | 11,440 | 78,238 | 49,714 | 401,655 | 450,656              | 86,137              | 113,412 | 89,401  | 68,597  | 1,349,256              |
| 1922... | 12,338 | 79,410 | 51,668 | 426,466 | 475,591              | 95,433              | 119,041 | 100,515 | 75,528  | 1,435,990              |
| 1923... | 11,763 | 83,472 | 53,745 | 426,935 | 482,068              | 98,787              | 130,499 | 103,612 | 77,752  | 1,468,633              |
| 1924... | 11,783 | 79,509 | 58,366 | 430,185 | 496,673              | 103,775             | 139,782 | 104,003 | 79,262  | 1,503,338              |
| 1925... | 12,250 | 80,318 | 58,397 | 443,741 | 508,044              | 104,312             | 144,650 | 105,078 | 82,721  | 1,540,420              |
| 1926... | 11,823 | 80,446 | 58,731 | 448,252 | 512,175              | 106,809             | 152,430 | 108,881 | 85,293  | 1,594,840              |
| 1927... | 11,777 | 81,426 | 61,076 | 452,767 | 528,485              | 106,793             | 157,392 | 112,401 | 88,305  | 1,600,407              |
| 1928... | 12,123 | 82,591 | 62,205 | 461,228 | 535,691              | 114,270             | 157,207 | 116,245 | 91,700  | 1,653,320              |
| 1929... | 12,144 | 84,275 | 63,312 | 468,537 | 583,334              | 110,766             | 161,658 | 120,229 | 94,410  | 1,704,665              |
| 1930... | 12,201 | 85,080 | 65,726 | 478,682 | 592,265              | 117,037             | 169,893 | 129,371 | 90,196  | 1,746,451              |
| 1931... | 12,721 | 87,418 | 70,856 | 502,800 | 597,164              | 120,703             | 176,716 | 134,112 | 99,375  | 1,801,955              |
| 1932... | 13,119 | 89,513 | 71,423 | 518,921 | 606,867              | 122,843             | 176,916 | 136,711 | 103,510 | 1,839,823              |
| 1933... | 13,810 | 93,866 | 72,204 | 525,215 | 614,357 <sup>2</sup> | 121,190             | 175,002 | 137,558 | 104,978 | 1,858,180 <sup>2</sup> |
| 1934... | 13,399 | 93,294 | 72,109 | 542,365 | 611,000 <sup>2</sup> | 120,314             | 175,457 | 139,155 | 103,408 | 1,870,491 <sup>2</sup> |
| 1935... | 13,496 | 90,565 | 70,757 | 539,441 | 609,269              | 117,379             | 175,323 | 136,202 | 104,824 | 1,857,255              |
| 1936... | 13,140 | 92,279 | 71,132 | 531,212 | 601,758              | 115,671             | 164,104 | 132,725 | 101,873 | 1,817,738              |

<sup>1</sup> Approximate.<sup>2</sup> Revised since the publication of the 1937 Year Book.<sup>3</sup> Not available.

For the year 1936 a record of the age distribution of pupils in the provincially-controlled schools of all provinces has been made available for the first time. This tabulation is presented in Table 3. The ages of boys and girls are not shown separately, and it should be mentioned that there is a definite tendency for boys to leave school at younger ages than girls. A table at p. 964 of the 1937 Year Book showed the comparative numbers of boys and girls in the secondary grades of eight provinces.

## 3.—Age Distribution of Pupils in Provincially-Controlled Schools, by Provinces, 1936.

| Age.                      | P.E.I.        | N.S.           | N.B.          | Que.           | Ont.           | Man.           | Sask.          | Alta.          | B.C.           |
|---------------------------|---------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 5 years or under          | 280           | 1,468          | 9,382         | 64,038         | 14,084         | 616            | 1,320          | 294            | 73             |
| 6 "                       | 1,040         | 6,664          |               |                | 39,976         | 8,267          | 10,691         | 7,351          | 4,837          |
| 7 "                       | 1,539         | 9,878          | 8,911         | 472,490        | 59,008         | 12,174         | 19,512         | 14,914         | 9,470          |
| 8 "                       | 1,798         | 10,928         | 9,161         |                | 63,873         | 13,095         | 20,726         | 15,531         | 9,840          |
| 9 "                       | 1,750         | 10,761         | 9,144         |                | 62,240         | 13,262         | 21,131         | 14,980         | 10,010         |
| 10 "                      | 1,780         | 11,272         | 9,780         |                | 65,740         | 13,587         | 20,696         | 15,735         | 10,418         |
| 11 "                      | 1,804         | 11,293         | 9,111         |                | 66,429         | 13,742         | 21,963         | 15,919         | 10,908         |
| 12 "                      | 1,871         | 11,294         | 9,157         |                | 66,686         | 14,430         | 21,287         | 15,767         | 10,988         |
| 13 "                      | 1,810         | 11,128         | 8,625         |                | 64,599         | 14,524         | 20,920         | 16,411         | 11,071         |
| 14 "                      | 1,741         | 10,862         | 6,960         |                | 55,833         | 13,806         | 20,874         | 15,962         | 11,500         |
| 15 "                      | 1,297         | 8,929          | 4,998         |                | 46,918         | 10,707         | 15,614         | 13,686         | 10,267         |
| 16 "                      | 764           | 6,394          | 2,842         |                | 29,657         | 7,512          | 9,857          | 8,192          | 7,845          |
| 17 "                      | 375           | 3,401          | 1,595         | 24,421         | 18,016         | 4,186          | 6,054          | 5,380          | 4,763          |
| 18 "                      | 114           | 1,720          | 815           |                | 11,181         | 1,795          | 3,674          | 3,692          | 2,581          |
| 19 "                      | 22            | 673            | 320           | 4,441          | 5,656          | 552            | 1,849          | 2,050          | 956            |
| 20 "                      | 7             | 194            | 127           |                | 2,333          |                | 786            | 786            | 288            |
| 21 years or over.         | 4             | 109            | 78            |                | 1,477          | 237            | 746            | 543            | 115            |
| <b>Totals, Classified</b> | <b>17,986</b> | <b>116,888</b> | <b>91,006</b> | <b>634,826</b> | <b>673,706</b> | <b>112,482</b> | <b>216,836</b> | <b>167,193</b> | <b>115,628</b> |
| Unclassified. ....        | 197           | Nil            | 1,950         | Nil            | Nil            | Nil            | 411            | Nil            | 1,094          |

**Technical Education.**—Recent editions of the Year Book have mentioned the tendency in post-war years toward diversity of instruction at the secondary level. It will be of interest to note here the extent to which communities of various sizes have made provision for technical and commercial instruction.

Among the 35 cities in Canada with populations of more than 20,000, there are 9 without day technical schools. Three of these—Verdun, Outremont and Westmount—are within reach of the Montreal Technical School. The others in order of size are Winnipeg, Halifax, Sherbrooke, Sydney, Glace Bay, and Moncton, the last four being among the smaller cities of the group. Evening technical classes are held in practically the same number of larger cities, though not the same cities, those without them in this case being all in Ontario and Quebec.

Among the 103 cities with populations between 5,000 and 20,000 about one-fourth have day technical schools and a similar number have evening technical classes. In smaller centres day schools are extremely rare, considering that there are nearly 400 places with populations of between 1,000 and 5,000, and only half a dozen schools among them. A considerable number, however, provide evening instruction of a technical character.

As information is not available concerning the number of centres offering commercial instruction in Quebec, reference can be made only to eight provinces. The chief difference to be noted, in comparison with the coverage of other technical instruction, is that approximately twice as many towns and smaller cities include commercial courses in their high schools. There are privately-owned business schools in quite a number of others, although they too are unusual in places with a population smaller than 5,000.

The number of centres offering evening classes of a technical nature has declined very considerably in the past few years, and attendance at such classes has fallen by one-third. Enrolment in day technical schools has changed little for several years (an interesting situation in view of the fact that the academic high school enrolment has continued to increase at the same time) probably due to the technical schools being filled to capacity with no money available for their extension.

Over a ten-year period technical students have increased proportionately more than academic students. They have approximately doubled while the others have increased by less than one-half. Even so, in the eight provinces only about one high school student in five is following a technical course.

Technical enrolment includes a number of part-time students in training under provincial Apprenticeship Acts, an arrangement that seems to be regarded with favour. Ontario has had an Apprenticeship Act since 1928, under which boys learning the building trades have received their training partly in industry and partly in the technical schools; in 1936 the scope of the Act was extended to include barbering, hairdressing, and the automobile repair trade. A similar plan has been operated in British Columbia in the building trades since 1930, and an Apprenticeship Act was passed by the Nova Scotia Legislature in 1937.

In addition to the arrangements for apprenticeship that are being systematized under provincial statutes, it appears that a growing number of industrial companies are practising plans, of their own arrangement or in conjunction with private correspondence schools, for the technical training of their younger employees. Some of the country's largest railway, mining, and paper companies, as well as other manufacturing establishments, have such plans in operation.

High schools where the only technical course is agricultural are not included in the foregoing references. The total number of schools in Canada that would be called agricultural high schools, in the sense that the term technical high school is used, is less than a dozen, but some of the provinces provide considerable agricultural instruction in the regular courses for school leaving, normal entrance, or matriculation. About one-third of the academic secondary schools in Ontario (collegiate institutes, high and continuation schools) have agricultural classes. The 'ruralization' of teaching in Quebec schools has received emphasis in recent years. Available information, however, does not permit of a tabulation which would convey a reliable impression of the extent of agricultural education in the ordinary schools of the several provinces together.

There are residential agricultural schools (other than agricultural colleges) with one- or two-year courses as follows: two in Alberta, one in Ontario, and two in Quebec. They serve much the same purpose as the diploma course in agricultural colleges which are held at one centre in each province, except in Quebec where there are three, and in the two smallest provinces, New Brunswick and Prince Edward Island, where there is none. These boarding schools for the teaching of agriculture remain rare in Canada as compared with some other agricultural countries. Denmark, with a population about equal to Ontario's, has 21 such schools with an attendance of from 2,500 to 3,000, in addition to 59 folk high schools (also residential institutions) with an attendance of 6,500 drawn mainly from farm young people. The total enrolment in agricultural boarding schools in all Canada, including the diploma course at agricultural colleges as well as the other five schools, is about 800.

For no other occupation, however, with the possible exception of homemaking, do Governments in Canada conduct so many educational services outside of the schools as for agriculture. Short courses by provincial Mines Departments for prospectors have been attended by nearly 5,000 men in a year lately, but short courses for farmers, their wives and children, varying in length from a few days to a few weeks, are attended each year by several times this number. And courses are by no means the only type of educational service sponsored by the Extension Branches of Departments of Agriculture and agricultural colleges. One other vari-

ety alone, the organization of boys' and girls' farm clubs, includes more than 30,000 young people. A review of the various types of service is not possible in short space and will not be attempted here.

**Teaching Staffs.**—The teaching staffs of day schools under provincial control in Canada consisted in 1936 of 73,291 teachers, 18,424 males and 54,867 females. Practically all of the increase of 3,500 in teachers since 1930 has been in the male class. The "Annual Survey of Education in Canada, 1936" deals in detail with the classification of these teachers, the rates of salary paid and the teaching experience. Table 4 summarizes statistics regarding rates of salary for rural and urban teachers in recent years.

4.—Average Annual Salaries Received by Teachers in Rural and Urban Schools, by Provinces, 1926 and 1930-36.

| Item.                            | 1926.              | 1930. | 1931. | 1932. | 1933. | 1934. | 1935. | 1936. |
|----------------------------------|--------------------|-------|-------|-------|-------|-------|-------|-------|
| Prince Edward Island—            |                    |       |       |       |       |       |       |       |
| Rural schools.....               | 508                | 555   | 527   | 523   | 507   | 490   | 480   | 481   |
| Urban schools.....               | 744                |       | 771   | 771   | 779   | 783   | 770   | 767   |
| Nova Scotia—                     |                    |       |       |       |       |       |       |       |
| Rural and village schools.....   | 525                | 543   | 556   | 552   | 540   | 531   | 531   | 536   |
| Urban schools.....               | 887                | 1,080 | 1,088 | 1,104 | 1,071 | 1,032 | 1,046 | 1,077 |
| New Brunswick—                   |                    |       |       |       |       |       |       |       |
| Rural schools.....               | 795                | 798   | 640   | 652   | 538   | 452   | 497   | 509   |
| Urban schools.....               |                    |       | 1,224 | 1,233 | 1,172 | 1,124 | 1,166 | 1,185 |
| Quebec—                          |                    |       |       |       |       |       |       |       |
| Roman Catholic schools—          |                    |       |       |       |       |       |       |       |
| Brothers and nuns.....           | 423                | 435   | 442   | 444   | 432   | 430   | 416   | 2     |
| Lay teachers.....                | 468                | 523   | 538   | 539   | 512   | 481   | 458   | 2     |
| Protestant schools—              |                    |       |       |       |       |       |       |       |
| Lay teachers.....                | 1,176              | 1,292 | 1,305 | 1,330 | 1,318 | 1,265 | 1,144 | 2     |
| Ontario—                         |                    |       |       |       |       |       |       |       |
| Public schools—                  |                    |       |       |       |       |       |       |       |
| Rural.....                       | 987                | 1,036 | 974   | 897   | 764   | 2     | 744   | 740   |
| Urban.....                       | 1,458              | 1,499 | 1,529 | 1,517 | 1,438 | 2     | 1,508 | 1,471 |
| Roman Catholic Separate schools— |                    |       |       |       |       |       |       |       |
| Rural.....                       | 818                | 889   | 877   | 849   | 749   | 2     | 741   | 760   |
| Urban.....                       | 687                | 762   | 781   | 731   | 743   | 2     | 730   | 715   |
| Collegiate institutes—Urban..... | 2,580              | 2,688 | 2,716 | 2,727 | 2,638 | 2,440 | 2,457 | 2,449 |
| High schools—Urban.....          | 2,100              | 2,188 | 2,243 | 2,206 | 2,080 | 1,831 | 1,798 | 1,759 |
| Continuation schools—Urban.....  | 1,545              | 1,156 | 1,570 | 1,577 | 1,454 | 1,272 | 1,242 | 1,214 |
| Vocational schools—Urban.....    | 2,571              | 2,600 | 2,572 | 2,586 | 2,576 | 2,413 | 2,456 | 2,434 |
| Manitoba—                        |                    |       |       |       |       |       |       |       |
| Rural.....                       | 1,208              | 1,217 | 951   | 915   | 822   | 529   | 620   | 601   |
| Urban.....                       |                    |       | 1,567 | 1,423 | 1,258 | 1,252 | 1,268 | 1,297 |
| Saskatchewan—                    |                    |       |       |       |       |       |       |       |
| Rural.....                       | 1,017 <sup>a</sup> | 1,076 | 863   | 861   | 620   | 506   | 465   | 2     |
| Urban.....                       | 1,292 <sup>a</sup> | 1,316 | 1,289 | 1,277 | 1,125 | 969   | 914   | 2     |
| Alberta—                         |                    |       |       |       |       |       |       |       |
| Rural.....                       | 1,034 <sup>a</sup> | 1,059 | 1,018 | 927   | 842   | 738   | 723   | 731   |
| Urban.....                       | 1,584 <sup>a</sup> | 1,507 | 1,533 | 1,614 | 1,414 | 1,418 | 1,369 | 1,395 |
| British Columbia—                |                    |       |       |       |       |       |       |       |
| Rural districts.....             | 1,110              | 1,151 | 1,135 | 1,086 | 1,011 | 945   | 940   | 949   |
| District municipalities.....     | 1,419              | 1,338 | 1,378 | 1,337 | 1,194 | 1,106 | 1,117 | 1,135 |
| Cities.....                      | 1,648              | 1,788 | 1,813 | 1,703 | 1,297 | 1,292 | 1,577 | 1,600 |

<sup>1</sup> Not entirely classified as rural and urban.  
to school year.

<sup>a</sup> Full-time teachers.

<sup>2</sup> Not available.  
<sup>3</sup> 1927 figures.

<sup>4</sup> Changed from calendar

**Financial Statistics.**—Tables 5 and 6 present records of the finances of the boards operating the provincial schools, in a comparable way, in so far as this can be done with existing records. Similar tables in the 1937 Year Book presented this information for all years since 1926, and in the 1936 Year Book for all years since 1914.

## 5.—Financial Support of Provincially-Controlled Schools in Canada, by Provinces, 1926, 1931, and latest years.

NOTE.—The receipts shown in the following table do not include any amounts raised by loans, or the sale of bonds or debentures, as all revenues of this nature must be repaid ultimately with money raised by local taxation. With the exception of the Maritime Provinces, for which the information is not available, the total debenture indebtedness of the schools of each province is given annually, thus showing the net increase or decrease per year. Figures for intervening years will be found at pp. 967-968 of the 1937 Year Book.

| Province and Fiscal Year.    | Government Grants.   | Taxation within School Administrative Units. | School Board Revenue from Counties. | Total Current Revenue Recorded. <sup>1</sup> | Debenture Indebtedness. | Administrative Units Operating Schools. |
|------------------------------|----------------------|--|-------------------------------------|--|-------------------------|---|
|                              | \$                   | \$   | \$                                  | \$   | \$                      | No.                                     |
| <b>Prince Edward Island—</b> |                      |  |                                     |  |                         |   |
| 1926.....                    | 242,336 <sup>2</sup> | 171,650                                      | Nil                                 | 413,986                                      |                         | 469                                     |
| 1931.....                    | 258,905 <sup>2</sup> | 189,444                                      | Nil                                 | 448,349                                      |                         | 469                                     |
| 1936.....                    | 265,723 <sup>2</sup> | 199,172                                      | Nil                                 | 464,895                                      |                         | 473                                     |
| 1937.....                    | 299,379 <sup>2</sup> | 181,236                                      | Nil                                 | 480,615                                      |                         | 475                                     |
| <b>Nova Scotia—</b>          |                      |  |                                     |  |                         |   |
| 1926.....                    | 365,219 <sup>2</sup> | 2,393,155                                    | 497,229                             | 3,255,603                                    |                         | 1,704                                   |
| 1931.....                    | 509,462 <sup>2</sup> | 2,657,780                                    | 493,533                             | 3,660,775                                    |                         | 1,714                                   |
| 1935.....                    | 631,233 <sup>2</sup> | 2,604,137 <sup>2</sup>                       | 483,185                             | 3,718,555 <sup>2</sup>                       |                         | 1,722                                   |
| 1936.....                    | 650,606 <sup>2</sup> | 2,556,905                                    | 482,398                             | 3,689,909                                    |                         | 1,719                                   |
| 1937.....                    | 669,421 <sup>2</sup> | 2,590,733                                    | 477,265                             | 3,737,419                                    |                         | 1,721                                   |
| <b>New Brunswick—</b>        |                      |  |                                     |  |                         |   |
| 1926.....                    | 511,350 <sup>2</sup> | 2,263,082                                    | 213,066                             | 2,987,498                                    |                         | 1,459                                   |
| 1931.....                    | 459,029 <sup>2</sup> | 2,467,510                                    | 210,500                             | 3,137,039                                    |                         | 1,483                                   |
| 1936.....                    | 462,182 <sup>2</sup> | 1,964,287                                    | 223,493                             | 2,649,962                                    | 4,961,800 <sup>2</sup>  | 1,518                                   |
| 1937.....                    | 505,021 <sup>2</sup> | 2,077,475                                    | 224,461                             | 2,806,947                                    |                         | 1,540                                   |
| <b>Quebec—</b>               |                      |  |                                     |  |                         |   |
| 1926.....                    | 993,500              | 15,647,512                                   | Nil                                 | 17,271,783                                   | 50,413,950              | 1,800                                   |
| 1931.....                    | 1,429,033            | 18,697,183                                   | Nil                                 | 20,742,951                                   | 65,886,105              | 1,827                                   |
| 1935.....                    | 1,137,886            | 19,002,389                                   | Nil                                 | 20,735,404                                   | 82,919,989              | 1,859                                   |
| 1936.....                    | 1,316,019            | 18,575,530                                   | Nil                                 | 20,548,403                                   | 79,556,117              | 1,860                                   |
| <b>Ontario—</b>              |                      |  |                                     |  |                         |   |
| 1926.....                    | 4,775,853            | 30,903,925 <sup>2</sup>                      | 1,774,592                           | 37,605,519                                   | 71,061,655              | 6,600 (approx.)                         |
| 1931.....                    | 6,276,066            | 39,544,376 <sup>2</sup>                      | 3,106,225                           | 49,351,714                                   | 88,781,934              |   |
| 1935.....                    | 4,739,116            | 33,548,155 <sup>2</sup>                      | 2,195,651                           | 40,482,922                                   | 70,570,591              |   |
| <b>Manitoba—</b>             |                      |  |                                     |  |                         |   |
| 1926.....                    | 1,091,151            | 7,302,044 <sup>2</sup>                       | Nil                                 | 8,393,195                                    | 14,790,474              | 1,862                                   |
| 1931.....                    | 1,310,587            | 7,675,879 <sup>2</sup>                       | Nil                                 | 8,986,466                                    | 15,006,997              | 1,938                                   |
| 1937.....                    | 972,277              | 6,091,895 <sup>2</sup>                       | Nil                                 | 7,064,172                                    | 14,590,064              | 1,892                                   |
| <b>Saskatchewan—</b>         |                      |  |                                     |  |                         |   |
| 1926.....                    | 2,265,481            | 10,696,154                                   | Nil                                 | 13,111,829                                   | 11,933,064              | 4,525                                   |
| 1931.....                    | 2,704,242            | 8,114,719                                    | Nil                                 | 11,015,486                                   | 15,945,934              | 4,766                                   |
| 1935.....                    | 1,613,960            | 6,075,000                                    | Nil                                 | 7,845,254                                    | 13,526,765 <sup>2</sup> | 4,923                                   |
| 1936.....                    | 1,638,417            | 6,307,000                                    | Nil                                 | 8,106,904                                    | 13,999,736              | 4,938                                   |
| <b>Alberta—</b>              |                      |  |                                     |  |                         |   |
| 1926.....                    | 1,137,638            | 8,241,715                                    | Nil                                 | 9,491,130                                    | 10,704,634              | 3,124                                   |
| 1931.....                    | 1,511,776            | 8,931,880                                    | Nil                                 | 10,599,204                                   | 12,026,157              | 3,395                                   |
| 1935.....                    | 1,432,085            | 7,489,823                                    | Nil                                 | 9,063,248                                    | 9,883,239               | 3,492                                   |
| 1936.....                    | 1,390,238            | 7,540,419                                    | Nil                                 | 9,065,132                                    | 9,359,594               | 3,542                                   |
| <b>British Columbia—</b>     |                      |  |                                     |  |                         |   |
| 1926.....                    | 2,380,698            | 5,095,420                                    | Nil                                 | 7,476,083                                    | 12,101,417              | 746                                     |
| 1931.....                    | 2,856,376            | 6,226,661                                    | Nil                                 | 9,083,037                                    | 15,936,753              | 811                                     |
| 1935.....                    | 2,175,619            | 5,623,115                                    | Nil                                 | 7,798,734                                    | 14,922,854 <sup>2</sup> | 762                                     |
| 1936.....                    | 2,270,466            | 5,802,969                                    | Nil                                 | 8,073,435                                    | 14,631,839 <sup>2</sup> | 773                                     |
| 1937.....                    | 2,456,372            | 6,315,902                                    | Nil                                 | 8,772,274                                    |                         | 763                                     |

<sup>1</sup> Includes tuition fees where these are recorded.<sup>2</sup> Includes contributions to teachers' salaries in the Maritime Provinces; and in New Brunswick, grants made to schools by the Vocational Education Board.<sup>3</sup> Record not available. <sup>4</sup> The Ontario figures include the township grant towards the salaries of rural public school teachers. In the rural municipalities of Manitoba about three-fifths of the school support is equalized by a uniform rate levied over the whole municipality.<sup>5</sup> Revised since publication of the 1937 Year Book.



## 6.—Expenditures of School Boards, by Provinces, 1926, 1931 and 1936, or latest year.

NOTE.—All amounts in even thousands are estimates. Figures for intervening years were given at p. 969 of the 1937 Year Book.

| Province and Fiscal Year.  | Teachers' Salaries. | Buildings, Grounds and Permanent Improvements. | Interest on Debentures and Other Loans. | Equipment, Repairs, Fuel and all Other Expenses. <sup>1</sup> | Total. <sup>1</sup>    |
|----------------------------|---------------------|--|---|---|------------------------|
|                            | \$                  | \$   | \$                                      | \$  | \$                     |
| Prince Edward Island ..... |                     |  |   |   |                        |
| Nova Scotia.....           | 2                   | 2  | 2                                       | 2   | 2                      |
| New Brunswick.....         |                     |  |   |   |                        |
| Quebec—                    |                     |  |   |   |                        |
| 1926.....                  | 9,099,785           | 2,433,047                                      | 2,721,293                               | 5,019,287   | 20,173,412             |
| 1931.....                  | 11,130,970          | 5,969,843                                      | 3,371,340                               | 7,936,447   | 28,408,605             |
| 1935.....                  | 11,023,731          | 2  | 4,100,000                               | 8,504,364   | 23,628,095             |
| 1936.....                  | 11,150,922          | 2  | 4,200,000                               | 7,764,165   | 23,115,087             |
| Ontario—                   |                     |  |   |   |                        |
| 1926.....                  | 25,167,571          | 5,463,159                                      | 3,396,000                               | 7,935,000   | 41,961,730             |
| 1931.....                  | 30,490,962          | 5,148,123                                      | 4,328,000                               | 10,739,094  | 50,706,179             |
| 1933.....                  | 27,405,768          | 926,673  | 4,407,000                               | 9,291,393   | 42,030,834             |
| Manitoba—                  |                     |  |   |   |                        |
| 1926.....                  | 4,914,087           | 419,047  | 681,643 <sup>2</sup>                    | 2,184,409   | 8,199,186              |
| 1931.....                  | 5,387,400           | 795,143  | 693,704 <sup>2</sup>                    | 2,290,757   | 9,167,004              |
| 1937.....                  | 4,057,103           | 285,375  | 614,176 <sup>2</sup>                    | 1,936,489   | 6,893,143              |
| Saskatchewan—              |                     |  |   |   |                        |
| 1926.....                  | 7,438,095           | 1,688,015                                      | 3,350,490                               |   | 12,476,600             |
| 1931.....                  | 7,358,024           | 1,022,655                                      | 3,052,489                               |   | 11,433,168             |
| 1936.....                  | 4,501,850           | 481,621  | 2,560,567                               |   | 7,544,047              |
| Alberta—                   |                     |  |   |   |                        |
| 1926.....                  | 5,640,219           | 1,051,627 <sup>2</sup>                         | 654,000                                 | 2,188,336   | 9,534,182              |
| 1931.....                  | 6,741,826           | 537,555 <sup>2</sup>                           | 758,000                                 | 2,325,678   | 10,363,059             |
| 1934.....                  | 5,613,781           | 435,535  | 694,000 <sup>2</sup>                    | 2,059,097   | 8,772,413 <sup>2</sup> |
| 1935.....                  | 5,668,088           | 477,928  | 628,000                                 | 2,054,721   | 8,828,737              |
| 1936.....                  | 5,664,072           | 525,448 <sup>2</sup>                           | 553,000                                 | 2,137,270   | 8,909,790              |
| British Columbia.....      | 2                   | 2  | 2                                       | 2   | 2                      |

<sup>1</sup> Excluding all payments on principal of debentures, etc.

<sup>2</sup> Not available.

<sup>3</sup> Included

under the heading, "Equipment, repairs, etc."

<sup>4</sup> In Manitoba, interest on debentures only.

<sup>5</sup> In

Alberta repairs are included under this heading.

<sup>6</sup> Revised since publication of the 1937 Year Book.

## Subsection 2.—Private Schools.

**Private Elementary and Secondary Schools.**—There are numerous schools in each province doing work similar to that of the ordinary provincially-controlled schools, but which are not publicly financed or administered and hence are not included in Subsection 1 (except in Quebec). Except in Quebec, the private schools have from about 2 to 4 p.c. of elementary and secondary pupils in the different provinces. In Quebec the proportion is about 10 p.c., but most of them are subsidized by the Provincial Government and provincial reports include a record of them similar to, and in some cases (as of average daily attendance) inseparable from, the records of publicly-controlled schools. Thus their statistics are of necessity included in Subsection 1. Table 7, however, shows their enrolment quinquennially since 1921, the year in which the Education Branch of the Dominion Bureau of Statistics commenced the collection of reports from private schools. A directory of the schools is included in the "Annual Survey of Education, 1936".

### 7.—Enrolment in Private Elementary and Secondary Schools in Canada, by Provinces, 1921, 1926, 1931, and 1936.

NOTE.—Figures for intervening years were given at p. 970 of the 1937 Year Book.

| Year.     | P.E.I. | N.S.  | N.B.  | Que.   | Ont.   | Man.  | Sask. | Alta. | B.C.  | Total. |
|-----------|--------|-------|-------|--------|--------|-------|-------|-------|-------|--------|
| 1921..... | 682    | 3,047 | 2,607 | 54,671 | 9,961  | 3,149 | 1,608 | 2,274 | 3,159 | 81,158 |
| 1926..... | 580    | 2,956 | 3,528 | 54,767 | 10,126 | 4,534 | 2,358 | 2,281 | 4,624 | 85,754 |
| 1931..... | 570    | 2,746 | 4,082 | 57,320 | 12,236 | 5,864 | 2,853 | 2,944 | 5,276 | 93,891 |
| 1936..... | 547    | 3,044 | 3,079 | 55,775 | 11,809 | 5,131 | 2,003 | 3,083 | 4,568 | 89,030 |

**Business Colleges.**—There are private schools in fields of education other than elementary and secondary, the most numerous group working in the field of business and commercial education. A record of enrolment from this group also has been collected by the Education Branch of the Dominion Bureau of Statistics since 1921; a summary of this information is presented in Table 8.

### 8.—Enrolment in Private Business and Commercial Schools (Business Colleges) in Canada, by Provinces, 1921, 1926, 1931, and 1936.

NOTE.—Figures for intervening years were given at p. 971 of the 1937 Year Book.

| Year.     | P.E.I. | N.S.  | N.B. | Que.  | Ont.   | Man.  | Sask. | Alta. | B.C.  | Total. |
|-----------|--------|-------|------|-------|--------|-------|-------|-------|-------|--------|
| 1921..... | 85     | 1,280 | 740  | 4,319 | 14,537 | 3,538 | 1,333 | 2,216 | 1,986 | 30,034 |
| 1926..... | 114    | 766   | 722  | 2,743 | 10,314 | 3,502 | 1,436 | 2,739 | 2,230 | 24,596 |
| 1931..... | 140    | 775   | 671  | 2,807 | 9,732  | 3,087 | 1,400 | 1,629 | 2,180 | 22,421 |
| 1936..... | 175    | 855   | 366  | 3,218 | 6,790  | 2,773 | 873   | 1,527 | 1,197 | 17,504 |

### Subsection 3.—Higher Education.

Previous editions of the Year Book have included considerable current information on universities and colleges, concerning enrolment, graduates, teaching staffs, and finances. For example, pp. 971 to 978 of the 1937 Year Book presented the enrolment and graduates of individual schools of higher education for the year 1934-35 and, furthermore, referred to previous editions of the Year Book in which statistics regarding the finances, staffs, etc., of these institutions were presented. The necessity to economize space in the Year Book has made it impossible to continue to give detailed statistics of this nature, more especially since they are now adequately treated in the "Annual Survey of Education in Canada", published by the Dominion Bureau of Statistics. The interested reader is referred to the latest edition, that for 1936.

Available space this year is devoted to a retrospective view of the work of these institutions since 1920, the year in which preparation of records of higher education was begun by the Education Branch of the Dominion Bureau of Statistics.

The record of graduates in Table 9 shows that there has been an increase of about 50 p.c. in the annual number of university graduates since 1923 or 1924, when the abnormalities of enrolment resulting from the War mainly disappeared. By studying the figures in relation to the total population of the country at university age, it is found that nearly 3 p.c. of the young people growing up in Canada to-day become university graduates—about 4 p.c. of the young men and 1.5 p.c. of the young women. The proportion receiving degrees in Arts or Science is now nearly

double that of fifteen years ago, but in several of the other faculties the proportion has not increased at all, and in some has definitely fallen. The annual supply of professional workers, as represented by these records of graduation in the several faculties, was studied in relation to the requirements for maintaining the existing ratio of professionals in the total population, in a special bulletin of the Education Branch issued in 1937.

This bulletin, *Supply and Demand in the Professions in Canada*, shows that Canadian universities have been further short of training the number of workers required in engineering and allied professions than in most others. Native-born Canadians constitute few more than half of the mining, mechanical and electrical engineers, designers, draughtsmen and architects in the country, and only about two-thirds of civil engineers, surveyors, chemists, assayers and metallurgists. Much the greatest outside source of supply has been the British Isles, while the United States has supplied larger numbers than the continent of Europe.

It has been shown by health professionals that the population per doctor is greater now than a generation ago, is nearly double in some provinces what it is in others, and is more than double in cities what it is in smaller communities and their surrounding rural areas. The population per dentist is now only about 2,500 where as it was 4,000 thirty years ago, but the rate at which dentists have been graduated in recent years has not been nearly fast enough to maintain the existing ratio. Health of animals engages fewer professionals, *i.e.*, veterinaries, than twenty years ago, although the number of live stock is much greater now.

Clergymen represent another main professional group in which it seems doubtful whether the supply is being maintained. Teachers, on the other hand, are more numerous than required, particularly in view of the fact that a smaller child population each year reduces the demand for their services. The equivalent number of all new teaching positions for several years have been taken by men. University courses in librarianship have as yet attracted few men.

The supply from the universities in law and pharmacy seems to retain a closer relationship to requirements than in the occupations just mentioned, perhaps, in a measure, because part of the training is taken in the employ of a graduate lawyer or druggist, the number of entrants thus depending in some measure on the number practising. In many of the less clearly defined or numerically less important professions it is not possible to trace the adequacy of the rate of supply with existing sources of information.

Table 9 shows that there has been no tendency in post-war years for women to increase their enrolment in such professional lines of study as medicine, dentistry, pharmacy, law, theological, or missionary courses. A few appear in the record of every branch of study into which enrolment can be divided, except forestry, but they have held in the main to Arts, including Science and Commerce, and to Education, Social Service and Public Health. Altogether they constitute about one-fourth of university graduates, but their proportion of the total has not tended to increase noticeably since the abnormal enrolment of returned soldiers came to an end in the early 1920's. Their proportion is highest in Ontario and the western provinces.

In this connection it is of interest to recall that university education for women in Canada began only within the lifetime of the older generation women still living. The centenary of university education for women was celebrated in the United States recently, the original event having been the admission of four young women to the post-matriculation course at Oberlin College, Ohio, in the autumn of 1837, but according to the archives of the Canadian Federation of University Women, it

was not until about 40 years later that women were first admitted to a university course in Canada, and only about 50 years ago that the practice became general.

The story of universities in these 50 years has been one of service broadening in many ways. There has been the addition, one after another, of new branches of study; Table 9 reveals several innovations in the years since 1920. To match the nineteenth century's extension of service to women, the twentieth century has brought about the recognition by universities of an educational responsibility to the general population beyond their walls. The work of university extension departments, however, takes so many forms that it does not lend itself to tabular expression, and cannot be summarized here.

### 9.—Graduates from Canadian Universities and Colleges, 1920-36.

#### GRADUATES IN ARTS, PURE SCIENCE, AND COMMERCE.

| Year.     | Bachelors of Arts. <sup>1</sup> |        | Bachelors of Science (in Arts). |        | Bachelors of Commerce. <sup>2</sup> |        | Totals.     |        |
|-----------|---------------------------------|--------|---------------------------------|--------|-------------------------------------|--------|-------------|--------|
|           | Total.                          | Women. | Total.                          | Women. | Total.                              | Women. | Both Sexes. | Women. |
| 1920..... | 1,033                           | 382    | 38                              | 4      | 8                                   | Nil    | 1,079       | 386    |
| 1921..... | 1,337                           | 514    | 77                              | 7      | 12                                  | 1      | 1,426       | 522    |
| 1922..... | 1,443                           | 540    | 95                              | 9      | 40                                  | 2      | 1,584       | 551    |
| 1923..... | 1,551                           | 600    | 115                             | 18     | 68                                  | 3      | 1,734       | 621    |
| 1924..... | 1,675                           | 645    | 107                             | 13     | 75                                  | 8      | 1,857       | 665    |
| 1925..... | 1,698                           | 674    | 98                              | 14     | 100                                 | 1      | 1,895       | 689    |
| 1926..... | 1,935                           | 770    | 136                             | 29     | 73                                  | 14     | 2,194       | 813    |
| 1927..... | 2,080                           | 776    | 149                             | 13     | 114                                 | 13     | 2,343       | 802    |
| 1928..... | 2,231                           | 856    | 161                             | 11     | 109                                 | 8      | 2,501       | 875    |
| 1929..... | 2,257                           | 922    | 195                             | 27     | 117                                 | 15     | 2,569       | 904    |
| 1930..... | 2,499                           | 989    | 237                             | 38     | 134                                 | 17     | 2,870       | 1,044  |
| 1931..... | 2,474                           | 981    | 252                             | 45     | 169                                 | 17     | 2,895       | 1,043  |
| 1932..... | 2,629                           | 1,020  | 277                             | 41     | 199                                 | 15     | 3,105       | 1,076  |
| 1933..... | 2,881                           | 1,143  | 259                             | 35     | 244                                 | 32     | 3,364       | 1,210  |
| 1934..... | 3,051                           | 1,157  | 293                             | 45     | 241                                 | 33     | 3,515       | 1,235  |
| 1935..... | 3,034                           | 1,182  | 238                             | 39     | 200                                 | 26     | 3,522       | 1,227  |
| 1936..... | 3,175                           | 1,168  | 320                             | 45     | 202                                 | 25     | 3,697       | 1,238  |

#### GRADUATES IN APPLIED SCIENCE.

| Year.     | Bachelors of Applied Science or Engineering |        | Bachelors of Architecture. <sup>3</sup> |        | Bachelors of Forestry. |        | Totals.     |        |
|-----------|---|--------|---|--------|------------------------|--------|-------------|--------|
|           | Total.                                      | Women. | Total.                                  | Women. | Total.                 | Women. | Both Sexes. | Women. |
| 1920..... | 237   | 1      | 10                                      | Nil    | 17                     | Nil    | 264         | 1      |
| 1921..... | 322   | 1      | 17                                      | Nil    | 15                     | Nil    | 354         | 1      |
| 1922..... | 375   | 1      | 12                                      | Nil    | 19                     | Nil    | 406         | 1      |
| 1923..... | 629   | 1      | 19                                      | Nil    | 19                     | Nil    | 667         | 1      |
| 1924..... | 452   | Nil    | 17                                      | Nil    | 26                     | Nil    | 495         | Nil    |
| 1925..... | 348   | Nil    | 19                                      | Nil    | 21                     | Nil    | 388         | Nil    |
| 1926..... | 315   | Nil    | 14                                      | Nil    | 19                     | Nil    | 348         | Nil    |
| 1927..... | 330   | 1      | 15                                      | 1      | 15                     | Nil    | 360         | 2      |
| 1928..... | 318   | 1      | 19                                      | Nil    | 27                     | Nil    | 364         | 1      |
| 1929..... | 336   | Nil    | 25                                      | Nil    | 18                     | Nil    | 379         | Nil    |
| 1930..... | 384   | 1      | 25                                      | Nil    | 44                     | Nil    | 453         | 1      |
| 1931..... | 418   | Nil    | 24                                      | Nil    | 41                     | Nil    | 483         | Nil    |
| 1932..... | 439   | 1      | 22                                      | 1      | 32                     | Nil    | 493         | 2      |
| 1933..... | 554   | 1      | 32                                      | Nil    | 27                     | Nil    | 613         | 1      |
| 1934..... | 624   | 2      | 31                                      | Nil    | 32                     | Nil    | 687         | 2      |
| 1935..... | 642   | 1      | 21                                      | 2      | 37                     | Nil    | 700         | 3      |
| 1936..... | 564   | 2      | 53                                      | Nil    | 21                     | Nil    | 638         | 2      |

<sup>1</sup> Includes Bachelors of Letters and of Social Science.

<sup>2</sup> Includes Bachelors of Accountancy and of Secretarial Science.

<sup>3</sup> Includes diplomas in Architecture from the Schools of Fine Arts of Montreal and Quebec.

## 9.—Graduates from Canadian Universities and Colleges, 1920-36—continued.

## GRADUATES IN AGRICULTURE, VETERINARY SCIENCE, AND HOUSEHOLD SCIENCE.

| Year.     | Bachelors of Agricultural Science. |        | Graduates in Veterinary Science. |        | Bachelors of Household Science. | Totals.     |        |
|-----------|------------------------------------|--------|----------------------------------|--------|---------------------------------|-------------|--------|
|           | Total.                             | Women. | Total.                           | Women. | Women.                          | Both Sexes. | Women. |
| 1920..... | 113                                | 1      | 6                                | Nil    | 6                               | 125         | 7      |
| 1921..... | 156                                | 3      | 26                               | Nil    | 10                              | 192         | 13     |
| 1922..... | 193                                | 1      | 28                               | Nil    | 9                               | 230         | 10     |
| 1923..... | 186                                | 3      | 39                               | Nil    | 18                              | 243         | 21     |
| 1924..... | 157                                | Nil    | 34                               | Nil    | 30                              | 221         | 30     |
| 1925..... | 131                                | Nil    | 21                               | Nil    | 28                              | 180         | 28     |
| 1926..... | 111                                | 3      | 18                               | Nil    | 19                              | 148         | 22     |
| 1927..... | 87                                 | 3      | 18                               | Nil    | 33                              | 138         | 36     |
| 1928..... | 104                                | 1      | 21                               | 1      | 57                              | 182         | 59     |
| 1929..... | 94                                 | 1      | 23                               | Nil    | 75                              | 192         | 76     |
| 1930..... | 131                                | 1      | 21                               | Nil    | 122                             | 274         | 123    |
| 1931..... | 160                                | 2      | 28                               | Nil    | 112                             | 300         | 114    |
| 1932..... | 150                                | 1      | 34                               | Nil    | 146                             | 330         | 147    |
| 1933..... | 198                                | 2      | 37                               | Nil    | 137                             | 372         | 139    |
| 1934..... | 215                                | 2      | 36                               | Nil    | 164                             | 415         | 166    |
| 1935..... | 243                                | 10     | 52                               | Nil    | 128                             | 423         | 138    |
| 1936..... | 238                                | 7      | 53                               | Nil    | 138                             | 429         | 145    |

## TEACHERS DIPLOMAS AND GRADUATES IN EDUCATION AND SOCIAL SERVICE.

| Year.    | Teachers' Diplomas. | Degrees in Education or Pedagogy. |        | Librarians' Degrees or Diplomas. |        | Physical Training Diplomas. |        | Social Service Diplomas. |        | Totals.     |                     |
|----------|---------------------|-----------------------------------|--------|----------------------------------|--------|-----------------------------|--------|--------------------------|--------|-------------|---------------------|
|          | Total.              | Total.                            | Women. | Total.                           | Women. | Total.                      | Women. | Total.                   | Women. | Both Sexes. | Women. <sup>1</sup> |
| 1920.... | 153                 | 5                                 | Nil    | Nil                              | -      | Nil                         | -      | Nil                      | -      | 158         | Nil                 |
| 1921.... | 100                 | 1                                 | Nil    | Nil                              | -      | Nil                         | -      | 5                        | 5      | 106         | 5                   |
| 1922.... | 176                 | 5                                 | Nil    | Nil                              | -      | 7                           | 7      | 11                       | 11     | 199         | 18                  |
| 1923.... | 239                 | 18                                | Nil    | Nil                              | -      | 17                          | 17     | 13                       | 13     | 287         | 30                  |
| 1924.... | 346                 | 24                                | 1      | Nil                              | -      | 24                          | 24     | 9                        | 9      | 403         | 34                  |
| 1925.... | 344                 | 28                                | 3      | Nil                              | -      | 18                          | 18     | 20                       | 18     | 410         | 39                  |
| 1926.... | 373                 | 25                                | 1      | Nil                              | -      | 37                          | 37     | 24                       | 23     | 459         | 61                  |
| 1927.... | 450                 | 42                                | 10     | Nil                              | -      | 38                          | 38     | 27                       | 27     | 557         | 75                  |
| 1928.... | 438                 | 25                                | 2      | 20                               | 19     | 41                          | 41     | 24                       | 23     | 548         | 85                  |
| 1929.... | 501                 | 31                                | 3      | 42                               | 41     | 45                          | 45     | 21                       | 21     | 640         | 110                 |
| 1930.... | 523                 | 77                                | 31     | 36                               | 36     | 41                          | 41     | 20                       | 20     | 697         | 128                 |
| 1931.... | 581                 | 60                                | 19     | 39                               | 37     | 45                          | 45     | 18                       | 18     | 743         | 119                 |
| 1932.... | 744                 | 72                                | 21     | 48                               | 46     | 41                          | 41     | 55                       | 51     | 960         | 159                 |
| 1933.... | 807                 | 56                                | 18     | 53                               | 51     | 25                          | 25     | 48                       | 42     | 989         | 136                 |
| 1934.... | 810                 | 74                                | 14     | 61                               | 58     | 24                          | 24     | 36                       | 36     | 1,005       | 132                 |
| 1935.... | 649                 | 61                                | 18     | 54                               | 53     | 26                          | 25     | 48                       | 44     | 838         | 140                 |
| 1936.... | 584                 | 100                               | 25     | 66                               | 63     | 21                          | 20     | 45                       | 39     | 816         | 147                 |

<sup>1</sup> Excluding teachers diplomas.

## 9.—Graduates from Canadian Universities and Colleges, 1920-36—continued.

## GRADUATES IN MEDICINE AND RELATED STUDIES.

| Year.     | Medical Doctors. |        | Dentists. |        | Pharmacists. |        | Post-Graduate Nurses Diplomas. <sup>1</sup> | Diplomas in Physiotherapy and Occupational Therapy. | Totals.     |        |
|-----------|------------------|--------|-----------|--------|--------------|--------|---|---|-------------|--------|
|           | Total.           | Women. | Total.    | Women. | Total.       | Women. | Women.                                      | Women.  | Both Sexes. | Women. |
| 1920..... | 274              | 9      | 170       | 2      | 182          | 9      | 19  | Nil   | 645         | 39     |
| 1921..... | 404              | 14     | 189       | 5      | 176          | 10     | 67  | Nil   | 836         | 96     |
| 1922..... | 448              | 22     | 221       | 4      | 181          | 22     | 98  | Nil   | 948         | 146    |
| 1923..... | 503              | 18     | 383       | 6      | 203          | 22     | 88  | Nil   | 1,177       | 134    |
| 1924..... | 651              | 25     | 281       | 4      | 200          | 8      | 80  | Nil   | 1,212       | 117    |
| 1925..... | 477              | 25     | 203       | Nil    | 177          | 16     | 72  | Nil   | 929         | 113    |
| 1926..... | 510              | 17     | 150       | 4      | 134          | 4      | 83  | Nil   | 877         | 108    |
| 1927..... | 421              | 20     | 145       | 2      | 212          | 10     | 93  | Nil   | 871         | 125    |
| 1928..... | 481              | 21     | 98        | Nil    | 182          | 9      | 102   | 13  | 876         | 145    |
| 1929..... | 747              | 41     | 102       | Nil    | 183          | 11     | 111   | 11  | 1,154       | 174    |
| 1930..... | 518              | 31     | 114       | 1      | 204          | 11     | 111   | 27  | 974         | 181    |
| 1931..... | 535              | 26     | 90        | Nil    | 208          | 10     | 122   | 20  | 976         | 178    |
| 1932..... | 511              | 24     | 78        | Nil    | 203          | 12     | 159   | 24  | 975         | 219    |
| 1933..... | 483              | 25     | 70        | 1      | 162          | 10     | 174   | 25  | 914         | 235    |
| 1934..... | 488              | 18     | 83        | 2      | 160          | 9      | 125   | 1   | 857         | 155    |
| 1935..... | 472              | 20     | 80        | 1      | 150          | 13     | 150   | 6   | 853         | 190    |
| 1936..... | 497              | 21     | 106       | Nil    | 190          | 10     | 191   | 27  | 1,011       | 249    |

## GRADUATES IN LAW AND THEOLOGY.

| Year.     | From Law Schools. |        | From Roman Catholic Theological Colleges. | From Protestant Theological Colleges. |        |
|-----------|-------------------|--------|---|---------------------------------------|--------|
|           | Total.            | Women. | Total.                                    | Total.                                | Women. |
| 1920..... | 382               | 12     | 182                                       | 212                                   | 17     |
| 1921..... | 393               | 14     | 226                                       | 200                                   | 18     |
| 1922..... | 382               | 4      | 245                                       | 148                                   | 22     |
| 1923..... | 261               | 4      | 264                                       | 163                                   | 18     |
| 1924..... | 252               | 11     | 278                                       | 152                                   | 19     |
| 1925..... | 226               | 7      | 250                                       | 168                                   | 19     |
| 1926..... | 277               | 10     | 270                                       | 205                                   | 23     |
| 1927..... | 257               | 7      | 272                                       | 173                                   | 21     |
| 1928..... | 198               | 7      | 271                                       | 166                                   | 17     |
| 1929..... | 241               | 3      | 244                                       | 164                                   | 15     |
| 1930..... | 211               | 8      | 269                                       | 161                                   | 16     |
| 1931..... | 223               | 5      | 245                                       | 189                                   | 18     |
| 1932..... | 235               | 8      | 265                                       | 173                                   | 15     |
| 1933..... | 213               | 7      | 258                                       | 162                                   | 17     |
| 1934..... | 209               | 8      | 288                                       | 202                                   | 20     |
| 1935..... | 238               | 11     | 289                                       | 202                                   | 15     |
| 1936..... | 209               | 7      | 310                                       | 174                                   | 16     |

<sup>1</sup> Includes 12 to 24 dental nurses annually.

## 9.—Graduates from Canadian Universities and Colleges, 1920-36—continued.

## POST-GRADUATE AND HONORARY DEGREES.

| Year.     | Honorary Doctorates. |        | Doctorates in Course. |        | Masters of Arts. <sup>1</sup> |        | Masters of Science. <sup>2</sup> |        |
|-----------|----------------------|--------|-----------------------|--------|-------------------------------|--------|----------------------------------|--------|
|           | Total.               | Women. | Total.                | Women. | Total.                        | Women. | Total.                           | Women. |
| 1920..... | 66                   | 1      | 24                    | Nil    | 147                           | 44     | 27                               | 1      |
| 1921..... | 58                   | Nil    | 24                    | 1      | 147                           | 42     | 30                               | 6      |
| 1922..... | 145                  | Nil    | 24                    | 1      | 156                           | 46     | 60                               | 4      |
| 1923..... | 84                   | 1      | 31                    | 2      | 196                           | 62     | 58                               | 2      |
| 1924..... | 78                   | 1      | 35                    | 3      | 222                           | 64     | 73                               | 5      |
| 1925..... | 72                   | 2      | 33                    | 3      | 187                           | 64     | 79                               | 5      |
| 1926..... | 67                   | Nil    | 28                    | 4      | 202                           | 62     | 82                               | 4      |
| 1927..... | 79                   | 2      | 40                    | 1      | 225                           | 72     | 67                               | 3      |
| 1928..... | 119                  | 3      | 41                    | 4      | 251                           | 74     | 77                               | 5      |
| 1929..... | 108                  | 1      | 51                    | 5      | 228                           | 76     | 59                               | 2      |
| 1930..... | 127                  | 1      | 61                    | 7      | 238                           | 78     | 68                               | 4      |
| 1931..... | 95                   | Nil    | 46                    | 7      | 274                           | 94     | 93                               | 4      |
| 1932..... | 78                   | 2      | 80                    | 11     | 239                           | 80     | 124                              | 5      |
| 1933..... | 102                  | Nil    | 87                    | 9      | 287                           | 101    | 145                              | 7      |
| 1934..... | 96                   | Nil    | 89                    | 11     | 254                           | 87     | 134                              | 4      |
| 1935..... | 76                   | 3      | 77                    | 4      | 234                           | 93     | 115                              | 7      |
| 1936..... | 100                  | 2      | 68                    | 5      | 252                           | 73     | 133                              | 3      |

| Year.     | Bachelors of Divinity. | Licentiates (except in Theology). |        | Other Post Graduate Degrees and Diplomas. <sup>3</sup> |        | Totals.     |        |
|-----------|------------------------|-----------------------------------|--------|--|--------|-------------|--------|
|           | Total.                 | Total.                            | Women. | Total.   | Women. | Both Sexes. | Women. |
| 1920..... | 37                     | 39                                | Nil    | 2  | Nil    | 342         | 46     |
| 1921..... | 34                     | 41                                | Nil    | 8  | Nil    | 342         | 49     |
| 1922..... | 61                     | 43                                | Nil    | 57   | Nil    | 546         | 51     |
| 1923..... | 42                     | 61                                | 1      | 66   | 1      | 538         | 69     |
| 1924..... | 47                     | 46                                | 1      | 80   | 8      | 581         | 82     |
| 1925..... | 33                     | 57                                | Nil    | 44   | 3      | 505         | 77     |
| 1926..... | 30                     | 40                                | 1      | 60   | 2      | 509         | 73     |
| 1927..... | 33                     | 70                                | 3      | 61   | 1      | 575         | 82     |
| 1928..... | 24                     | 72                                | 1      | 93   | 2      | 677         | 89     |
| 1929..... | 31                     | 76                                | 1      | 104  | 2      | 657         | 87     |
| 1930..... | 41                     | 94                                | 1      | 107  | Nil    | 736         | 91     |
| 1931..... | 37                     | 91                                | 2      | 100  | 2      | 736         | 109    |
| 1932..... | 33                     | 130                               | 2      | 107  | 2      | 791         | 102    |
| 1933..... | 32                     | 97                                | 4      | 97   | Nil    | 847         | 121    |
| 1934..... | 46                     | 120                               | 16     | 108  | 5      | 856         | 123    |
| 1935..... | 36                     | 112                               | 7      | 95   | 3      | 765         | 117    |
| 1936..... | 43                     | 100                               | 7      | 90   | Nil    | 786         | 90     |

<sup>1</sup> Includes M. Com. and M. Ed. or M. Paed.  
M.V.Sc., M.Sc. Dent., M. Surgery (where conferred separately).<sup>2</sup> Includes M.A.Sc., M.S.A., M.Sc.F., M.Arch.,  
<sup>3</sup> Excepting diplomas for teachers

## 9.—Graduates from Canadian Universities and Colleges, 1920-36—concluded.

## ESTIMATE OF STUDENTS RECEIVING FIRST DEGREES.

| Year.    | Grand Totals. <sup>1</sup> |       |        | Deductions for Duplication. |      |        | Net Totals.    |       |        |
|----------|----------------------------|-------|--------|-----------------------------|------|--------|----------------|-------|--------|
|          | Men and Women.             | Men.  | Women. | Men and Women.              | Men. | Women. | Men and Women. | Men.  | Women. |
| 1920.... | 2,889                      | 2,427 | 462    | 533                         | 522  | 11     | 2,356          | 1,905 | 451    |
| 1921.... | 3,627                      | 2,963 | 664    | 457                         | 445  | 12     | 3,170          | 2,518 | 652    |
| 1922.... | 3,843                      | 3,109 | 734    | 442                         | 430  | 12     | 3,401          | 2,679 | 722    |
| 1923.... | 4,609                      | 3,710 | 799    | 509                         | 502  | 7      | 4,000          | 3,208 | 792    |
| 1924.... | 4,467                      | 3,624 | 843    | 546                         | 535  | 11     | 3,921          | 3,089 | 832    |
| 1925.... | 4,037                      | 3,181 | 856    | 474                         | 464  | 10     | 3,563          | 2,717 | 846    |
| 1926.... | 4,319                      | 3,343 | 976    | 454                         | 443  | 11     | 3,865          | 2,900 | 965    |
| 1927.... | 4,414                      | 3,421 | 993    | 460                         | 450  | 10     | 3,954          | 2,971 | 983    |
| 1928.... | 4,545                      | 3,454 | 1,091  | 446                         | 435  | 11     | 4,099          | 3,019 | 1,080  |
| 1929.... | 4,932                      | 3,711 | 1,221  | 515                         | 501  | 14     | 4,417          | 3,210 | 1,207  |
| 1930.... | 5,185                      | 3,839 | 1,346  | 467                         | 453  | 14     | 4,718          | 3,386 | 1,332  |
| 1931.... | 5,290                      | 3,952 | 1,338  | 449                         | 437  | 12     | 4,841          | 3,515 | 1,326  |
| 1932.... | 5,552                      | 4,109 | 1,443  | 459                         | 447  | 12     | 5,093          | 3,662 | 1,431  |
| 1933.... | 5,891                      | 4,307 | 1,584  | 440                         | 428  | 12     | 5,451          | 3,879 | 1,572  |
| 1934.... | 6,272                      | 4,687 | 1,585  | 479                         | 467  | 12     | 5,793          | 4,220 | 1,573  |
| 1935.... | 6,226                      | 4,648 | 1,578  | 460                         | 449  | 11     | 5,766          | 4,199 | 1,567  |
| 1936.... | 6,441                      | 4,854 | 1,607  | 455                         | 444  | 11     | 5,986          | 4,390 | 1,596  |

<sup>1</sup> Not including diplomas in Education and Social Service, a few other diplomas, post-graduate and honorary degrees.

## Section 2.—Scientific and Industrial Research in Canada.

This section has, in past years, dealt with the history of scientific and industrial research in Canada and has included subsections outlining the organization and work of the National Research Council, and of those provincial councils and private institutions which are primarily interested in research work. During the past year, the operations of these organizations continued to be conducted along the lines described in previous issues of the Year Book, and to conserve space the reader is referred for this information to pp. 866-872 of the 1932 Year Book.

## Section 3.—The Libraries of Canada.

The Dominion Bureau of Statistics collects information from libraries biennially. In the 1937 Year Book, at pp. 978-980, a summary of the data obtained in the latest survey was published. More recent information is not available at the date on which the 1938 Year Book goes to press.

## Section 4.—Art in Canada.

An article entitled "The Development of the Fine Arts in Canada", contributed by Newton MacTavish, M.A., D.Litt., appeared at pp. 995-1009 of the 1931 Year Book and a shorter article, dealing more particularly with the National Art Gallery, at pp. 886-888 of the 1924 Year Book.



## CHAPTER XXVI.—PUBLIC HEALTH AND RELATED INSTITUTIONS.

The subject matter of this chapter is treated under the following sectional headings: Section 1.—Administration of Public Health Activities in Canada by the Dominion and Provincial Governments; Section 2.—Institutional Statistics of Public Health and Benevolence where, besides health and hospitalization records, social statistics also receive some attention—the latter are becoming more and more necessary to the proper drafting of social legislation and the study of social problems; Sections 3 and 4 review concisely the work of the Victorian Order of Nurses and the Canadian Red Cross Society, respectively.

The rapid increase in the numbers committed to various institutions, such as hospitals for the insane, feeble-minded and epileptic; the alleged increase in juvenile crime and the extension of social work in this field; the increasing number of institutions caring for the aged and incurable, as well as for dependent, neglected, and handicapped children, have been marked features of the first part of the twentieth century.

### Section 1.—Administration.

In Canada public health is administered by the Dominion and Provincial Governments through their respective health departments.

The Dominion Government deals only with such public health matters as are exclusively national, or such interprovincial public health matters as cannot be controlled effectively by the provinces. In addition, the Dominion Government makes grants to voluntary organizations which are engaged in public health work, notably: Canadian Welfare Council; Canadian National Institute for the Blind; Canadian Tuberculosis Association; Canadian National Committee for Mental Hygiene; Victorian Order of Nurses; Canadian Branch of St. John Ambulance Association; Canadian Red Cross Society; Canadian Social Hygiene Council; Canadian Mental Hygiene Council.

With the object of obtaining uniform legislation and procedure in the various provinces the Dominion Council of Health was created. This body consists of the Deputy Minister of the Dominion Department of Pensions and National Health as Chairman, the chief executive officer of the provincial department or board of health of each province, together with such other persons, not exceeding five, as may be appointed by the Governor in Council to hold office for three years. Of these appointed members, four represent agriculture, labour, rural women's work and social service, and child welfare, while the fifth member is a scientific adviser on public health matters. The Council meets twice a year at Ottawa, when public health problems are discussed and uniform standards and legislation adopted.

Speaking generally, the administration of local public health activities and the establishment and maintenance of institutions is in the hands of the Provincial Governments, under Sec. 92 of the British North America Act, 1867. Under their control, municipalities, societies, and individuals generally initiate charitable and humane efforts, depending on the Government to some extent for financial aid and for competent uniform inspection of methods and standards. Important, and reflecting most clearly the benefits accruing from such work, are the provisions for medical inspection of school children. These are carried out in some cases by the district or sub-district medical health officers, and in others by public health nurses

whose activities are confined to this work alone. In addition, expert advice and assistance are supplied freely to children, teachers, and parents. In many cases dental inspection is provided for. This work is relatively new and has been carried on upon a considerable scale for only a short period but great benefits have already resulted, notably general improvement in health and sanitary conditions and in the control and prevention of epidemics.

Public hospitals are the most numerous among health institutions. They are usually erected and supported by the municipalities, their actual administration being in the hands of boards of trustees; their revenue, in addition to that provided by the municipality, is derived from grants from the Provincial Governments, donations of individuals and societies, and fees paid by patients. Admission and treatment are free to all deserving persons who apply for them and whose resources are so limited as to prevent their otherwise receiving proper medical attention, while it is generally expected of others that payments for services shall be made in proportion to costs and their ability to defray them. Such public hospitals include isolation and maternity hospitals, tuberculosis sanatoria, etc. The two lazarettos for lepers are under Dominion administration, as are also hospitals for veterans and certain marine and immigrant hospitals.

Private hospitals do not receive public grants. There are also hospitals, more common in the province of Quebec, which are conducted by various religious orders; Red Cross hospitals and outposts; and special hospitals which may be privately administered or maintained by the provinces.

Mental institutions, homes for the feeble-minded and the epileptic are in most cases under provincial administration, although in Nova Scotia the insane of each county are cared for in county institutions.

Among charitable and benevolent institutions, orphanages, refuges, and homes for the aged are usually supported by the larger centres and by county municipalities. Homes or schools for the deaf and dumb and the blind are largely under provincial administration.

In the case of penal and reformatory institutions, penitentiaries are administered by the Dominion Government, while reformatories, industrial schools, prison farms, and similar corrective institutions are administered by the Provincial Governments.

#### **Subsection 1.—Public Health Activities of the Dominion Government.**

The Act of Parliament (18-19 Geo. V, c. 39, An Act respecting the Department of Pensions and National Health) creating the Dominion Department of Pensions and National Health, clearly defined its functions. The Department is divided into two divisions—those of Pensions, and National Health. The chief functions of the National Health Section (which from 1919 to 1929 was the Department of Health) are: to protect the country against the entrance of infectious disease; to exclude immigrants who might become a charge upon the country; to treat sick and injured mariners; to see that men employed on public construction work are provided with proper medical care; to set the standards and control the quality of food and drugs, except export meat and canned goods, which are under the Department of Agriculture; to control proprietary medicines and the importation and exportation of habit-forming drugs such as morphine, cocaine, etc.; to care for lepers and to co-operate with the provinces with a view to preserving and improving the public health. Following are the various Divisions of the Department of Health.

**Division of Quarantine, Leprosy, Immigration Medical, Sick Mariners and Marine Hospitals.**—*Quarantine*—Quarantine has for its object the prevention of the entry into the country by water, land, or air traffic of quarantinable diseases, especially plague, cholera, yellow fever, smallpox, and typhus. Quarantine stations are maintained at Halifax, N.S., Saint John, N.B., Quebec, Que., and William Head, B.C. Supervision is exercised especially over all vessels coming from abroad and any passengers or crews who are found to be suffering from quarantinable disease, together with contacts, are removed to the quarantine station, and the necessary measures taken regarding the infestation of vessels with rats or other vermin; all this in accordance with the principles laid down in the Convention of Paris, 1926. *Leprosy*—The Leprosy Branch of this Division operates two hospitals for the treatment of all cases of leprosy found in Canada, one at Tracadie, N.B., and the other at Bentinck Island, B.C. *Immigration Medical*—Medical advice is given the Immigration Department with regard to the mental and physical suitability of prospective immigrants. With this end in view there has been placed in Great Britain, Ireland, and on the Continent of Europe, a staff of Canadian doctors, whose duty is to examine all intending emigrants to Canada prior to their embarkation. This arrangement obviates the expense, discomfort, disappointment, and hardship occurring hitherto whenever it became necessary to deport, on account of physical or mental disability, immigrants who have made the journey across the ocean to Canada. Medical officers are also stationed at the principal ports of entry in Canada, who make a final inspection of prospective immigrants and supply medical care for those who are ill on arrival. *Sick Mariners and Marine Hospitals*—The sick mariners and marine hospitals provide medical and surgical attendance and such other treatment as may be required to all sick and injured mariners arriving at Canadian ports and belonging to vessels that pay sick mariners' dues, in conformity with Part V of the Canada Shipping Act (see pp. 680-682).

**Division of Sanitary Engineering.**—The activities normally handled under Public Health Engineering include: the administration of the Public Works Health Act, which is concerned with the health of men on construction works, canals, railways, and other forms of public works; by agreement with the U.S. Public Health Service, investigations and reports on sources of water supplies for use aboard common carriers in international and interprovincial traffic between Canada and the United States; special investigations and reports regarding pollution of the International Boundary waters in conjunction with representatives of the U.S. Public Health Service; supervision of water supplies of common carriers on the inland waters of Canada and in international and interprovincial traffic is another function; co-operation with other Dominion Departments *re* sanitation in National Parks and summer camps on Dominion lands and allied matters; with the American Railway Association regarding regulations on sanitation; with the Provincial Health Departments and the U.S. Public Health Service for the certification of water supplies of common carriers in interprovincial and international traffic.

**Proprietary or Patent Medicine Division.**—This Division is organized to give the public a reasonably safe and truthfully labelled proprietary medicine supply. Registration of all secret formula non-pharmacopoeial medicines for human use is required, and control is exercised over the potent drugs used in the manufacture of such medicines and the representations made regarding their use.

**Laboratory of Hygiene.**—The Laboratory of Hygiene is chiefly concerned with the control of biologic products used in treatment of human diseases, particu-

larly with reference to the potency of certain toxins, antitoxins, and other serological preparations. Sera and vaccines are scrutinized for purity, sterility, and potency. Such drugs as digitalis, strophanthus, ergot, pituitrin, and the salvarsans are examined for potency, and standards for them, based upon those of the League of Nations' Health Committee, are prepared by the Laboratory and furnished to all manufacturers desiring to use them in making their products. Disinfectants are investigated as to manufacturers' claims for germicidal qualities. Special and general aid is rendered to other departments of government, and research problems are undertaken.

**Food and Drugs Division.**—In this Division, inspection and laboratory services are maintained primarily for the purposes of the Food and Drugs Act, which is regulatory in character, designed to prevent the importation and sale of adulterated or misbranded food and drugs. Laboratories in Halifax, Montreal, Ottawa, Toronto, Winnipeg, and Vancouver examine samples taken from suspected stocks. Corrective measures are applied whenever adulteration or misbranding is found. Standards of quality have been established for many products, and the supervision of informative, truthful label declarations is a special objective. Laboratory services are provided for other Divisions of the Department, and co-operation with other departments of government is effectively carried on.

**Narcotic Drug Division.**—Since the introduction of opium smoking in Canada forty or more years ago the use of habit-forming drugs, such as morphine, heroin, and cocaine, has increased. One of the first steps taken by the Department of Health was the creation of a Narcotic Branch. Through this Branch, the importation and sale of such drugs are controlled in accordance with the principles laid down by international Conventions agreed to at The Hague and Geneva. Wholesale agents and druggists are obliged to keep records of importation or sale and to forward their records periodically to the Department. The legitimate use of these habit-forming drugs is thus controlled.

**Epidemiology.**—The Epidemiological Division co-operates with the provincial Departments of Health in the control of the communicable diseases and carries out special studies in regard to morbidity and mortality of disease and public health problems that arise from time to time.

**Industrial Hygiene.**—The purpose of the Industrial Hygiene Division is to develop methods for the protection and improvement of the health of industrial workers. This Division conducts special studies regarding illness in industries in co-operation with the provincial Departments of Health.

**Child and Maternal Hygiene.**—The work of this Division consists of measures designed for the reduction of infantile and maternal mortality in Canada. This necessitates collection of information regarding causative factors and the dissemination of knowledge regarding the application of remedial measures.

**Medical Appraisal and Advisory Division.**—This Division is concerned with medical examination of civil servants, supervision of sick leave and superannuation of civil servants throughout Canada on behalf of the Civil Service Commission, and special medical studies.

**Publicity.**—As the name indicates, the efforts of this Division are directed towards the dissemination of information on all phases of public health. The work consists of the compilation and distribution of public health literature, of exhibits, lectures, etc.

**Subsection 2.—Public Health Activities of the Provincial Governments.\***

**Prince Edward Island.**—The supervision of public health matters in Prince Edward Island was placed, on July 1, 1931, under a specially created Department of Public Health, presided over by a Minister and his Deputy. Two part-time physicians, five full-time public health nurses and two sanitary and food inspectors are employed. Under the direction of the Deputy Minister, the province is divided into five public health districts and each nurse is assigned a territory in which she is responsible for the inspection of school children, home visits, home-nursing classes, immunizing and vaccinating clinics, etc. The sanitary and food inspectors make regular surveys of the food-manufacturing plants, school premises, hotels, boarding houses, restaurants, etc., throughout the province. The Government also operates the Faleonwood Hospital for the Insane and the Provincial Infirmary.

In addition the Government subsidizes the Provincial Sanatorium, which has a capacity of sixty beds and has been functioning to capacity since July 1, 1931. In charge of the Provincial Sanatorium is a Medical Superintendent with an assistant and a staff of trained nurses. The Superintendent conducts chest clinics at regular intervals throughout the province as well as a regular weekly clinic in the Sanatorium, where referred cases from physicians are examined.

The Department of Health operates the Provincial Laboratory and a qualified technician is in charge, who examines material forwarded by physicians throughout the province.

Two venereal disease clinics are conducted by the Public Health Department, one in Charlottetown and the other in Summerside. All prisoners in Queens and Prince Counties gaols are examined and treatment given when required. Other patients unable to attend these clinics on account of distance are treated by their own local physicians who are supplied with the necessary medication.

**Nova Scotia.**—In Nova Scotia the Department of the Public Health directs its energies to communicable disease control; prenatal, post-natal, and school hygiene; sewage disposal; safety of milk and water supplies; collection of vital statistics; mental hygiene and health education. All of this has brought into being a comprehensive organization, presided over by a Minister, which acts in an advisory capacity to all local boards of health; makes regulations respecting any matter relevant to the public health; maintains a field force which provides a consulting service in tuberculosis and other health activities; supports a public health nursing service with specially trained nurses, who work both in the schools and in the homes; gives a free public health laboratory service which extends throughout the province; supervises the provincial hospitals, both general and special; provides inspection of public general hospitals and humane institutions; stocks and dispenses sera and vaccines; and distributes literature on all phases of health.

In addition to the foregoing the Department has recently broadened out and has taken under itsegis certain phases of social welfare and dependency, which give it the administration of mothers' allowances, old age pensions, child welfare, and a training school for the mentally deficient.

The latest venture has been the planning of a public health unit for Cape Breton island, which unit is now in process of organization.

**New Brunswick.**—The Department of Health, under the administration of a Minister of Health, was established in 1918. It provides the following services:

\*The material under this heading has been revised by the respective provincial authorities.

general sanitation, including supervision of water supplies and sewage disposal; control of communicable diseases, including tuberculosis and venereal diseases; public health laboratory and the supply of biologicals; medical inspection of schools; collection of vital statistics; public health nursing and child welfare; health education; and general supervision and co-ordination of the work of the sub-district boards of health.

Under the Minister, the Department is directed by the Chief Medical Officer who is also Registrar General of Vital Statistics. The staff consists of a director of laboratories, eleven full-time medical health officers, a director of public health nursing service and in addition a part-time director of venereal disease clinics.

There are ten health districts, each in charge of a district medical health officer who also provides the tuberculosis diagnostic and medical inspection of schools services.

Sixteen sub-health districts, each with its own board of health of which the district medical health officer is the chairman, have been organized. The sub-district boards of health have their own individual staffs of sanitary, food, plumbing, and other inspectors, registrars of vital statistics and public health nurses, all operating under the Provincial Health Act and Regulations.

The Department also maintains twenty-four depots for the distribution of biologicals and eleven venereal disease clinics.

The twentieth annual report of the Chief Medical Officer contains a review of the various services, the vital statistics for the province and the reports of staff members and of the sub-district boards of health.

**Quebec.**—The Department of Health, under the control of the Minister of Health, replaced the former Provincial Bureau of Health at the end of the year 1936.

The province of Quebec inaugurated, in 1926, a new system known as the 'county health units', consisting of a full-time health service for each county, or group of two or three adjoining counties. At present, 36 health units covering 46 counties have been organized with new counties asking for the same privilege. The former district health officers, reduced to 12, are in charge of all the counties not yet organized as county health units.

The services of all these officers and their staffs of nurses, sanitary inspectors, etc., are given in the form of consultations, public lectures, school medical inspections, baby and travelling tuberculosis clinics, and investigations of all kinds, immunization, sanitation, etc.

In addition to an Administrative Division, the Ministry of Health maintains the following Divisions: Laboratories, Sanitary Engineering, Demography, Mental Hygiene, Public Charities, Health Units and Districts, and Epidemiology. The control of venereal disease and tuberculosis is also undertaken and the Grancher system of foster homes has been introduced. The two Divisions created last year, namely, the Division of Industrial Hygiene and the Division of Hygiene of Nutrition, are now in operation. The latter includes maternal and child welfare.

The energies of the Ministry of Health are also directed towards the prevention of epidemics, more particularly tuberculosis and the more important causes of infant mortality. To this end, the Ministry has established 21 anti-tuberculosis dispensaries and 70 baby clinics, including those receiving government grants. During the year 1936-37, in the anti-tuberculosis dispensaries and the travelling

tuberculosis clinics, 23,407 people were examined. The various county health units have provided for the immunization of 22,940 children against diphtheria, which, with those previously immunized, make a total of 242,506.

**Ontario.**—The Department of Health of Ontario is under a Minister of the Government. In the direction of the departmental program, he is assisted by a Deputy Minister. These activities are appropriately divided into the following Divisions: Hospitals; Sanitary Engineering; Laboratories; Preventable Diseases; Maternal and Child Hygiene, and Public Health Nursing; Oral Hygiene; Tuberculosis Prevention; Industrial Hygiene, and Inspection of Training Schools for Nurses.

The local health work is carried on by a Board of Health and a Medical Officer of Health in each of the 900 municipalities. Twelve cities have whole-time health officers.

The Department assumes the responsibility for the free distribution of biological products used in the prevention and cure of preventable diseases. Insulin is distributed to those in need of such treatment on the recommendation of the local authorities; a percentage of the cost is contributed by the local municipalities. The maximum in the way of bacteriological service, including the examination of pathological tissue, is offered through the central laboratory and the seven branch laboratories, which are situated at appropriate centres throughout the province. Consultative service in the field of mental hygiene is made available through clinics which operate throughout the province. A regular schedule is maintained by these clinics and the profession is urged to take advantage of the service offered.

The increased public interest in the prevention of tuberculosis has justified the large measure of emphasis placed, during the past two years, on this phase of the program. The Department has continued its efforts to make both diagnosis and treatment of cancer possible for all. Seven cancer clinics are operating in well-chosen centres in the province; each of these is substantially subsidized by the Department.

The control of venereal diseases is stimulated by the conduct in the large urban centres of clinics operated for the treatment of these diseases. In all municipalities, the Department assumes a percentage of the cost of treatment of those suffering from either syphilis or gonorrhoea, who are not in a position to pay for the necessary treatment.

**Manitoba.**—Manitoba has an organized Department of Health and Public Welfare. The Health and Public Welfare Act states that the Minister shall preside over and have the management and direction of the Department, and the Department shall have administrative jurisdiction over all matters in the province which relate to health and public welfare. The various Divisions of the Department include those of: Disease Prevention (food and dairy inspection, public health nursing, sanitation, venereal disease prevention, communicable diseases, industrial hygiene, and maternal and child hygiene); Provincial Laboratories; Vital Statistics; Hospitalization; Psychiatry (Selkirk and Brandon Hospitals for Mental Diseases—Manitoba School for Mentally Defective Persons, Portage la Prairie—Psychopathic Hospital, Winnipeg); Child Welfare; Estates of Insane Persons and Indigency in Unorganized Territory; Supervision of Aged and Infirm Persons (being supported by public funds); Supervision of Medical Service (supplied by the province).

The previously established Board of Health and the Welfare Supervision Board have assumed an advisory capacity to the Minister of Health and Public Welfare;

and the Child Welfare Board is both advisory and administrative, being responsible for the administration of the Child Welfare Act.

**Saskatchewan.**—The Department of Public Health has been organized since 1923 under a Minister and a Deputy Minister. The Public Health Act of Saskatchewan also provides for a Public Health Council, consisting of the Deputy Minister as Chairman, three medical practitioners, a veterinary surgeon and a civil engineer. This Council acts in an advisory capacity to consider new health regulations and allied problems.

The Department is organized into seven Divisions. The Division of Administration, directly under the Deputy Minister who is also the Registrar General, co-ordinates the activities of the Department as a whole, directs the general policy in public health matters, supervises finances, legislation, hospital grants, municipal boards of health, and medical relief in certain unorganized territories. The Division of Public Health Nursing supervises maternity grants, organizes inspection of school children and home visits, pre-school and preventive clinics in co-operation with local physicians and conducts a public health nursing service throughout the province. The Division of Communicable Disease deals with epidemiology in all its phases and administers the regulations governing cemeteries and care and transportation of the dead. Supervision of trachoma, venereal disease, and tuberculosis (other than the organization of the Anti-Tuberculosis League) also comes under this Division. The Division of Sanitation supervises food, water, milk, and ice supplies, sewerage systems, urban and rural sanitation, and the organization of union hospital districts. The Division of Laboratories includes in its organization bacteriology, serology, pathology, chemical analyses, and medico-legal work. The Office of the Registrar General (formerly the Division of Vital Statistics) administers the Vital Statistics Act and the Marriage Act. The system used in classifying vital statistics has been decided upon in co-operation with other provinces and the Dominion Bureau of Statistics. The Mental Hygiene Act and the mental institutions established under its provisions in North Battleford, Weyburn, and Regina (psychopathic ward), are administered by the Department, and the internal operations of these institutions are supervised by the Commissioner of Mental Services.

**Union Hospitals.**—In Saskatchewan, in addition to the general hospitals, there exists a system known as the Union Hospital Organization, designed to furnish hospital accommodation in rural districts. Under the provisions of this plan, two or more municipalities may co-operate in building, equipping, and maintaining a hospital. Municipalities constituting a hospital district may enter into an agreement with the hospital board to provide free treatment for certain classes of patients at the cost of the municipalities concerned.

**Cancer Commission.**—This Commission, created in 1930, consists of the Deputy Minister of Public Health as Chairman, together with two physicians as members and a physician as secretary. Consultative diagnostic and treatment clinics have been established in Regina and Saskatoon, and radon is manufactured at an emanation plant in Saskatoon. Close contact is maintained with current advances in the prevention, diagnosis, and treatment of cancer.

**Health Services Board.**—This Board consists of the Deputy Minister as Chairman, a representative of the provincial College of Physicians and Surgeons and a representative of the Association of Rural Municipalities. The Board is inquiring into the extent and administration of the various health services existing in the province, collecting and studying data on the general situation regarding incidence



of illness from all causes, considering methods for an equitable distribution of the costs of illness, studying the needs of the people with respect to general health services and the necessity of co-ordination of those now existing. An advisory committee is associated with the Board, and consists of representatives from medical, hospital and allied organizations.

**Alberta.**—The Department of Public Health was established by an Act of the Provincial Legislature in 1919. The Department includes the following Divisions: Communicable Diseases; Sanitary Engineering and Sanitation; Public Health Education; Laboratory; Public Health Nursing; Hospitals, Municipal Hospitals; Hospital Inspection; Social Hygiene; Vital Statistics; Mental Hygiene; Dental Hygiene; Tuberculosis Control and the following institutions: the Central Alberta Sanatorium; the Provincial Mental Hospital, Ponoka; the Provincial Training School, Red Deer; the Provincial Auxiliary Hospital, Claresholm; and the Provincial Mental Institute, Edmonton.

Free clinics for venereal diseases are maintained in the principal cities and in the two provincial gaols. Educational work on social hygiene is carried on by means of lectures, moving pictures, bulletins, and radio talks.

**British Columbia.**—The Provincial Board of Health, responsible to the Provincial Secretary, administers the laws relating to public health in British Columbia. Its Branches comprise the following: Sanitation, Venereal Clinics, Laboratories, Tuberculosis, Infectious Diseases and Public Health Nursing, and Vital Statistics. The Sanitation Branch has directed numerous recent efforts to the prevention of the spread of communicable diseases by touring motorists, and to the control of campers and squatters along the coast. The Laboratories Branch, in addition to the analysis of specimens, distributes various vaccines and antitoxin. The Tuberculosis Branch has been very much enlarged, the province being organized into districts under the direction of a medical officer and specially trained public health nurses. The educational part of the work is accentuated, and home visits are emphasized in order to educate the people to the dangers of infection.

## Section 2.—Institutional Statistics.\*

Under authority granted by the Dominion Government in 1930, the Dominion Bureau of Statistics has since co-operated with the provincial authorities through its newly created branch of the Census of Institutions, and collects, on a Dominion-wide basis, statistics for the following types of institutions: (1) *hospitals*—institutions primarily engaged in the prevention and cure of physical sickness and disease, such as hospitals for the sick, sanatoria, and institutions for incurables; (2) *mental and neurological institutions*—for the treatment and care of mental ailments, such as asylums for the insane, institutions for the feeble-minded, epileptic, etc.; (3) *charitable and benevolent institutions*—caring for the poor of both sexes and of all ages, such as homes for the aged, county refuges, orphanages, etc.; and (4) *penal and corrective institutions*—having for their purpose the reclamation of the criminal and the reformation and training of delinquent boys and girls. Institutional statistics, as summarized in Table 1, may, therefore, be regarded as dealing with the four main types of social pathology, *viz.*, physical, mental, economic, and moral. They provide a body of statistical data which affords to students of social problems a fairly comprehensive view of institutional life in Canada.

**Historical.**—A brief historical sketch of the origin and growth of the several classes of institutions in Canada was given at pp. 1006-1009 of the 1936 Year Book.

\* This section has been revised by J. C. Brady, Officer in Charge of Census of Institutions, Dominion Bureau of Statistics.

## 1.—Numbers of Institutions in Canada, by Provinces, 1936.

NOTE.—Dashes in this table mean that no institutions of the type indicated existed in those provinces so far as was known.

| Type of Institution.                           | P.E.I.    | N.S.       | N.B.      | Que.       | Ont.       | Man.      | Sask.      | Alta.      | B.C.       | Yukon and N.W.T. | Total.       |
|--|-----------|------------|-----------|------------|------------|-----------|------------|------------|------------|------------------|--------------|
| <b>Hospitals (excluding mental)—</b>           |           |            |           |            |            |           |            |            |            |                  |              |
| Public—  |           |            |           |            |            |           |            |            |            |                  |              |
| General.....                                   | 4         | 23         | 16        | 52         | 110        | 33        | 74         | 76         | 68         | 10               | 466          |
| Women's.....                                   | —         | 2          | 1         | 5          | 4          | —         | 3          | 2          | 1          | —                | 18           |
| Pediatric.....                                 | —         | 1          | —         | 3          | 2          | 1         | 1          | 1          | 2          | —                | 11           |
| Isolation.....                                 | —         | 1          | —         | 3          | 7          | 2         | 1          | 3          | —          | —                | 18           |
| Convalescent.....                              | —         | —          | —         | 3          | 1          | 1         | —          | —          | —          | —                | 5            |
| Tuberculosis.....                              | 1         | 2          | 3         | 8          | 13         | 4         | 4          | 1          | 1          | —                | 37           |
| Red Cross.....                                 | —         | —          | —         | —          | 27         | —         | 6          | —          | 1          | —                | 34           |
| Incurable.....                                 | —         | —          | 1         | 1          | 7          | 1         | 2          | 5          | 1          | —                | 18           |
| Other.....                                     | —         | —          | —         | 5          | 1          | —         | —          | —          | —          | —                | 6            |
| Totals, Public.....                            | 5         | 29         | 21        | 81         | 172        | 42        | 91         | 88         | 74         | 10               | 613          |
| Private.....                                   | —         | 4          | 7         | 33         | 68         | 7         | 63         | 50         | 27         | —                | 259          |
| Dominion.....                                  | —         | 4          | 3         | 4          | 7          | 3         | 1          | 5          | 4          | —                | 31           |
| <b>Totals, All Hospitals...</b>                | <b>5</b>  | <b>37</b>  | <b>31</b> | <b>118</b> | <b>247</b> | <b>52</b> | <b>155</b> | <b>143</b> | <b>105</b> | <b>10</b>        | <b>903</b>   |
| <b>Mental Institutions—</b>                    |           |            |           |            |            |           |            |            |            |                  |              |
| Public hospitals.....                          | 1         | 1          | 1         | 6          | 11         | 2         | 2          | 3          | 3          | —                | 30           |
| Training schools.....                          | —         | 1          | —         | 1          | 1          | 1         | —          | 1          | —          | —                | 5            |
| Psychiatric hospitals.....                     | —         | —          | —         | —          | 1          | 1         | —          | —          | —          | —                | 2            |
| County and municipal institutions.....         | —         | 14         | —         | —          | —          | —         | —          | —          | —          | —                | 14           |
| Dominion hospitals.....                        | —         | —          | —         | 1          | 1          | —         | —          | —          | —          | —                | 2            |
| Private institutions.....                      | —         | —          | —         | 1          | 2          | —         | —          | —          | 1          | —                | 4            |
| <b>Totals, Mental.....</b>                     | <b>1</b>  | <b>16</b>  | <b>1</b>  | <b>9</b>   | <b>16</b>  | <b>4</b>  | <b>2</b>   | <b>4</b>   | <b>4</b>   | <b>—</b>         | <b>57</b>    |
| <b>Charitable and Benevolent Institutions—</b> |           |            |           |            |            |           |            |            |            |                  |              |
| Homes for adults.....                          | 1         | 16         | 8         | 33         | 64         | 6         | —          | 2          | 7          | —                | 137          |
| Homes for adults and children.....             | 1         | 7          | 10        | 48         | 15         | 3         | 1          | 1          | 2          | —                | 88           |
| Orphanages.....                                | 2         | 10         | 7         | 30         | 28         | 14        | 4          | 6          | 3          | —                | 118          |
| Day nurseries.....                             | —         | 1          | —         | 3          | 8          | 2         | —          | —          | —          | —                | 15           |
| Children's aid societies.....                  | 2         | 14         | 3         | 2          | 58         | 5         | 5          | 3          | 3          | —                | 95           |
| Juvenile immigration societies.....            | —         | 1          | 1         | 1          | 2          | —         | —          | —          | 1          | —                | 6            |
| <b>Totals, Charitable, etc..</b>               | <b>6</b>  | <b>49</b>  | <b>29</b> | <b>126</b> | <b>175</b> | <b>30</b> | <b>10</b>  | <b>12</b>  | <b>22</b>  | <b>—</b>         | <b>459</b>   |
| <b>Penal and Reformatory Institutions—</b>     |           |            |           |            |            |           |            |            |            |                  |              |
| Penitentiaries.....                            | —         | —          | 1         | 1          | 2          | 1         | 1          | —          | 1          | —                | 7            |
| Corrective and reformatory institutions.....   | —         | 4          | 3         | 4          | 9          | 3         | 2          | 2          | 2          | —                | 29           |
| Male juveniles.....                            | —         | 2          | 1         | 2          | 3          | 1         | 1          | —          | 1          | —                | 11           |
| Female juveniles.....                          | —         | —          | —         | 1          | 1          | —         | —          | 1          | —          | —                | 4            |
| Male adults.....                               | —         | —          | —         | 3          | —          | —         | 1          | —          | —          | —                | 4            |
| Female adults.....                             | —         | —          | 1         | —          | 1          | —         | —          | —          | —          | —                | 2            |
| Female adults and juveniles.....               | —         | 2          | 1         | 1          | 1          | 2         | —          | 1          | —          | —                | 8            |
| <b>Totals, Penal, etc.....</b>                 | <b>—</b>  | <b>4</b>   | <b>4</b>  | <b>5</b>   | <b>11</b>  | <b>4</b>  | <b>3</b>   | <b>2</b>   | <b>3</b>   | <b>—</b>         | <b>36</b>    |
| <b>Grand Totals.....</b>                       | <b>12</b> | <b>106</b> | <b>65</b> | <b>259</b> | <b>449</b> | <b>90</b> | <b>170</b> | <b>161</b> | <b>134</b> | <b>10</b>        | <b>1,455</b> |

## Subsection 1.—Statistics of Hospitals, other than Mental.

The total number of various hospitals in operation in Canada during 1936 is given in the first part of Table 1. It is seen from the table that in addition to 613 public hospitals there were 259 private hospitals and 31 hospitals operated by the Dominion Government made up of: 8 for war veterans, 4 quarantine and immigration, 1 marine and 2 leper hospitals under the direction of the Department of Pensions and National Health; 9 military hospitals under the Department of National Defence; and 7 hospitals for Indians under the Department of Indian Affairs.\*

\* A complete list of all hospitals in Canada, giving name, location, type, bed accommodation, etc., will be found in the Hospital Directory for Canada, 1936, issued by the Dominion Bureau of Statistics.

Summary statistics of reporting hospitals, which included 99.5 p.c. of all hospitals in 1936, are presented for the years 1932 to 1936 in Table 2, and detailed statistics of staff, facilities, and movement of patients are shown by provinces in Table 3.

## 2.—Summary Statistics of Reporting Hospitals in Canada, calendar years 1932-36.

NOTE.—Figures include hospitals and homes for incurables, but do not include mental hospitals.

| Item.  | 1932.            | 1933.            | 1934.            | 1935.            | 1936.            |
|--|------------------|------------------|------------------|------------------|------------------|
| <b>Public Hospitals—</b>                       |                  |                  |                  |                  |                  |
| Numbers reporting.....                         | 589 <sup>1</sup> | 508 <sup>2</sup> | 602 <sup>2</sup> | 608 <sup>2</sup> | 610 <sup>2</sup> |
| Bed capacities <sup>4</sup> .....              | 45,835           | 58,100           | 58,535           | 59,832           | 59,909           |
| Patients under treatment <sup>5</sup> .....    | 650,845          | 657,372          | 700,240          | 766,559          | 825,720          |
| Total collective days' stay <sup>6</sup> ..... | 11,868,608       | 13,033,021       | 13,767,188       | 14,696,408       | 15,175,356       |
| <b>Private Hospitals—</b>                      |                  |                  |                  |                  |                  |
| Numbers reporting.....                         | 214              | 243              | 281              | 267              | 259              |
| Bed capacities <sup>4</sup> .....              | 2,315            | 3,312            | 3,490            | 3,409            | 3,386            |
| Patients under treatment <sup>5</sup> .....    | 25,460           | 25,273           | 30,180           | 32,363           | 35,707           |
| Total collective days' stay <sup>6</sup> ..... | 351,459          | 368,221          | 412,461          | 410,890          | 428,239          |
| <b>Dominion Hospitals—</b>                     |                  |                  |                  |                  |                  |
| Numbers reporting.....                         | 35               | 32               | 28 <sup>7</sup>  | 31 <sup>8</sup>  | 30 <sup>8</sup>  |
| Bed capacities <sup>4</sup> .....              | 3,427            | 2,560            | 2,422            | 2,638            | 3,191            |
| Patients under treatment <sup>5</sup> .....    | 16,058           | 15,160           | 15,447           | 16,646           | 16,518           |
| Total collective days' stay <sup>6</sup> ..... | 733,967          | 424,046          | 421,972          | 445,694          | 691,574          |
| <b>Totals—</b>                                 |                  |                  |                  |                  |                  |
| Numbers reporting.....                         | 838              | 873              | 891              | 906              | 899              |
| Bed capacities <sup>4</sup> .....              | 51,577           | 63,972           | 64,447           | 65,879           | 66,486           |
| Patients under treatment <sup>5</sup> .....    | 689,363          | 697,805          | 751,867          | 815,568          | 877,945          |
| Total collective days' stay <sup>6</sup> ..... | 12,954,064       | 14,194,409       | 15,014,082       | 15,963,882       | 16,200,100       |

<sup>1</sup> Eight public hospitals did not report. <sup>2</sup> Three public hospitals in Yukon and N.W.T. did not report. <sup>3</sup> Seven public hospitals in Yukon and N.W.T. did not report. <sup>4</sup> Bed capacities include beds, cribs and bassinets. <sup>5</sup> Patients under treatment includes newborn. <sup>6</sup> Collective days' stay includes stay of newborn. <sup>7</sup> Four Dominion hospitals did not report. <sup>8</sup> One Dominion hospital did not report.

## 3.—Statistics of Reporting Hospitals, by Provinces, Showing Staff, Facilities, and Movement of Population, calendar year 1936.

NOTE.—Figures include hospitals and homes for incurables, but do not include mental hospitals.

| Province and Item.                       | Public Hospitals.<br>General. | Province and Item.                       | Public Hospitals. |                | Private Hospitals. |
|--|-------------------------------|--|-------------------|----------------|--------------------|
|  |                               |  | General.          | All Other.     |                    |
| <b>Yukon and N.W.T.</b>                  |                               | <b>Prince Edward Island.</b>             |                   |                |                    |
| Number of hospitals reporting.....       | 7 <sup>1</sup>                | Numbers of hospitals reporting.....      | 4                 | 1 <sup>2</sup> | Nil                |
| Approved schools of nursing....          | Nil                           | Approved schools of nursing....          | 3                 | Nil            | Nil                |
| <b>Staff—</b>                            |                               | <b>Staff—</b>                            |                   |                |                    |
| Salaries doctors.....                    | 2                             | Salaries doctors.....                    | 1                 | Nil            | —                  |
| Interns.....                             | Nil                           | Interns.....                             | 2                 | Nil            | —                  |
| Graduate nurses.....                     | 17                            | Graduate nurses.....                     | 19                | 7              | —                  |
| Student nurses.....                      | Nil                           | Student nurses.....                      | 64                | Nil            | —                  |
| <b>Total, Personnel.....</b>             | <b>56</b>                     | <b>Totals, Personnel.....</b>            | <b>141</b>        | <b>24</b>      | <b>—</b>           |
| <b>Hospital Facilities—</b>              |                               | <b>Hospital Facilities—</b>              |                   |                |                    |
| X-Ray.....                               | 4                             | X-Ray.....                               | 3                 | 1              | —                  |
| Clinical laboratory.....                 | 2                             | Clinical laboratory.....                 | 3                 | 1              | —                  |
| Physio-therapy.....                      | Nil                           | Physio-therapy.....                      | 1                 | Nil            | —                  |
| <b>Movement of Population—</b>           |                               | <b>Movement of Population—</b>           |                   |                |                    |
| Admissions.....                          | 888                           | Admissions.....                          | 4,707             | 68             | —                  |
| Live births.....                         | 46                            | Live births.....                         | 428               | 1              | —                  |
| <b>Total, Under Treatment...</b>         | <b>1,044</b>                  | <b>Totals, Under Treatment.</b>          | <b>5,269</b>      | <b>122</b>     | <b>—</b>           |
| Discharges.....                          | 873                           | Discharges.....                          | 4,930             | 46             | —                  |
| All deaths.....                          | 80                            | All deaths.....                          | 174               | 15             | —                  |
| Total collective days' stay...<br>35,583 |                               | Total collective days' stay...<br>52,372 |                   | 19,848         | —                  |

<sup>1</sup> Three general hospitals did not report, and figures for the Territories are, therefore, not as representative as for the provinces. <sup>2</sup> This institution is classified in Table 1.

## 3.—Statistics of Reporting Hospitals, by Provinces, Showing Staff, Facilities, and Movement of Population, calendar year 1936—continued.

| Province and Item.                  | All Hospitals. | Public Hospitals. |                 | Private Hospitals. | Dominion Hospitals. |
|-------------------------------------|----------------|-------------------|-----------------|--------------------|---------------------|
|                                     |                | General.          | All Other.      |                    |                     |
| Nova Scotia.                        |                |                   |                 |                    |                     |
| Numbers of hospitals reporting..... | 37             | 23                | 6 <sup>1</sup>  | 4                  | 4                   |
| Approved schools of nursing.....    | 15             | 11                | 2               | 2                  | Nil                 |
| Staff—                              |                |                   |                 |                    |                     |
| Salaried doctors.....               | 16             | 5                 | 6               | Nil                | 5                   |
| Interns.....                        | 26             | 18                | 8               | Nil                | Nil                 |
| Graduate nurses.....                | 295            | 194               | 51              | 39                 | 14                  |
| Student nurses.....                 | 433            | 330               | 53              | 55                 | Nil                 |
| Totals, Personnel.....              | 1,526          | 937               | 313             | 194                | 92                  |
| Hospital Facilities—                |                |                   |                 |                    |                     |
| X-Ray.....                          | 28             | 22                | 3               | 2                  | 1                   |
| Clinical laboratory.....            | 23             | 16                | 2               | 3                  | 2                   |
| Physio-therapy.....                 | 14             | 9                 | 1               | 3                  | 1                   |
| Movement of Population—             |                |                   |                 |                    |                     |
| Admissions.....                     | 37,785         | 29,440            | 2,930           | 3,832              | 1,583               |
| Live births.....                    | 3,712          | 2,234             | 922             | 556                | Nil                 |
| Totals, Under Treatment.....        | 48,262         | 33,726            | 9,258           | 4,529              | 1,749               |
| Discharges.....                     | 40,068         | 30,593            | 3,642           | 4,306              | 1,527               |
| All deaths.....                     | 1,333          | 1,033             | 190             | 88                 | 22                  |
| Total collective days' stay.....    | 669,191        | 419,057           | 157,011         | 49,834             | 43,289              |
| New Brunswick.                      |                |                   |                 |                    |                     |
| Numbers of hospitals reporting..... | 31             | 16                | 5 <sup>1</sup>  | 7                  | 3                   |
| Approved schools of nursing.....    | 13             | 12                | 1               | Nil                | Nil                 |
| Staff—                              |                |                   |                 |                    |                     |
| Salaried doctors.....               | 22             | 8                 | 8               | Nil                | 6                   |
| Interns.....                        | 13             | 11                | 2               | Nil                | Nil                 |
| Graduate nurses.....                | 227            | 149               | 50              | 21                 | 7                   |
| Student nurses.....                 | 372            | 359               | 13              | Nil                | Nil                 |
| Totals, Personnel.....              | 1,177          | 872               | 224             | 39                 | 42                  |
| Hospital Facilities—                |                |                   |                 |                    |                     |
| X-Ray.....                          | 21             | 15                | 3               | 2                  | 1                   |
| Clinical laboratory.....            | 16             | 11                | 3               | Nil                | 2                   |
| Physio-therapy.....                 | 16             | 12                | 3               | Nil                | 1                   |
| Movement of Population—             |                |                   |                 |                    |                     |
| Admissions.....                     | 22,957         | 20,413            | 581             | 1,382              | 581                 |
| Live births.....                    | 1,958          | 1,815             | 105             | 38                 | Nil                 |
| Totals, Under Treatment.....        | 26,694         | 23,869            | 1,123           | 1,456              | 646                 |
| Discharges.....                     | 23,732         | 21,209            | 589             | 1,387              | 547                 |
| All deaths.....                     | 1,005          | 874               | 86              | 32                 | 13                  |
| Total collective days' stay.....    | 505,368        | 306,410           | 162,536         | 14,799             | 21,523              |
| Quebec.                             |                |                   |                 |                    |                     |
| Numbers of hospitals reporting..... | 118            | 52                | 29 <sup>1</sup> | 33                 | 4                   |
| Approved schools of nursing.....    | 37             | 28                | 7               | 2                  | Nil                 |
| Staff—                              |                |                   |                 |                    |                     |
| Salaried doctors.....               | 254            | 122               | 88              | 21                 | 23                  |
| Interns.....                        | 301            | 246               | 55              | Nil                | Nil                 |
| Graduate nurses.....                | 1,867          | 1,289             | 354             | 93                 | 31                  |
| Student nurses.....                 | 1,896          | 1,611             | 259             | 26                 | Nil                 |
| Totals, Personnel.....              | 10,439         | 7,779             | 2,167           | 297                | 237                 |
| Hospital Facilities—                |                |                   |                 |                    |                     |
| X-Ray.....                          | 75             | 44                | 20              | 8                  | 3                   |
| Clinical laboratory.....            | 65             | 36                | 16              | 10                 | 3                   |
| Physio-therapy.....                 | 54             | 31                | 14              | 7                  | 2                   |
| Movement of Population—             |                |                   |                 |                    |                     |
| Admissions.....                     | 151,886        | 124,441           | 21,308          | 5,258              | 879                 |
| Live births.....                    | 10,897         | 7,892             | 2,251           | 754                | Nil                 |
| Totals, Under Treatment.....        | 173,517        | 133,166           | 27,796          | 6,261              | 1,354               |
| Discharges.....                     | 155,468        | 126,398           | 22,237          | 5,578              | 905                 |
| All deaths.....                     | 7,349          | 5,858             | 1,324           | 138                | 29                  |
| Total collective days' stay.....    | 4,235,538      | 2,543,007         | 1,452,291       | 87,821             | 152,419             |

<sup>1</sup> These institutions are classified in detail in Table 1.

### 3.—Statistics of Reporting Hospitals, by Provinces, Showing Staff, Facilities, and Movement of Population, calendar year 1936—continued.

| Province and Item.                  | All Hospitals. | Public Hospitals. |                 | Private Hospitals. | Dominion Hospitals. |
|-------------------------------------|----------------|-------------------|-----------------|--------------------|---------------------|
|                                     |                | General.          | All Other.      |                    |                     |
| Ontario.                            |                |                   |                 |                    |                     |
| Numbers of hospitals reporting..... | 247            | 110               | 62 <sup>1</sup> | 68                 | 7                   |
| Approved schools of nursing.....    | 74             | 62                | 11              | 1                  | Nil                 |
| Staff—                              |                |                   |                 |                    |                     |
| Salaried doctors.....               | 282            | 110               | 84              | 29                 | 59                  |
| Interns.....                        | 243            | 208               | 35              | Nil                | Nil                 |
| Graduate nurses.....                | 2,595          | 1,664             | 706             | 140                | 85                  |
| Student nurses.....                 | 3,421          | 3,135             | 273             | 13                 | Nil                 |
| Totals, Personnel.....              | 13,720         | 9,582             | 3,163           | 474                | 501                 |
| Hospital Facilities—                |                |                   |                 |                    |                     |
| X-Ray.....                          | 146            | 102               | 27              | 14                 | 3                   |
| Clinical laboratory.....            | 86             | 58                | 15              | 11                 | 2                   |
| Physio-therapy.....                 | 72             | 54                | 5               | 12                 | 1                   |
| Movement of Population—             |                |                   |                 |                    |                     |
| Admissions.....                     | 244,607        | 202,274           | 27,556          | 10,339             | 4,438               |
| Live births.....                    | 29,647         | 24,526            | 3,128           | 1,890              | 103                 |
| Totals, Under Treatment.....        | 288,547        | 234,874           | 33,670          | 12,580             | 5,423               |
| Discharges.....                     | 262,043        | 216,554           | 29,147          | 11,951             | 4,361               |
| All deaths.....                     | 12,419         | 10,315            | 1,717           | 247                | 140                 |
| Total collective days' stay.....    | 5,407,324      | 3,127,012         | 1,854,947       | 136,474            | 308,891             |
| Manitoba.                           |                |                   |                 |                    |                     |
| Numbers of hospitals reporting..... | 52             | 33                | 9 <sup>1</sup>  | 7                  | 3                   |
| Approved schools of nursing.....    | 20             | 15                | 5               | Nil                | Nil                 |
| Staff—                              |                |                   |                 |                    |                     |
| Salaried doctors.....               | 89             | 43                | 21              | 4                  | 21                  |
| Interns.....                        | 66             | 55                | 11              | Nil                | Nil                 |
| Graduate nurses.....                | 520            | 328               | 192             | 17                 | 23                  |
| Student nurses.....                 | 876            | 759               | 117             | Nil                | Nil                 |
| Totals, Personnel.....              | 3,095          | 2,983             | 857             | 39                 | 116                 |
| Hospital Facilities—                |                |                   |                 |                    |                     |
| X-Ray.....                          | 32             | 23                | 6               | 2                  | 1                   |
| Clinical laboratory.....            | 23             | 13                | 5               | 3                  | 2                   |
| Physio-therapy.....                 | 15             | 10                | 2               | 2                  | 1                   |
| Movement of Population—             |                |                   |                 |                    |                     |
| Admissions.....                     | 63,012         | 52,320            | 7,880           | 1,110              | 1,702               |
| Live births.....                    | 6,489          | 6,145             | 19              | 308                | 17                  |
| Totals, Under Treatment.....        | 73,631         | 60,490            | 9,180           | 1,448              | 1,913               |
| Discharges.....                     | 67,250         | 56,620            | 7,565           | 1,388              | 1,077               |
| All deaths.....                     | 2,307          | 1,912             | 334             | 20                 | 41                  |
| Total collective days' stay.....    | 1,240,915      | 697,847           | 468,051         | 10,995             | 64,022              |
| Saskatchewan.                       |                |                   |                 |                    |                     |
| Numbers of hospitals reporting..... | 155            | 74                | 17 <sup>1</sup> | 63                 | 1                   |
| Approved schools of nursing.....    | 11             | 10                | 1               | Nil                | Nil                 |
| Staff—                              |                |                   |                 |                    |                     |
| Salaried doctors.....               | 26             | 10                | 15              | 1                  | 2                   |
| Interns.....                        | 24             | 20                | 4               | Nil                |                     |
| Graduate nurses.....                | 650            | 502               | 95              | 53                 |                     |
| Student nurses.....                 | 614            | 598               | 16              | Nil                |                     |
| Totals, Personnel.....              | 2,606          | 2,010             | 422             | 144                |                     |
| Hospital Facilities—                |                |                   |                 |                    |                     |
| X-Ray.....                          | 62             | 57                | 3               | 2                  | 2                   |
| Clinical laboratory.....            | 36             | 32                | 3               | 1                  |                     |
| Physio-therapy.....                 | 27             | 24                | 2               | 1                  |                     |
| Movement of Population—             |                |                   |                 |                    |                     |
| Admissions.....                     | 73,034         | 61,555            | 8,195           | 3,284              | 2                   |
| Live births.....                    | 8,065          | 6,706             | 496             | 803                |                     |
| Totals, Under Treatment.....        | 84,431         | 70,168            | 9,691           | 4,169              |                     |
| Discharges.....                     | 73,419         | 65,914            | 8,491           | 4,014              |                     |
| All deaths.....                     | 2,540          | 2,262             | 190             | 88                 |                     |
| Total collective days' stay.....    | 1,272,545      | 847,869           | 384,494         | 40,182             |                     |

<sup>1</sup> These institutions are classified in detail in Table 1.<sup>2</sup> New hospital; no report for 1936.

## 3.—Statistics of Reporting Hospitals, by Provinces, Showing Staff, Facilities, and Movement of Population, calendar year 1936—concluded.

| Province and Item.                  | All Hospitals. | Public Hospitals. |                  | Private Hospitals. | Dominion Hospitals. |
|-------------------------------------|----------------|-------------------|------------------|--------------------|---------------------|
|                                     |                | General.          | All Other.       |                    |                     |
| <b>Alberta.</b>                     |                |                   |                  |                    |                     |
| Numbers of hospitals reporting..... | 143            | 76                | 12 <sup>1</sup>  | 50                 | 5                   |
| Approved schools of nursing.....    | 11             | 10                |                  | Nil                | Nil                 |
| <b>Staff—</b>                       |                |                   |                  |                    |                     |
| Salaried doctors.....               | 54             | 20                | 6                | 7                  | 21                  |
| Interns.....                        | 37             | 37                | Nil              | Nil                | Nil                 |
| Graduate nurses.....                | 652            | 531               | 56               | 40                 | 25                  |
| Student nurses.....                 | 701            | 695               | 6                | Nil                | Nil                 |
| <b>Totals, Personnel.....</b>       | <b>2,533</b>   | <b>2,400</b>      | <b>220</b>       | <b>125</b>         | <b>88</b>           |
| <b>Hospital Facilities—</b>         |                |                   |                  |                    |                     |
| X-Ray.....                          | 75             | 62                | 2                | 8                  | 3                   |
| Clinical laboratory.....            | 36             | 30                | 1                | 3                  | 2                   |
| Physio-therapy.....                 | 21             | 16                | 1                | 3                  | 1                   |
| <b>Movement of Population—</b>      |                |                   |                  |                    |                     |
| Admissions.....                     | 77,207         | 71,204            | 1,782            | 1,713              | 2,508               |
| Live births.....                    | 9,773          | 8,658             | 353              | 645                | 117                 |
| <b>Totals, Under Treatment.....</b> | <b>90,027</b>  | <b>82,154</b>     | <b>2,671</b>     | <b>2,430</b>       | <b>2,772</b>        |
| Discharges.....                     | 84,083         | 77,247            | 1,989            | 2,206              | 2,551               |
| All deaths.....                     | 2,836          | 2,623             | 83               | 61                 | 69                  |
| Total collective days' stay.....    | 1,243,129      | 966,317           | 194,850          | 31,813             | 50,149              |
| <b>British Columbia.</b>            |                |                   |                  |                    |                     |
| Numbers of hospitals reporting..... | 105            | 68                | 6 <sup>1</sup>   | 27                 | 4                   |
| Approved schools of nursing.....    | 10             | 9                 | 1                | Nil                | Nil                 |
| <b>Staff—</b>                       |                |                   |                  |                    |                     |
| Salaried doctors.....               | 89             | 55                | 8                | 8                  | 18                  |
| Interns.....                        | 49             | 49                | Nil              | Nil                | Nil                 |
| Graduate nurses.....                | 913            | 780               | 60               | 54                 | 19                  |
| Student nurses.....                 | 748            | 738               | 10               | Nil                | Nil                 |
| <b>Totals, Personnel.....</b>       | <b>3,821</b>   | <b>3,252</b>      | <b>319</b>       | <b>140</b>         | <b>110</b>          |
| <b>Hospital Facilities—</b>         |                |                   |                  |                    |                     |
| X-Ray.....                          | 69             | 60                | 2                | 6                  | 1                   |
| Clinical laboratory.....            | 33             | 27                | 2                | 2                  | 2                   |
| Physio-therapy.....                 | 24             | 19                | 2                | 2                  | 1                   |
| <b>Movement of Population—</b>      |                |                   |                  |                    |                     |
| Admissions.....                     | 80,943         | 75,057            | 850              | 2,510              | 2,526               |
| Live births.....                    | 8,322          | 7,682             | 403              | 237                | Nil                 |
| <b>Totals, Under Treatment.....</b> | <b>93,001</b>  | <b>85,629</b>     | <b>1,517</b>     | <b>2,894</b>       | <b>2,661</b>        |
| Discharges.....                     | 85,333         | 79,083            | 1,119            | 2,673              | 2,458               |
| All deaths.....                     | 3,576          | 3,328             | 103              | 89                 | 56                  |
| Total collective days' stay.....    | 1,608,456      | 1,287,582         | 218,272          | 51,321             | 51,281              |
| <b>Canada.</b>                      |                |                   |                  |                    |                     |
| Numbers of hospitals reporting..... | 900            | 463               | 147 <sup>1</sup> | 259                | 31                  |
| Approved schools of nursing.....    | 194            | 160               | 29               | 5                  | Nil                 |
| <b>Staff—</b>                       |                |                   |                  |                    |                     |
| Salaried doctors.....               | 835            | 376               | 236              | 70                 | 153                 |
| Interns.....                        | 761            | 646               | 115              | Nil                | Nil                 |
| Graduate nurses.....                | 7,765          | 5,573             | 1,531            | 457                | 204                 |
| Student nurses.....                 | 9,130          | 8,289             | 747              | 94                 | Nil                 |
| <b>Totals, Personnel.....</b>       | <b>39,479</b>  | <b>29,142</b>     | <b>7,709</b>     | <b>1,442</b>       | <b>1,186</b>        |
| <b>Hospital Facilities—</b>         |                |                   |                  |                    |                     |
| X-Ray.....                          | 510            | 392               | 67               | 44                 | 13                  |
| Clinical laboratory.....            | 324            | 228               | 48               | 33                 | 15                  |
| Physio-therapy.....                 | 244            | 176               | 30               | 30                 | 8                   |
| <b>Movement of Population—</b>      |                |                   |                  |                    |                     |
| Admissions.....                     | 757,094        | 642,299           | 71,150           | 29,428             | 14,217              |
| Live births.....                    | 79,338         | 66,192            | 7,678            | 5,231              | 237                 |
| <b>Totals, Under Treatment.....</b> | <b>882,945</b> | <b>733,389</b>    | <b>87,331</b>    | <b>35,707</b>      | <b>16,518</b>       |
| Discharges.....                     | 802,245        | 679,421           | 74,875           | 33,893             | 14,056              |
| All deaths.....                     | 33,634         | 28,459            | 4,042            | 703                | 370                 |
| Total collective days' stay.....    | 16,290,169     | 10,283,056        | 4,892,300        | 423,239            | 691,574             |

<sup>1</sup> These institutions are classified in detail in Table 1.

**Out-Patient Departments.**—Out-patient departments, or clinics, are operated independently or in connection with hospitals, medical colleges, universities, or other institutions. The dispensary or clinic in connection with a hospital is generally the out-patient department treating patients who do not occupy beds in the hospital. Sometimes, however, the out-patient department is distinct from the hospital proper and is a separate institution with its own staff, etc. The extension of out-patient services to patients of modest means has far-reaching and beneficial effects. It may replace admission to a hospital, or may serve to secure necessary and beneficial hospitalization. As a general rule, out-patient departments are subsidized from the funds of the general hospital and separate records are not kept. Until a uniform system of accounting is adopted, it will not be possible to give the average cost per patient.

Table 4 gives the hospitals of each class operating public out-patient departments in Canada, by provinces, 1936. The statistics are rendered more complicated than is desirable because of lack of uniformity in the method of reporting patients and treatments. The majority of hospitals report both patients and treatments, but a considerable number report either patients or treatments, but not both.

#### 4.—Public Hospitals Operating Out-Patient Departments, 1936.

NOTE.—Figures of government and municipal clinics held in hospitals are not included.

| Province and Class of Hospital. | Total Out-Patient Departments. | Both Patients and Treatments Reported. |           |                  | Patients only Reported. |           | Treatments only Reported. |                  |
|---------------------------------|--------------------------------|--|-----------|------------------|-------------------------|-----------|---------------------------|------------------|
|                                 |                                | No. Re-<br>porting.                    | Patients. | Treat-<br>ments. | No. Re-<br>porting.     | Patients. | No. Re-<br>porting.       | Treat-<br>ments. |
| <b>Canada</b> .....             | 73                             | 41                                     | 202,671   | 751,013          | 13                      | 155,520   | 19                        | 868,305          |
| General.....                    | 53                             | 32                                     | 173,024   | 645,244          | 6                       | 89,508    | 15                        | 833,273          |
| Women's.....                    | 4                              | 1                                      | 825       | 1,981            | 2                       | 19,188    | 1                         | 24,055           |
| Pædiatric.....                  | 7                              | 4                                      | 24,671    | 90,522           | 3                       | 37,607    | Nil                       | —                |
| Tuberculosis.....               | 9                              | 4                                      | 4,151     | 13,266           | 2                       | 9,117     | 3                         | 10,977           |
| Other.....                      | Nil                            | —                                      | —         | —                | —                       | —         | —                         | —                |
| <b>Nova Scotia</b> .....        | 1                              | Nil                                    | —         | —                | 1                       | 6,504     | Nil                       | —                |
| General.....                    | 1                              | Nil                                    | —         | —                | 1                       | 6,504     | Nil                       | —                |
| <b>New Brunswick</b> .....      | 2                              | 2                                      | 10,111    | 30,788           | Nil                     | —         | Nil                       | —                |
| General.....                    | 2                              | 2                                      | 10,111    | 30,788           | Nil                     | —         | Nil                       | —                |
| <b>Quebec</b> .....             | 26                             | 15                                     | 105,121   | 347,923          | 5                       | 118,738   | 6                         | 326,642          |
| General.....                    | 22                             | 14                                     | 104,881   | 347,160          | 2                       | 69,654    | 6                         | 326,642          |
| Women's.....                    | 1                              | —                                      | —         | —                | 1                       | 12,129    | —                         | —                |
| Pædiatric.....                  | 3                              | 1                                      | 240       | 763              | 2                       | 36,955    | —                         | —                |
| Other.....                      | Nil                            | —                                      | —         | —                | —                       | —         | —                         | —                |
| <b>Ontario</b> .....            | 24                             | 14                                     | 63,525    | 240,906          | 4                       | 24,709    | 6                         | 427,306          |
| General.....                    | 13                             | 8                                      | 38,133    | 161,661          | 1                       | 11,054    | 4                         | 399,765          |
| Women's.....                    | 3                              | 1                                      | 825       | 1,981            | 1                       | 7,059     | 1                         | 24,055           |
| Pædiatric.....                  | 2                              | 1                                      | 20,416    | 63,998           | 1                       | 652       | Nil                       | —                |
| Tuberculosis.....               | 6                              | 4                                      | 4,151     | 13,266           | 1                       | 5,944     | 1                         | 3,486            |
| <b>Manitoba</b> .....           | 9                              | 4                                      | 8,816     | 42,811           | Nil                     | —         | 5                         | 53,604           |
| General.....                    | 6                              | 3                                      | 4,842     | 17,226           | Nil                     | —         | 3                         | 46,113           |
| Pædiatric.....                  | 1                              | 1                                      | 3,974     | 25,585           | Nil                     | —         | Nil                       | —                |
| Tuberculosis.....               | 2                              | Nil                                    | —         | —                | Nil                     | —         | 2                         | 7,491            |
| <b>Saskatchewan</b> .....       | 3                              | 1                                      | 764       | 1,672            | 2                       | 3,818     | Nil                       | —                |
| General.....                    | 2                              | 1                                      | 764       | 1,672            | 1                       | 645       | Nil                       | —                |
| Tuberculosis.....               | 1                              | Nil                                    | —         | —                | 1                       | 3,173     | Nil                       | —                |
| <b>Alberta</b> .....            | 3                              | 3                                      | 10,299    | 80,892           | Nil                     | —         | Nil                       | —                |
| General.....                    | 2                              | 2                                      | 10,258    | 80,716           | Nil                     | —         | Nil                       | —                |
| Pædiatric.....                  | 1                              | 1                                      | 41        | 176              | Nil                     | —         | Nil                       | —                |
| <b>British Columbia</b> .....   | 5                              | 2                                      | 4,035     | 6,021            | 1                       | 1,651     | 2                         | 60,753           |
| General.....                    | 5                              | 2                                      | 4,035     | 6,021            | 1                       | 1,651     | 2                         | 60,753           |
| <b>N.W.T.</b> .....             | 1                              | —                                      | —         | —                | —                       | —         | —                         | —                |
| General.....                    | 1                              | —                                      | —         | —                | —                       | —         | —                         | —                |

<sup>1</sup> No report.

Subsection 2.—Statistics of Mental Hospitals.

The Census of Mental Institutions of Canada for June 1, 1931, gave the number of patients in all mental institutions as 31,686, of whom 24,188 were insane, 7,006 mentally deficient, and 492 epileptic. The number of patients in mental institutions per 100,000 of the general population was 305.4 on June 1, 1931, 316.5 on Dec. 31, 1932, 324.9 on Dec. 31, 1933, 335.6 on Dec. 31, 1934, and 348.2 on Dec. 31, 1935.

At Dec. 31, 1936, there were 39,833 patients in mental institutions in Canada, and 3,247 on parole, making a total of 43,080, whereas the normal bed capacity was only 37,379, showing a seriously overcrowded situation over a period when the patient population on Jan. 1, 1936, and the admissions and separations during the year are considered. This overcrowded condition is specially marked in British Columbia, Manitoba, Saskatchewan, Ontario, and Quebec. Of the 39,833 resident patients in 1936, 31,268 were insane, 7,711 were mentally deficient, 603 were epileptic, and 251 mental cases were otherwise classified. The patients per 100,000 of population at the end of the year were 359.5. Table 5 gives general statistics of mental institutions for 1936.

5.—Statistics of Capacity, Staff, Movement of Population, and Finances of Mental Institutions in Canada, by Provinces, calendar year 1936.

| Item.  | Prince<br>Edward<br>Island. | Nova<br>Scotia. | New<br>Brun-<br>swick. | Quebec.          | Ontario.                     |
|--|-----------------------------|-----------------|------------------------|------------------|------------------------------|
| Institutions reporting.....No.                     | 1                           | 16              | 1                      | 9                | 16                           |
| Normal capacities....."                            | 275                         | 2,126           | 1,025                  | 11,484           | 13,050                       |
| <b>Staff—</b>                                      |                             |                 |                        |                  |                              |
| Doctors, full time....."                           | 2                           | 5               | 4                      | 51               | 88                           |
| Doctors, part time....."                           | Nil                         | 15              | 1                      | 10               | 32                           |
| Graduate nurses....."                              | 11                          | 32              | 12                     | 217              | 592                          |
| Other nurses....."                                 | 8                           | 62              | Nil                    | 357              | 291                          |
| <b>Totals, Staff<sup>1</sup>....."</b>             | <b>60</b>                   | <b>339</b>      | <b>129</b>             | <b>2,253</b>     | <b>2,707</b>                 |
| <b>Movement of Population—</b>                     |                             |                 |                        |                  |                              |
| Admissions....."                                   | 97                          | 545             | 273                    | 3,271            | 4,544                        |
| <b>Totals, under Treatment....."</b>               | <b>353</b>                  | <b>2,583</b>    | <b>1,314</b>           | <b>15,696</b>    | <b>18,877</b>                |
| Separations....."                                  | 93                          | 522             | 233                    | 2,604            | 3,999                        |
| <b>Receipts—</b>                                   |                             |                 |                        |                  |                              |
| Government and municipal payments.....\$           | 99,929                      | 494,476         | 124,517                | 2,712,072        | 3,146,381                    |
| Fees from paying patients.....\$                   | 11,285                      | 13,248          | 33,638                 | 400,936          | 1,034,331                    |
| Received from other sources.....\$                 | Nil                         | 52,202          | 140,349                | 1,525,310        | 481,441                      |
| <b>Totals, Receipts.....\$</b>                     | <b>111,214</b>              | <b>559,926</b>  | <b>298,504</b>         | <b>4,638,318</b> | <b>4,662,152<sup>2</sup></b> |
| <b>Expenditures—</b>                               |                             |                 |                        |                  |                              |
| Salaries.....\$                                    | 35,268                      | 207,418         | 72,809                 | 1,057,743        | 2,539,089                    |
| Provisions.....\$                                  | 31,842                      | 148,823         | 74,373                 | 778,058          | 909,530                      |
| All other expenditures for maintenance.....\$      | 44,104                      | 166,638         | 102,822                | 997,762          | 1,068,861                    |
| <b>Totals, Expenditures for Maintenance.....\$</b> | <b>111,214</b>              | <b>522,879</b>  | <b>250,004</b>         | <b>2,833,563</b> | <b>4,507,480</b>             |
| New buildings and improvements.....\$              | Nil                         | 34,764          | 48,500                 | 1,311,186        | Nil                          |
| Expenditures for other purposes.....\$             | Nil                         | 2,060           | Nil                    | 485,963          | 93,540                       |
| <b>Totals, Expenditures.....\$</b>                 | <b>111,214</b>              | <b>559,703</b>  | <b>298,504</b>         | <b>4,630,712</b> | <b>4,601,020<sup>2</sup></b> |

For footnotes, see end of table, p. 1014.



### 5.—Statistics of Capacity, Staff, Movement of Population, and Finances of Mental Institutions in Canada, by Provinces, calendar year 1936—concluded.

| Item.  | Manitoba.      | Saskatchewan.    | Alberta.       | British Columbia. | Total.            |
|--|----------------|------------------|----------------|-------------------|-------------------|
| Institutions reporting.....No.                     | 4              | 2                | 4              | 4                 | 57                |
| Normal capacities....."                            | 2,272          | 2,600            | 2,092          | 2,455             | 37,379            |
| <b>Staff—</b>                                      |                |                  |                |                   |                   |
| Doctors, full time....."                           | 18             | 6                | 13             | 17                | 204               |
| Doctors, part time....."                           | 3              | 3                | Nil            | 2                 | 72                |
| Graduate nurses....."                              | 71             | 11               | 53             | 33                | 1,032             |
| Other nurses....."                                 | 105            | 119              | 58             | 129               | 1,129             |
| <b>Totals, Staff....."</b>                         | <b>544</b>     | <b>475</b>       | <b>426</b>     | <b>596</b>        | <b>7,538</b>      |
| <b>Movement of Population—</b>                     |                |                  |                |                   |                   |
| Admissions....."                                   | 793            | 778              | 894            | 910               | 12,105            |
| <b>Totals, under Treatment....."</b>               | <b>3,471</b>   | <b>3,721</b>     | <b>3,174</b>   | <b>4,227</b>      | <b>53,326</b>     |
| Separations....."                                  | 696            | 588              | 736            | 775               | 10,246            |
| <b>Receipts—</b>                                   |                |                  |                |                   |                   |
| Government and municipal payments.....\$           | 753,561        | 1,126,272        | 718,551        | 888,290           | 10,064,049        |
| Fees from paying patients.....\$                   | 74,311         | 108,984          | 85,052         | 217,346           | 1,074,131         |
| Received from other sources.....\$                 | 24,711         | 4,957            | 25,672         | 8,130             | 2,262,772         |
| <b>Totals, Receipts.....\$</b>                     | <b>852,583</b> | <b>1,235,213</b> | <b>829,275</b> | <b>1,113,766</b>  | <b>14,390,952</b> |
| <b>Expenditures—</b>                               |                |                  |                |                   |                   |
| Salaries.....\$                                    | 343,890        | 417,596          | 436,307        | 462,101           | 5,572,221         |
| Provisions.....\$                                  | 201,658        | 243,403          | 146,540        | 265,339           | 2,799,566         |
| All other expenditures for maintenance.....\$      | 275,837        | 385,557          | 166,250        | 374,192           | 3,572,029         |
| <b>Totals, Expenditures for Maintenance.....\$</b> | <b>821,385</b> | <b>1,046,556</b> | <b>749,103</b> | <b>1,101,632</b>  | <b>11,943,816</b> |
| New buildings and improvements.....\$              | 2,016          | 188,667          | 80,172         | 4                 | 1,065,285         |
| Expenditures for other purposes.....\$             | 20,182         | 3                | 3              | 2,282             | 613,027           |
| <b>Totals, Expenditures.....\$</b>                 | <b>852,583</b> | <b>1,235,213</b> | <b>829,275</b> | <b>1,103,914</b>  | <b>14,222,135</b> |

<sup>1</sup> Includes other personnel.  
are not included.

<sup>2</sup> Receipts and expenditures for the Ontario Hospital, Fort William, None reported.

### Subsection 3.—Charitable and Benevolent Institutions.

Statistics of institutions which care for the indigent, the aged and infirm, orphans, dependent and neglected children, the deaf and dumb and the blind, are shown by provinces in Table 6. Such statistics are now collected quinquennially and figures for 1931 will be found at page 1018 of the 1936 edition of the Year Book.

### 6.—Summary Statistics of Charitable and Benevolent Institutions in Canada, by Provinces, June 1, 1936.

| Item.                                  | Prince Edward Island. | Nova Scotia.   | New Brunswick. | Quebec.          | Ontario.         |
|--|-----------------------|----------------|----------------|------------------|------------------|
| Institutions.....No.                   | 6                     | 48             | 28             | 126              | 173              |
| Personnel....."                        | 58                    | 370            | 275            | 4,413            | 1,075            |
| <b>Inmates—</b>                        |                       |                |                |                  |                  |
| Adults....."                           | 187                   | 1,676          | 532            | 6,192            | 5,295            |
| Children....."                         | 233                   | 2,299          | 993            | 12,363           | 13,688           |
| <b>Totals, Inmates....."</b>           | <b>420</b>            | <b>3,975</b>   | <b>1,525</b>   | <b>18,555</b>    | <b>18,983</b>    |
| <b>Receipts—</b>                       |                       |                |                |                  |                  |
| Grants and maintenance payments.....\$ | 9,408                 | 338,815        | 91,754         | 1,603,735        | 2,027,163        |
| Receipts from paying inmates.....\$    | 13,954                | 94,262         | 40,322         | 673,299          | 559,789          |
| All other receipts.....\$              | 8,553                 | 131,210        | 167,558        | 1,473,447        | 641,524          |
| <b>Totals, Receipts.....\$</b>         | <b>31,915</b>         | <b>564,287</b> | <b>299,634</b> | <b>3,750,481</b> | <b>3,228,476</b> |
| <b>Expenditures—</b>                   |                       |                |                |                  |                  |
| Salaries and wages.....\$              | 9,430                 | 118,471        | 62,821         | 625,689          | 819,892          |
| Provisions (food).....\$               | 8,740                 | 180,179        | 70,118         | 1,105,235        | 801,024          |
| Fuel, power, light and water.....\$    | 4,829                 | 51,390         | 25,848         | 456,898          | 275,163          |
| All other expenditures.....\$          | 6,983                 | 226,702        | 125,611        | 1,930,506        | 1,343,502        |
| <b>Totals, Expenditures.....\$</b>     | <b>29,982</b>         | <b>576,742</b> | <b>284,398</b> | <b>4,118,328</b> | <b>3,239,581</b> |

<sup>1</sup> These institutions are classified in Table 1.

**6.—Summary Statistics of Charitable and Benevolent Institutions in Canada,  
by Provinces, June 1, 1936—concluded.**

| Item.                                  | Mani-<br>toba. | Sas-<br>katche-<br>wan. | Alberta.      | British<br>Colum-<br>bia. | Total.           |
|--|----------------|-------------------------|---------------|---------------------------|------------------|
| Institutions <sup>1</sup> .....No.     | 30             | 10                      | 12            | 21                        | 454 <sup>2</sup> |
| Personnel....."                        | 319            | 64                      | 71            | 177                       | 7,422            |
| <b>Inmates—</b>                        |                |                         |               |                           |                  |
| Adults....."                           | 336            | 14                      | 68            | 381                       | 14,681           |
| Children....."                         | 1,589          | 327                     | 603           | 1,318                     | 38,413           |
| <b>Totals, Inmates....."</b>           | <b>1,925</b>   | <b>341</b>              | <b>671</b>    | <b>1,699</b>              | <b>48,094</b>    |
| <b>Receipts—</b>                       |                |                         |               |                           |                  |
| Grants and maintenance payments.....\$ | 276,961        | 29,752                  | 38,289        | 268,730                   | 4,684,607        |
| Receipts from paying inmates.....\$    | 66,677         | 5,488                   | 26,671        | 67,337                    | 1,547,769        |
| All other receipts.....\$              | 66,372         | 42,881                  | 24,881        | 71,745                    | 2,628,171        |
| <b>Totals, Receipts.....\$</b>         | <b>410,010</b> | <b>78,121</b>           | <b>89,841</b> | <b>407,812</b>            | <b>8,860,547</b> |
| <b>Expenditures—</b>                   |                |                         |               |                           |                  |
| Salaries and wages.....\$              | 100,361        | 16,291                  | 19,077        | 88,864                    | 1,800,896        |
| Provisions (food).....\$               | 77,792         | 14,356                  | 23,958        | 52,218                    | 2,333,620        |
| Fuel, power, light and water.....\$    | 40,517         | 8,840                   | 8,109         | 23,204                    | 900,798          |
| All other expenditures.....\$          | 196,141        | 85,822                  | 37,484        | 226,140                   | 4,128,891        |
| <b>Totals, Expenditures.....\$</b>     | <b>420,811</b> | <b>75,309</b>           | <b>88,628</b> | <b>390,426</b>            | <b>9,224,205</b> |

<sup>1</sup> These institutions are classified in Table 1.

<sup>2</sup> Five institutions did not report and are not included.

**Subsection 4.—Corrective and Reformative Institutions.**

Summary statistics under this heading collected at the Census of 1931 were given at page 1019 of the 1936 edition of the Year Book. These statistics are now being collected quinquennially and figures for 1936 are given in Table 7. The reader will find detailed statistics of crime and delinquency (which are presented on an annual basis), as distinct from these institutional statistics, in Chapter XXVII immediately following this chapter.

**7.—Summary Statistics of Corrective and Reformative Institutions, by Provinces,  
June 1, 1936.**

Note.—The figures in this table differ from those shown at p. 998 of the 1937 Year Book in that the statistics for corrective and reformative institutions are now final, while those for penitentiaries have been eliminated, as statistics for these latter may be found in the following chapter.

| Item.  | Nova<br>Scotia. | New<br>Brunswick. | Quebec.        | Ontario.         | Manitoba.     |
|--|-----------------|-------------------|----------------|------------------|---------------|
| Institutions <sup>1</sup> .....No.                       | 4               | 3                 | 4              | 10               | 3             |
| Personnel....."  | 68              | 40                | 144            | 456              | 58            |
| <b>Inmates—</b>  |                 |                   |                |                  |               |
| Adults (16 years or over)....."                          | 90              | 49                | 423            | 1,806            | 93            |
| Juveniles (under 16 years)....."                         | 198             | 54                | 426            | 292              | 47            |
| <b>Totals, Inmates....."</b>                             | <b>288</b>      | <b>103</b>        | <b>849</b>     | <b>2,098</b>     | <b>140</b>    |
| <b>Receipts—</b>   |                 |                   |                |                  |               |
| Grants—Provincial.....\$                                 | 29,889          | 17,225            | 164,032        | 819,566          | 64,352        |
| Municipal.....\$   | 24,848          | 16,275            | "              | 208,237          | "             |
| From all other sources.....\$                            | 26,211          | 13,755            | 94,352         | 614,745          | 2,639         |
| <b>Totals, Receipts.....\$</b>                           | <b>80,948</b>   | <b>47,255</b>     | <b>258,384</b> | <b>1,642,548</b> | <b>66,991</b> |
| <b>Expenditures—</b>                                     |                 |                   |                |                  |               |
| Salaries.....\$  | 27,668          | 14,127            | 52,792         | 455,272          | 28,341        |
| Provisions (food).....\$                                 | 15,878          | 6,193             | 53,013         | 232,645          | 11,999        |
| Fuel, power and light.....\$                             | 6,977           | 3,773             | 23,572         | 79,424           | 15,636        |
| All other expenditures for maintenance \$                | 17,830          | 8,430             | 96,608         | 257,957          | 19,641        |
| <b>Totals, Expenditures for Main-<br/>tenance.....\$</b> | <b>68,353</b>   | <b>32,523</b>     | <b>225,985</b> | <b>1,025,298</b> | <b>75,617</b> |
| Non-maintenance expenditures.....\$                      | 15,184          | 10,985            | 104,927        | 604,672          | 3,153         |
| <b>Totals, Expenditures.....\$</b>                       | <b>83,537</b>   | <b>43,508</b>     | <b>330,912</b> | <b>1,629,970</b> | <b>78,770</b> |

<sup>1</sup> These institutions are classified in Table 1.

<sup>2</sup> None reported.

**7.—Summary Statistics of Corrective and Reformative Institutions, by Provinces,  
June 1, 1936—concluded.**

| Item.  | Saskatchewan. | Alberta.      | British Columbia. | Total. <sup>2</sup> |
|--|---------------|---------------|-------------------|---------------------|
| Institutions <sup>1</sup> .....No.                           | 2             | 2             | 2                 | 30                  |
| Personnel..... <sup>a</sup>                                  | 26            | 23            | 39                | 884                 |
| <b>Inmates—</b>  |               |               |                   |                     |
| Adults (16 years or over)..... <sup>a</sup>                  | 54            | 47            | 60                | 2,622               |
| Juveniles (under 16 years)..... <sup>a</sup>                 | 37            | 17            | 30                | 1,101               |
| <b>Totals, Inmates.....<sup>a</sup></b>                      | <b>91</b>     | <b>64</b>     | <b>90</b>         | <b>3,723</b>        |
| <b>Receipts—</b>   |               |               |                   |                     |
| Grants—Provincial..... <sup>3</sup>                          | 62,513        | 2,564         | 54,016            | 1,214,157           |
| Municipal..... <sup>3</sup>                                  | 3             | 842           | 13,794            | 263,996             |
| From all other sources..... <sup>3</sup>                     | 98            | 9,421         | 4,051             | 765,872             |
| <b>Totals, Receipts.....<sup>3</sup></b>                     | <b>62,611</b> | <b>12,827</b> | <b>72,461</b>     | <b>2,244,025</b>    |
| <b>Expenditures—</b>   |               |               |                   |                     |
| Salaries..... <sup>3</sup>                                   | 34,456        | 2,504         | 35,966            | 651,126             |
| Provisions (food)..... <sup>3</sup>                          | 7,826         | 4,045         | 10,613            | 342,222             |
| Fuel, power and light..... <sup>3</sup>                      | 5,579         | 1,914         | 7,282             | 144,157             |
| All other expenditures for maintenance..... <sup>3</sup>     | 14,642        | 2,918         | 13,868            | 431,804             |
| <b>Totals, Expenditures for Maintenance.....<sup>3</sup></b> | <b>62,513</b> | <b>11,381</b> | <b>67,729</b>     | <b>1,569,399</b>    |
| Non-maintenance expenditures..... <sup>3</sup>               | 3             | 1,029         | 4,732             | 744,632             |
| <b>Totals, Expenditures.....<sup>3</sup></b>                 | <b>62,513</b> | <b>12,410</b> | <b>72,461</b>     | <b>2,314,031</b>    |

<sup>1</sup> These institutions are classified in Table 1.  
Edward Island.

<sup>2</sup> None reported.

<sup>3</sup> There are no institutions of this class in Prince

### Section 3.—The Victorian Order of Nurses.

The Victorian Order of Nurses was created in 1897 for the definite purpose of establishing trained nurses in localities such as villages and townships remote from hospital centres. With the growth of the Order, the field of activity was broadened to meet the demands of health and social agencies in the large centres of population, but the main work of the Order is still carried out in the villages and rural areas of population.

The primary function of the Victorian Order is bedside nursing and teaching of health in the homes visited. Three types of care are given by the nurses, *viz.*, maternal and infant welfare, general nursing, and health education. During 1936, the Order had 343 trained nurses in the field and 78 Branches distributed as follows: Nova Scotia, 14; New Brunswick, 5; Quebec, 5; Ontario, 43; Manitoba, 1; Saskatchewan, 2; Alberta, 2; and British Columbia, 6. During 1936, 727,400 visits were made to 82,021 patients, which was a slight decrease in the work as a whole. The average number of visits per case was 8.9. Of the total visits paid, 433,668 or 59.6 p.c. were free while fully-paid visits constituted 24.7 p.c. (of which 17 p.c. were insurance) and part-paid visits 15.7 p.c. Maternal and welfare cases constituted 56.4 p.c. of the total visits paid.

The maternal death rate per 1,000 living births attended by Victorian Order nurses for the past five years was 2.2.

### Section 4.—The Canadian Red Cross Society.\*

Closely allied with the Dominion and Provincial Governments in activities to promote the health of the people is the Canadian Red Cross Society. Founded in 1896, its purposes are (1) to furnish volunteer aid to the sick and wounded of armies in time of war, and (2) in time of peace to carry on and assist in work for the improvement of health, the prevention of disease and the mitigation of suffering.

The more important phases of the peace-time work carried on by the Society are: (a) the continuing care of sick and disabled ex-service men; (b) the operation of Red Cross outpost hospitals; (c) the promotion of Junior Red Cross and the treatment of crippled or otherwise disabled children; (d) the maintenance of a disaster relief organization fully prepared for immediate action in any emergency; (e) the organization of classes for the study of home nursing and nutrition; (f) the care of immigrant women and children at the Port of Halifax; (g) the training and supplying of visiting housekeepers for families when the homemaker is ill; (h) co-operation with government departments and other voluntary organizations in combating disease, the promotion of child welfare, and the care of the physically defective; (i) in general, provision for the needs of the distressed and destitute.

Since the inception of the peace-time program in 1920, the Red Cross Society has established outpost hospital service in 70 centres in Canada's northland. Twenty-four of these have been handed over to their communities, four have been found no longer necessary, and in 1937 there were 42 outpost hospitals operating under the emblem of the Red Cross. In 1937, Red Cross outposts cared for 36,803 patients, of which number 7,296 were in-patients with a total of 78,369 hospital days' treatment. Without the aid of these outposts, thousands of our fellow-citizens who gain their livelihood on the fringes of the settled parts of Canada would have lacked any kind of skilled assistance when sickness or injury overtook them.

Junior Red Cross, a movement for the children of elementary and sometimes secondary schools, is devoted to the promotion of the principles of health, good citizenship, and international friendliness. Guided only by the teacher-mentor, the children work out their own program of personal and school hygiene, community service, and interchange of handicrafts and information with the Juniors of other lands. Though primarily an educational movement, it is significant that since its inception, the Canadian Junior Red Cross has helped over 14,000 crippled or otherwise disabled children. Junior Red Cross now embraces a membership of over 17,000,000 children in 52 nations of the world. In Canada for the school year 1936-37, 11,927 branches were enrolled with a total membership of 364,335.

The consolidated financial statement of the Society for 1937 showed total receipts of \$1,273,782, of which \$956,618 consisted of voluntary contributions. Gross expenditures were \$1,279,175, of which the major items were \$463,484 on disaster relief, \$299,679 for outpost hospitals, \$118,215 on assistance to soldiers and their dependants, \$44,796 for the treatment of crippled children, \$104,276 on general relief, \$45,792 on the organization of the Junior Red Cross, and \$24,037 for home nursing, visiting housekeeper, and nutrition services.

\* Revised by W. S. Caldwell, M.D., Assistant Director, Ontario Division, The Canadian Red Cross Society, Toronto.

## CHAPTER XXVII.—JUDICIAL AND PENITENTIARY STATISTICS.\*

**Canadian Criminal Law and Procedure.**—An account of the development of the Criminal Code in Canada was given at pp. 1085-1087 of the 1934-35 edition of the Year Book. In this article a résumé of procedure and of the extent and jurisdiction of the various classes of judges and magistrates was given.

The statistics presented in the tables that follow, which are summarized from the Annual Report of Statistics of Criminal and Other Offences, are collected directly from the criminal courts in the different judicial districts throughout the Dominion. There are 155 judicial districts, including 2 sub-districts, divided as to provinces as follows: Prince Edward Island 3, Nova Scotia 18, New Brunswick 15, Quebec 24, Ontario 47, Manitoba 6, Saskatchewan 21, Alberta 12, British Columbia 8, and Yukon 1. The figures for the Northwest Territories are obtained from the reports of the Royal Canadian Mounted Police.

### Section 1.—General Tables.

The collection and publication of criminal statistics now made by the Dominion Bureau of Statistics was initiated in 1876 (39 Vict., c. 13). All records of crime in that period are now available in publications of the Judicial Statistics Branch of the Bureau. The statistics relate to years ended Sept. 30, the latest report being for 1936. Beginning with the report for 1922, an enlargement of the classification of offences has been adopted, by which offences of juvenile offenders are compiled separately from those of adults.

Crime is divided into two definite classes, 'criminal' or 'indictable offences', which include all serious crime covered by the Criminal Code (see Section 2, p. 1022), and 'summary' or 'non-indictable offences', which comprise breaches of municipal by-laws, traffic laws, and other less serious crimes (see Section 3, p. 1027). Broadly speaking, indictable offences are triable by jury, although in certain cases the accused is accorded the right of election as to whether he be tried by jury or before a judge without the intervention of a jury, and in other cases the jurisdiction of the magistrate as to trial is absolute and does not depend upon the consent of the accused. Non-indictable offences are usually dealt with summarily by police magistrates under the Summary Convictions Act, and comprise breaches of municipal regulations and other minor offences. The term indictable applies to offences of adults only, similar offences committed by juveniles being termed 'major' offences; similarly, non-indictable offences of adults are termed 'minor' offences when attributed to juveniles. Returns of criminal court proceedings for the year ended Sept. 30, 1936, showed that 420,247 trials were held as compared with 402,148 during the previous year. The figures showed 42,541 indictable and 377,706 non-indictable cases, as compared with 39,506 indictable and 362,642 non-indictable cases during the previous year. Of the indictable offences, 36,059 were convictions as compared with 33,531 during 1935. The 36,059 convictions during 1936 were comprised of 32,689 males and 3,370 females. In 1935, 30,195 males and 3,336 females were convicted.

Previous to 1922, however, the classification into criminal and minor offences was followed in classifying statistics; the historical Table 1 and the more detailed

\* Revised by H. M. Boyd, Chief, Judicial Statistics Branch, Dominion Bureau of Statistics. The sixty-first Annual Report of Statistics of Criminal and Other Offences, for the year ended Sept. 30, 1936, is obtainable on application from the Dominion Bureau of Statistics.

short-term statistics of Table 2 continue the classification on a comparable basis, giving the totals for all offences, *i.e.*, different classes of criminal offences and minor offences, including those of juvenile delinquents. In connection with Table 1, it should be remembered that, while the Criminal Code undergoes little change over periods of time, the figures of summary convictions are influenced very much by the changing customs of the people, and are apt to increase with the increasing urbanization of the population. The most significant column of this table is the figure of criminal offences per 100,000 of population. Attention may be drawn to the increase in the proportion of both criminal offences and minor offences to population in recent years, convictions for criminal offences having risen from 284 per 100,000 population in 1921 to 425 in 1931 and 412 in 1936, and convictions for minor offences from 1,731 per 100,000 in 1921 to 3,113 in 1931 and 3,405 in 1936.

It should be understood that the classification of offences in these general tables is irrespective of the mode of procedure. That is to say, the headings "criminal" include many indictable offences disposed of summarily under the Summary Trials Act. Hence any addition of indictable and major and minor offences, as shown in other tables, will not agree with the figures given in Tables 1 and 2. The object here is to show a broad historical record of criminal and minor offences, respectively.

**1.—Convictions for Criminal Offences, by Classes, Convictions for Minor Offences, and Total Convictions, with Proportions to Population, years ended Sept. 30, 1911–36.**

NOTE.—For figures for the years 1876–1910, see p. 993 of the 1930 Year Book.

| Year.   | Criminal Offences. |                         |                            |                                   |  |                       |                  | Minor Offences, Total and Ratios. |                       |                  | Total Criminal and Minor Offences. |
|---------|--------------------|-------------------------|----------------------------|-----------------------------------|--|-----------------------|------------------|-----------------------------------|-----------------------|------------------|------------------------------------|
|         | Offences against—  |                         |                            | Other Felonies and Misdemeanours. | Total and Ratios of Criminal Offences. |                       |                  |                                   |                       |                  |                                    |
|         | The Person.        | Property with Violence. | Property without Violence. |                                   |  |                       |                  |                                   |                       |                  |                                    |
|         | No.                | No.                     | No.                        | No.                               | No.                                    | P.C. of All Offences. | Per 100,000 Pop. | No.                               | P.C. of All Offences. | Per 100,000 Pop. |                                    |
| 1911... | 8,352              | 977                     | 9,024                      | 1,194                             | 19,547                                 | 17-3                  | 271              | 93,713                            | 82-7                  | 1,300            | 113,260                            |
| 1912... | 9,371              | 1,195                   | 10,626                     | 1,540                             | 22,732                                 | 15-5                  | 308              | 123,795                           | 84-5                  | 1,675            | 146,527                            |
| 1913... | 11,444             | 1,472                   | 12,721                     | 1,724                             | 27,361                                 | 15-8                  | 359              | 145,777                           | 84-2                  | 1,910            | 173,138                            |
| 1914... | 12,136             | 1,810                   | 14,045                     | 1,952                             | 30,543                                 | 16-7                  | 388              | 152,492                           | 83-3                  | 1,935            | 183,085                            |
| 1915... | 10,664             | 2,234                   | 14,269                     | 1,525                             | 28,692                                 | 18-7                  | 300              | 124,363                           | 81-3                  | 1,558            | 155,055                            |
| 1916... | 9,327              | 1,478                   | 11,018                     | 1,459                             | 22,262                                 | 18-8                  | 291              | 100,509                           | 81-2                  | 1,256            | 123,791                            |
| 1917... | 6,852              | 1,321                   | 9,886                      | 1,271                             | 19,330                                 | 16-9                  | 240              | 94,681                            | 83-1                  | 1,175            | 114,011                            |
| 1918... | 7,292              | 2,049                   | 10,743                     | 1,390                             | 21,474                                 | 17-4                  | 264              | 101,795                           | 82-6                  | 1,249            | 123,269                            |
| 1919... | 7,731              | 2,606                   | 11,508                     | 1,656                             | 23,501                                 | 18-1                  | 283              | 106,518                           | 81-9                  | 1,282            | 130,019                            |
| 1920... | 8,281              | 2,310                   | 11,634                     | 2,059                             | 24,284                                 | 14-9                  | 284              | 138,424                           | 85-1                  | 1,618            | 162,708                            |
| 1921... | 8,197              | 2,609                   | 12,059                     | 2,081                             | 24,946                                 | 14-2                  | 284              | 152,227                           | 85-9                  | 1,731            | 177,173                            |
| 1922... | 7,291              | 2,753                   | 11,607                     | 2,610                             | 24,201                                 | 15-3                  | 272              | 134,049                           | 84-7                  | 1,503            | 158,340                            |
| 1923... | 7,550              | 2,076                   | 11,432                     | 3,075                             | 24,183                                 | 15-1                  | 268              | 135,069                           | 84-8                  | 1,499            | 159,252                            |
| 1924... | 7,695              | 2,536                   | 12,790                     | 2,635                             | 25,556                                 | 15-3                  | 279              | 141,663                           | 84-7                  | 1,549            | 167,219                            |
| 1925... | 7,826              | 2,749                   | 13,892                     | 2,644                             | 27,111                                 | 15-3                  | 292              | 150,672                           | 84-7                  | 1,621            | 177,783                            |
| 1926... | 7,799              | 2,296                   | 14,262                     | 2,679                             | 27,036                                 | 13-8                  | 286              | 169,171                           | 86-2                  | 1,790            | 196,207                            |
| 1927... | 8,343              | 2,671                   | 15,164                     | 2,806                             | 28,977                                 | 13-1                  | 301              | 191,285                           | 86-9                  | 1,985            | 220,262                            |
| 1928... | 9,140              | 2,991                   | 16,072                     | 3,856                             | 32,059                                 | 11-6                  | 326              | 243,123                           | 88-4                  | 2,472            | 275,182                            |
| 1929... | 10,392             | 3,529                   | 17,271                     | 4,001                             | 35,193                                 | 10-9                  | 351              | 286,773                           | 89-1                  | 2,599            | 321,966                            |
| 1930... | 11,052             | 4,047                   | 18,498                     | 6,564                             | 40,781                                 | 11-8                  | 400              | 304,860                           | 88-2                  | 2,988            | 345,641                            |
| 1931... | 11,773             | 5,288                   | 21,528                     | 5,475                             | 44,064                                 | 12-0                  | 425              | 323,024                           | 88-0                  | 3,113            | 367,088                            |
| 1932... | 10,327             | 5,194                   | 20,766                     | 5,510                             | 41,797                                 | 12-4                  | 402              | 294,558                           | 87-6                  | 2,842            | 336,655                            |
| 1933... | 9,608              | 5,319                   | 21,575                     | 6,096                             | 42,593                                 | 12-8                  | 411              | 280,475                           | 87-2                  | 2,799            | 333,068                            |
| 1934... | 9,284              | 5,310                   | 21,071                     | 6,330                             | 41,995                                 | 11-4                  | 404              | 326,239                           | 88-6                  | 3,145            | 365,234                            |
| 1935... | 9,672              | 5,178                   | 21,703                     | 7,206                             | 43,759                                 | 10-8                  | 420              | 360,093                           | 89-2                  | 3,472            | 403,852                            |
| 1936... | 9,995              | 5,860                   | 22,065                     | 7,674                             | 45,594                                 | 10-8                  | 412              | 375,381                           | 89-2                  | 3,405            | 420,975                            |

**Pardons.**—The total number of cases in which the prerogative of mercy was exercised during 1936 was 1,495; of these 53 were not imprisoned, and were granted remittance or reduction of fines, etc. In 716 cases release on ticket of leave was granted, and 635 were released unconditionally, 46 were deported, 57 fines were remitted or reduced; 3 death sentences were commuted and 85 cases disposed of in various other manners. These figures relate to the judicial year ended Sept. 30, and are not therefore comparable with those given in Section 6, Penitentiary Statistics.

**2.—Convictions for Criminal and Minor Offences, by Class of Offence, Compared as to Numbers and Ratios, years ended Sept. 30, 1932-36 (Including Juveniles).**

NUMBERS.

| Class of Offence.                               | 1932.          | 1933.          | 1934.          | 1935.          | 1936.          |
|---|----------------|----------------|----------------|----------------|----------------|
|   | No.            | No.            | No.            | No.            | No.            |
| <b>CRIMINAL OFFENCES—</b>                       |                |                |                |                |                |
| Offences against the person.....                | 10,327         | 9,603          | 9,284          | 9,672          | 9,095          |
| Offences against property with violence.....    | 5,194          | 5,319          | 5,310          | 5,178          | 5,880          |
| Offences against property without violence..... | 20,766         | 21,575         | 21,071         | 21,703         | 22,065         |
| Other felonies and misdemeanours.....           | 5,510          | 6,096          | 6,330          | 7,206          | 7,674          |
| <b>TOTALS, CRIMINAL OFFENCES.....</b>           | <b>41,797</b>  | <b>42,593</b>  | <b>41,995</b>  | <b>43,759</b>  | <b>45,594</b>  |
| <b>MINOR OFFENCES—</b>                          |                |                |                |                |                |
| Breach of municipal Acts and by-laws.....       | 204,981        | 201,990        | 233,331        | 264,171        | 257,972        |
| Breach of liquor laws.....                      | 12,231         | 10,491         | 10,761         | 8,833          | 10,084         |
| Drunkenness.....                                | 22,071         | 18,012         | 20,769         | 25,050         | 28,438         |
| Vagrancy.....                                   | 12,400         | 11,182         | 6,507          | 8,156          | 7,808          |
| Loose, idle, and disorderly.....                | 3,802          | 2,497          | 4,374          | 5,745          | 7,876          |
| Keeping bawdy houses and inmates thereof.....   | 6,036          | 5,692          | 3,945          | 4,328          | 4,886          |
| Miscellaneous minor offences.....               | 32,668         | 39,711         | 46,052         | 43,210         | 50,557         |
| <b>TOTALS, MINOR OFFENCES.....</b>              | <b>294,858</b> | <b>290,475</b> | <b>326,239</b> | <b>360,093</b> | <b>375,381</b> |
| <b>Grand Totals.....</b>                        | <b>336,655</b> | <b>333,068</b> | <b>368,234</b> | <b>403,852</b> | <b>420,975</b> |

RATIOS PER CENT OF TOTAL AND PER 100,000 OF POPULATION.

| Class of Offence.                               | 1932.        |                  | 1933.        |                  | 1934.        |                  | 1935.        |                  | 1936.        |                  |
|---|--------------|------------------|--------------|------------------|--------------|------------------|--------------|------------------|--------------|------------------|
|   | Per Cent.    | Per 100,000 Pop. | Per Cent.    | Per 100,000 Pop. | Per Cent.    | Per 100,000 Pop. | Per Cent.    | Per 100,000 Pop. | Per Cent.    | Per 100,000 Pop. |
| <b>CRIMINAL OFFENCES—</b>                       |              |                  |              |                  |              |                  |              |                  |              |                  |
| Offences against the person.....                | 3.1          | 101              | 2.9          | 93               | 2.5          | 89               | 2.4          | 93               | 2.4          | 92               |
| Offences against property with violence.....    | 1.5          | 48               | 1.6          | 51               | 1.4          | 51               | 1.3          | 51               | 1.4          | 53               |
| Offences against property without violence..... | 6.2          | 201              | 6.5          | 209              | 5.8          | 203              | 5.4          | 210              | 5.2          | 198              |
| Other felonies and misdemeanours.....           | 1.6          | 52               | 1.8          | 58               | 1.7          | 61               | 1.7          | 66               | 1.8          | 69               |
| <b>TOTALS, CRIMINAL OFFENCES</b>                | <b>12.4</b>  | <b>402</b>       | <b>12.8</b>  | <b>411</b>       | <b>11.4</b>  | <b>404</b>       | <b>10.8</b>  | <b>420</b>       | <b>10.8</b>  | <b>412</b>       |
| <b>MINOR OFFENCES—</b>                          |              |                  |              |                  |              |                  |              |                  |              |                  |
| Breach of municipal Acts and by-laws.....       | 60.9         | 1,979            | 60.6         | 1,945            | 63.4         | 2,254            | 65.4         | 2,545            | 61.3         | 2,340            |
| Breach of liquor laws.....                      | 3.6          | 117              | 3.1          | 100              | 2.9          | 103              | 2.2          | 86               | 2.4          | 92               |
| Drunkenness.....                                | 6.7          | 217              | 5.7          | 183              | 5.6          | 200              | 6.4          | 249              | 6.8          | 260              |
| Vagrancy.....                                   | 3.7          | 120              | 3.4          | 109              | 1.8          | 62               | 2.0          | 78               | 1.8          | 68               |
| Loose, idle, and disorderly.....                | 1.1          | 36               | 0.8          | 26               | 1.3          | 46               | 1.4          | 55               | 1.8          | 69               |
| Keeping bawdy houses and inmates thereof.....   | 1.8          | 58               | 1.7          | 55               | 1.1          | 37               | 1.1          | 43               | 1.0          | 38               |
| Miscellaneous minor offences.....               | 9.7          | 315              | 11.0         | 381              | 12.5         | 443              | 10.7         | 416              | 14.1         | 538              |
| <b>TOTALS, MINOR OFFENCES..</b>                 | <b>87.6</b>  | <b>2,842</b>     | <b>87.2</b>  | <b>2,799</b>     | <b>88.6</b>  | <b>3,145</b>     | <b>89.2</b>  | <b>3,472</b>     | <b>89.2</b>  | <b>3,405</b>     |
| <b>Grand Totals.....</b>                        | <b>100.0</b> | <b>3,244</b>     | <b>100.0</b> | <b>3,219</b>     | <b>100.0</b> | <b>3,549</b>     | <b>100.0</b> | <b>3,892</b>     | <b>100.0</b> | <b>3,817</b>     |

The recent trend of total convictions, including those of juveniles, and of sentences imposed, is shown by provinces for the years 1930 to 1936 in Table 3. Death sentences for all provinces except British Columbia show a downward trend during the period covered in Table 3. In the latter province, they were abnormally high in 1936 and in fact exceeded those of either Ontario or Quebec—provinces with four or five times the population of British Columbia. Increases in the numbers of convictions are shown in every province except Quebec and in the Territories.

3.—Convictions and Sentences for All Offences, by Provinces, years ended Sept. 30, 1930-36.

| Province and Item.           | 1930.   | 1931.   | 1932.   | 1933.   | 1934.   | 1935.   | 1936.   |
|------------------------------|---------|---------|---------|---------|---------|---------|---------|
|                              | No.     | No.     | No.     | No.     | No.     | No.     | No.     |
| <b>Canada—</b>               |         |         |         |         |         |         |         |
| Convictions.....             | 345,641 | 367,088 | 336,655 | 333,068 | 368,234 | 403,852 | 420,975 |
| Sentences—                   |         |         |         |         |         |         |         |
| Penitentiary.....            | 3,013   | 3,129   | 2,892   | 2,485   | 2,200   | 2,656   | 2,905   |
| Gaol or fine.....            | 266,777 | 274,483 | 242,128 | 248,177 | 286,358 | 311,008 | 329,117 |
| Reformatory.....             | 643     | 1,226   | 1,156   | 830     | 907     | 1,210   | 3,351   |
| Death.....                   | 17      | 25      | 23      | 24      | 19      | 15      | 22      |
| Other sentences.....         | 74,891  | 88,225  | 90,450  | 81,552  | 78,630  | 88,963  | 85,580  |
| <b>Prince Edward Island—</b> |         |         |         |         |         |         |         |
| Convictions.....             | 975     | 910     | 900     | 737     | 831     | 1,017   | 1,051   |
| Sentences—                   |         |         |         |         |         |         |         |
| Penitentiary.....            | 2       | 6       | 18      | 16      | 16      | 7       | 13      |
| Gaol or fine.....            | 956     | 871     | 853     | 688     | 776     | 913     | 989     |
| Reformatory.....             | 6       | 4       | 6       | 4       | 8       | 7       | 9       |
| Death.....                   | Nil     | Nil     | Nil     | Nil     | Nil     | Nil     | Nil     |
| Other sentences.....         | 11      | 29      | 32      | 29      | 31      | 90      | 40      |
| <b>Nova Scotia—</b>          |         |         |         |         |         |         |         |
| Convictions.....             | 7,499   | 6,725   | 4,907   | 5,432   | 5,651   | 6,132   | 7,157   |
| Sentences—                   |         |         |         |         |         |         |         |
| Penitentiary.....            | 118     | 132     | 152     | 127     | 133     | 123     | 137     |
| Gaol or fine.....            | 6,720   | 5,971   | 4,129   | 4,474   | 4,615   | 5,239   | 6,078   |
| Reformatory.....             | 65      | 45      | 46      | 39      | 79      | 76      | 78      |
| Death.....                   | 1       | 1       | 1       | 3       | 2       | 1       | Nil     |
| Other sentences.....         | 595     | 576     | 579     | 789     | 822     | 693     | 804     |
| <b>New Brunswick—</b>        |         |         |         |         |         |         |         |
| Convictions.....             | 4,727   | 5,380   | 4,628   | 4,318   | 4,400   | 4,899   | 5,701   |
| Sentences—                   |         |         |         |         |         |         |         |
| Penitentiary.....            | 49      | 108     | 92      | 110     | 70      | 68      | 72      |
| Gaol or fine.....            | 4,130   | 4,524   | 4,016   | 3,519   | 3,500   | 3,778   | 4,769   |
| Reformatory.....             | 53      | 40      | 65      | 63      | 58      | 48      | 46      |
| Death.....                   | 1       | Nil     | Nil     | 1       | 1       | Nil     | 2       |
| Other sentences.....         | 494     | 708     | 455     | 625     | 711     | 1,005   | 812     |
| <b>Quebec—</b>               |         |         |         |         |         |         |         |
| Convictions.....             | 67,219  | 106,941 | 121,191 | 127,416 | 125,533 | 130,337 | 122,932 |
| Sentences—                   |         |         |         |         |         |         |         |
| Penitentiary.....            | 754     | 765     | 803     | 659     | 683     | 761     | 741     |
| Gaol or fine.....            | 51,405  | 86,729  | 97,702  | 108,031 | 108,885 | 111,752 | 96,531  |
| Reformatory.....             | 67      | 109     | 268     | 280     | 229     | 271     | 293     |
| Death.....                   | 5       | 6       | 6       | 5       | 4       | 7       | 5       |
| Other sentences.....         | 14,988  | 19,332  | 22,412  | 18,441  | 15,732  | 17,546  | 25,362  |
| <b>Ontario—</b>              |         |         |         |         |         |         |         |
| Convictions.....             | 178,795 | 168,069 | 146,393 | 140,256 | 175,083 | 206,169 | 221,263 |
| Sentences—                   |         |         |         |         |         |         |         |
| Penitentiary.....            | 926     | 834     | 775     | 826     | 740     | 869     | 901     |
| Gaol or fine.....            | 135,315 | 118,674 | 95,631  | 94,968  | 129,695 | 150,758 | 175,738 |
| Reformatory.....             | 430     | 736     | 831     | 261     | 393     | 548     | 2,657   |
| Death.....                   | 5       | 6       | 8       | 10      | 1       | 3       | 6       |
| Other sentences.....         | 42,119  | 47,819  | 49,450  | 44,191  | 44,254  | 53,991  | 41,961  |



### 3.—Convictions and Sentences for All Offences, by Provinces, years ended Sept. 30, 1930-36—concluded.

| Province and Item.       | 1930.  | 1931.  | 1932.  | 1933.  | 1934.  | 1935.  | 1936.  |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|
|                          | No.    | No.    | No.    | No.    | No.    | No.    | No.    |
| <b>Manitoba—</b>         |        |        |        |        |        |        |        |
| Convictions.....         | 30,540 | 27,002 | 22,343 | 19,100 | 20,398 | 18,649 | 20,431 |
| Sentences—               |        |        |        |        |        |        |        |
| Penitentiary.....        | 303    | 528    | 482    | 251    | 243    | 264    | 305    |
| Gaol or fine.....        | 19,561 | 14,737 | 10,410 | 7,149  | 8,546  | 9,012  | 11,035 |
| Reformatory.....         | 176    | 168    | 163    | 123    | 107    | 117    | 100    |
| Death.....               | Nil    | 2      | 4      | 3      | 3      | 1      | 2      |
| Other sentences.....     | 10,500 | 11,567 | 11,284 | 11,574 | 11,499 | 9,225  | 8,989  |
| <b>Saskatchewan—</b>     |        |        |        |        |        |        |        |
| Convictions.....         | 14,386 | 13,760 | 9,687  | 8,564  | 8,202  | 8,067  | 8,182  |
| Sentences—               |        |        |        |        |        |        |        |
| Penitentiary.....        | 115    | 115    | 90     | 54     | 58     | 62     | 171    |
| Gaol or fine.....        | 12,631 | 11,822 | 8,101  | 7,345  | 7,124  | 6,805  | 6,976  |
| Reformatory.....         | 48     | 35     | 21     | 22     | 42     | 42     | 36     |
| Death.....               | 3      | 1      | 2      | 2      | 3      | 2      | Nil    |
| Other sentences.....     | 1,589  | 1,787  | 1,472  | 1,141  | 1,065  | 1,006  | 999    |
| <b>Alberta—</b>          |        |        |        |        |        |        |        |
| Convictions.....         | 16,080 | 16,589 | 10,853 | 12,538 | 11,077 | 11,202 | 12,364 |
| Sentences—               |        |        |        |        |        |        |        |
| Penitentiary.....        | 424    | 291    | 187    | 152    | 177    | 194    | 371    |
| Gaol or fine.....        | 12,936 | 12,293 | 8,017  | 9,672  | 8,613  | 8,595  | 9,512  |
| Reformatory.....         | 26     | 15     | 8      | 10     | 9      | 15     | 22     |
| Death.....               | 1      | 0      | Nil    | Nil    | 2      | 1      | Nil    |
| Other sentences.....     | 2,693  | 3,984  | 2,641  | 2,704  | 2,376  | 2,397  | 2,459  |
| <b>British Columbia—</b> |        |        |        |        |        |        |        |
| Convictions.....         | 25,286 | 21,548 | 15,647 | 14,602 | 16,899 | 17,344 | 21,793 |
| Sentences—               |        |        |        |        |        |        |        |
| Penitentiary.....        | 322    | 340    | 291    | 290    | 139    | 248    | 192    |
| Gaol or fine.....        | 22,968 | 18,727 | 13,185 | 12,244 | 14,587 | 14,015 | 17,395 |
| Reformatory.....         | 72     | 74     | 48     | 28     | 42     | 85     | 110    |
| Death.....               | 1      | 3      | Nil    | 3      | Nil    | 7      | 7      |
| Other sentences.....     | 1,893  | 2,395  | 2,121  | 2,040  | 2,128  | 2,995  | 4,089  |
| <b>The Territories—</b>  |        |        |        |        |        |        |        |
| Convictions.....         | 134    | 164    | 97     | 105    | 70     | 96     | 101    |
| Sentences—               |        |        |        |        |        |        |        |
| Penitentiary.....        | Nil    | 1      | 2      | Nil    | 1      | Nil    | 2      |
| Gaol or fine.....        | 125    | 135    | 84     | 87     | 57     | 81     | 94     |
| Reformatory.....         | Nil    | Nil    | Nil    | Nil    | Nil    | Nil    | Nil    |
| Death.....               | Nil    | Nil    | 1      | Nil    | Nil    | Nil    | Nil    |
| Other sentences.....     | 9      | 28     | 10     | 18     | 12     | 15     | 5      |

## Section 2.—Indictable Offences of Adults.

The progress of a community, from a moral point of view, is often judged by the number of convictions for indictable offences, as these are less affected than non-indictable offences by extraneous circumstances and the varying methods of law enforcement in different areas and in different years. However, in the study of such statistics it is important to have comparable figures over a period of years, and these are set out by provinces for each year since 1911 in Table 4. Again, in Table 5 are shown the numbers of charges and convictions and the percentages of acquittals for the three years ended Sept. 30, 1934-36.

It may be stated that during the thirty-six year period from 1900 to 1936 crimes increased from 4,853 to 36,059 or 643 p.c. The increase in the population during the same period was but 108.4 p.c., revealing that the increase in the crime rate was six times that of the population.

#### 4.—Convictions of Persons 16 Years of Age or Over for Indictable Offences, by Provinces, years ended Sept. 30, 1911-36.

NOTE.—For figures for 1900-10, see p. 1016 of the 1933 Year Book.

| Year.     | P.E.I. | N.S.  | N.B. | Que.  | Ont.   | Man.  | Sask. | Alta. | B.C.  | Yukon. | N.W.T. | Canada. |
|-----------|--------|-------|------|-------|--------|-------|-------|-------|-------|--------|--------|---------|
|           | No.    | No.   | No.  | No.   | No.    | No.   | No.   | No.   | No.   | No.    | No.    | No.     |
| 1911..... | 19     | 356   | 123  | 1,865 | 5,067  | 888   | 957   | 870   | 1,015 | 24     | 4      | 11,188  |
| 1912..... | 11     | 657   | 107  | 2,052 | 5,456  | 1,121 | 1,204 | 1,513 | 1,532 | 26     | 7      | 13,686  |
| 1913..... | 8      | 808   | 140  | 2,336 | 6,272  | 1,381 | 1,504 | 1,908 | 1,794 | 26     | 7      | 16,007  |
| 1914..... | 18     | 669   | 170  | 2,918 | 7,479  | 1,284 | 1,880 | 2,235 | 2,112 | 27     | 10     | 18,810  |
| 1915..... | 12     | 840   | 206  | 2,427 | 7,112  | 1,362 | 1,993 | 2,082 | 1,517 | 24     | 10     | 17,575  |
| 1916..... | 11     | 519   | 241  | 3,166 | 6,023  | 914   | 1,711 | 1,895 | 1,503 | 20     | 10     | 16,003  |
| 1917..... | 21     | 427   | 228  | 2,667 | 4,824  | 765   | 1,057 | 894   | 1,058 | 22     | 10     | 11,953  |
| 1918..... | 12     | 563   | 230  | 2,916 | 6,111  | 811   | 1,067 | 886   | 659   | 11     | 10     | 13,266  |
| 1919..... | 14     | 663   | 241  | 2,900 | 6,005  | 919   | 1,154 | 1,025 | 951   | 5      | 10     | 14,520  |
| 1920..... | 4      | 590   | 375  | 2,517 | 6,701  | 957   | 1,402 | 1,233 | 1,212 | 6      | 10     | 15,936  |
| 1921..... | 15     | 712   | 313  | 2,654 | 7,548  | 1,150 | 1,220 | 1,263 | 1,282 | 3      | 10     | 10,169  |
| 1922..... | 27     | 701   | 323  | 2,885 | 7,021  | 1,188 | 1,391 | 1,171 | 1,004 | 10     | 10     | 15,720  |
| 1923..... | 13     | 400   | 148  | 2,655 | 6,886  | 1,094 | 1,446 | 1,424 | 1,116 | 6      | 10     | 15,188  |
| 1924..... | 25     | 595   | 224  | 2,729 | 7,180  | 1,160 | 1,647 | 1,423 | 1,265 | 10     | 10     | 16,258  |
| 1925..... | 3      | 624   | 244  | 3,084 | 7,751  | 1,215 | 1,654 | 1,254 | 1,385 | 2      | 3      | 17,219  |
| 1926..... | 14     | 752   | 222  | 3,053 | 7,248  | 1,385 | 2,052 | 1,465 | 1,352 | 3      | 6      | 17,448  |
| 1927..... | 14     | 680   | 287  | 3,021 | 7,069  | 1,402 | 1,402 | 1,439 | 1,333 | 3      | 4      | 16,936  |
| 1928..... | 43     | 891   | 355  | 4,299 | 9,052  | 1,672 | 1,761 | 1,701 | 1,931 | 5      | NB     | 21,720  |
| 1929..... | 55     | 869   | 358  | 4,780 | 9,489  | 1,988 | 1,918 | 2,201 | 2,425 | 8      | 6      | 24,097  |
| 1930..... | 50     | 875   | 354  | 5,540 | 11,774 | 2,272 | 2,355 | 2,525 | 2,604 | 6      | 3      | 28,457  |
| 1931..... | 57     | 1,184 | 401  | 5,737 | 12,000 | 3,102 | 2,716 | 2,897 | 3,385 | 8      | 5      | 31,542  |
| 1932..... | 78     | 1,072 | 514  | 7,086 | 12,428 | 2,982 | 1,893 | 2,241 | 3,072 | 6      | 11     | 31,383  |
| 1933..... | 70     | 1,160 | 479  | 7,713 | 13,152 | 2,667 | 2,049 | 2,544 | 3,094 | 7      | 7      | 32,942  |
| 1934..... | 88     | 902   | 525  | 7,087 | 11,761 | 2,671 | 2,366 | 2,708 | 3,001 | 3      | 7      | 31,685  |
| 1935..... | 59     | 1,092 | 570  | 9,354 | 12,653 | 2,382 | 1,976 | 2,424 | 3,088 | 3      | 14     | 33,531  |
| 1936..... | 75     | 1,147 | 744  | 9,497 | 13,694 | 2,631 | 2,194 | 3,138 | 3,021 | 8      | 10     | 36,059  |

<sup>1</sup> Included with Manitoba since that part of the N.W.T. from which earlier returns were received was included in Manitoba by the Extension of Boundaries Act, 1913. Later figures are for the present area of the N.W.T.

In Table 5, which shows charges, convictions, and acquittals, by provinces, convictions for indictable offences show increases in 1936 compared to 1935 in every province with the exception of British Columbia.

#### 5.—Charges, Convictions, and Percentages of Acquittals for Indictable Offences, by Provinces, years ended Sept. 30, 1934-36.

NOTE.—The figures of this table do not include charges or convictions of juvenile delinquents.

| Province.                 | Numbers.      |                   |               |                   |               |                   | Percentages of Acquittals. |       |       |
|---------------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|----------------------------|-------|-------|
|                           | 1934.         |                   | 1935.         |                   | 1936.         |                   | 1934.                      | 1935. | 1936. |
|                           | Char-<br>ges. | Convic-<br>tions. | Char-<br>ges. | Convic-<br>tions. | Char-<br>ges. | Convic-<br>tions. |                            |       |       |
| Prince Edward Island..... | 93            | 38                | 69            | 59                | 83            | 75                | 5.4                        | 14.5  | 9.6   |
| Nova Scotia.....          | 1,214         | 992               | 1,224         | 1,002             | 1,389         | 1,147             | 18.3                       | 15.1  | 17.4  |
| New Brunswick.....        | 604           | 525               | 619           | 570               | 806           | 744               | 13.1                       | 7.0   | 7.7   |
| Quebec.....               | 8,953         | 7,687             | 10,658        | 9,354             | 10,626        | 9,497             | 14.1                       | 12.2  | 10.6  |
| Ontario.....              | 14,280        | 11,761            | 15,717        | 12,653            | 16,639        | 13,594            | 17.6                       | 19.5  | 18.3  |
| Manitoba.....             | 3,206         | 2,571             | 2,781         | 2,382             | 3,106         | 2,631             | 19.8                       | 14.4  | 15.3  |
| Saskatchewan.....         | 2,634         | 2,396             | 2,189         | 1,976             | 2,491         | 2,194             | 9.0                        | 9.7   | 11.9  |
| Alberta.....              | 2,942         | 2,703             | 2,680         | 2,424             | 3,580         | 3,138             | 7.9                        | 9.6   | 19.1  |
| British Columbia.....     | 3,479         | 2,840             | 3,549         | 3,088             | 3,601         | 3,021             | 14.5                       | 12.9  | 13.7  |
| The Territories.....      | 12            | 10                | 20            | 17                | 20            | 18                | 16.7                       | 15.0  | 10.0  |
| Canada.....               | 37,408        | 31,681            | 39,506        | 33,531            | 42,541        | 36,059            | 15.3                       | 15.1  | 15.2  |

Classes of Indictable Offences and Analysis of Convictions.—Each of the six classes into which indictable offences are divided showed an increase in the number of total convictions, the 1936 figure being 36,059 as compared with 33,531 in 1935, an increase of 2,528, or 7.54 p.c.

*Offences Against the Person.*—The increase in this class was 472 or 12 p.c. There were 7 more convictions for murder than in 1935. Of the 15 specific offences under this class, only 6 show a decrease in convictions, *viz.*, abortion and concealing birth, procuration, bigamy, shooting, stabbing and wounding, assault on females, and aggravated assault.

*Offences Against Property with Violence.*—An increase of 694 convictions, or nearly 17 p.c., is recorded in this class, although robbery and demanding with menaces showed a decrease.

*Offences Against Property without Violence.*—The percentage increase in this class was smaller than in the two preceding classes, amounting to slightly over 5 p.c. Improvement was shown in fewer convictions being recorded for bringing stolen goods into Canada, embezzlement, and fraud.

*Malignant Offences Against Property.*—Convictions in this class increased by 53, or 12 p.c. Those for arson increased from 55 to 82, or nearly half as many again as in 1935.

*Forgery and Other Offences against the Currency.*—An increase of 184 convictions, or over 20 p.c., was recorded in this class. While offences against the currency decreased, forging and uttering showed a marked increase.

*Various Offences.*—A slight increase of 264 convictions, or 3 p.c., was recorded in this class. Decreases were recorded in breaches of the Trade Marks Act, criminal negligence, perjury, prison breach, riot, and various offences. Noteworthy among the increases were the convictions for intimidation, which increased from 45 to 122.

Details by offences are given in Table 6 and the details of the disposition of the charges in Table 7, which shows, with other information, that convictions of females numbered 3,370 in 1936 as against 3,336 in 1935 and 3,145 in 1934; as recently as 1924 the figure was only 1,826. Details as to occupation, conjugal condition, educational status, age, use of liquors, birthplace, religion, and residence of those convicted of indictable offences are given in Table 8.

#### 6.—Indictable Offences, by Classes, years ended Sept. 30, 1934-36.

NOTE.—The figures of this table do not include charges or convictions of juvenile delinquents.

| Class and Offence.                             | 1934.        |              | 1935.        |              | 1936.        |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
|  | Charges.     | Convictions. | Charges.     | Convictions. | Charges.     | Convictions. |
|  | No.          | No.          | No.          | No.          | No.          | No.          |
| <b>Class I.—Offences against the Person.</b>   |              |              |              |              |              |              |
| Murder.....                                    | 46           | 19           | 46           | 15           | 48           | 22           |
| Murder, attempt to commit.....                 | 24           | 10           | 21           | 13           | 36           | 25           |
| Manslaughter.....                              | 100          | 39           | 135          | 41           | 126          | 50           |
| Abortion and concealing birth of infants.....  | 59           | 40           | 52           | 37           | 57           | 34           |
| Rape and other crimes against decency.....     | 653          | 423          | 563          | 384          | 671          | 443          |
| Procuration.....                               | 36           | 25           | 77           | 63           | 54           | 37           |
| Bigamy.....                                    | 58           | 48           | 56           | 47           | 46           | 40           |
| Shooting, stabbing, and wounding.....          | 127          | 88           | 146          | 113          | 144          | 90           |
| Assault on females, incl. assault on wife..... | 211          | 183          | 378          | 302          | 327          | 250          |
| Aggravated assault.....                        | 1,164        | 821          | 1,376        | 940          | 1,476        | 929          |
| Assault on police officer.....                 | 536          | 491          | 592          | 515          | 714          | 647          |
| Assault and battery.....                       | 1,570        | 1,159        | 1,622        | 1,212        | 2,044        | 1,577        |
| Refusal to support family.....                 | 280          | 147          | 285          | 157          | 319          | 194          |
| Wife desertion.....                            | 11           | 7            | 8            | 7            | 14           | 10           |
| Causing injury by fast driving.....            | 42           | 30           | 32           | 19           | 45           | 28           |
| Various other offences against the person..... | 83           | 58           | 185          | 120          | 117          | 72           |
| <b>Totals, Class I.....</b>                    | <b>5,005</b> | <b>3,588</b> | <b>5,574</b> | <b>3,955</b> | <b>6,238</b> | <b>4,457</b> |

## 6.—Indictable Offences, by Classes, years ended Sept. 30, 1934-36—concluded.

| Class and Offence.   | 1934.         |               | 1935.         |               | 1936.         |               |
|--|---------------|---------------|---------------|---------------|---------------|---------------|
|  | Charges.      | Convictions.  | Charges.      | Convictions.  | Charges.      | Convictions.  |
|  | No.           | No.           | No.           | No.           | No.           | No.           |
| <b>Class II.—Offences against Property with Violence.</b>                      |               |               |               |               |               |               |
| Burglary, house-, warehouse-, and shop-breaking.....                           | 4,254         | 3,848         | 4,158         | 3,720         | 4,982         | 4,487         |
| Robbery and demanding with menaces..   | 503           | 390           | 527           | 427           | 454           | 354           |
| <b>Totals, Class II.....</b>   | <b>4,757</b>  | <b>4,238</b>  | <b>4,685</b>  | <b>4,147</b>  | <b>5,436</b>  | <b>4,841</b>  |
| <b>Class III.—Offences against Property without Violence.</b>                  |               |               |               |               |               |               |
| Bringing stolen goods into Canada.....   | 8             | 6             | 8             | 8             | 3             | 3             |
| Embezzlement.....  | 229           | 164           | 178           | 124           | 180           | 120           |
| False pretences.....   | 2,927         | 2,514         | 2,972         | 2,471         | 3,041         | 2,618         |
| Feloniously receiving stolen goods.....  | 1,571         | 1,142         | 1,357         | 1,437         | 2,258         | 1,742         |
| Fraud and conspiracy to defraud.....   | 658           | 517           | 627           | 512           | 456           | 395           |
| Horse, cattle, and sheep stealing.....   | 137           | 121           | 175           | 138           | 217           | 181           |
| Theft.....   | 12,309        | 10,719        | 12,175        | 10,603        | 12,791        | 11,026        |
| Theft of mail.....   | 30            | 25            | 30            | 28            | 44            | 43            |
| Theft of automobile.....   | 731           | 645           | 907           | 840           | 1,051         | 894           |
| <b>Totals, Class III.....</b>  | <b>18,610</b> | <b>15,853</b> | <b>18,939</b> | <b>16,161</b> | <b>20,070</b> | <b>17,022</b> |
| <b>Class IV.—Malicious Offences against Property.</b>                          |               |               |               |               |               |               |
| Arson.....   | 127           | 91            | 79            | 55            | 131           | 82            |
| Malicious injury to horses and cattle and other wilful damage to property..... | 639           | 393           | 439           | 384           | 532           | 410           |
| <b>Totals, Class IV.....</b>   | <b>766</b>    | <b>484</b>    | <b>568</b>    | <b>439</b>    | <b>663</b>    | <b>492</b>    |
| <b>Class V.—Forgery and Other Offences against the Currency.</b>               |               |               |               |               |               |               |
| Offences against the currency.....   | 16            | 12            | 73            | 57            | 43            | 31            |
| Forgery and uttering forged documents..  | 726           | 678           | 933           | 853           | 1,113         | 1,063         |
| <b>Totals, Class V.....</b>  | <b>742</b>    | <b>690</b>    | <b>1,006</b>  | <b>910</b>    | <b>1,156</b>  | <b>1,094</b>  |
| <b>Class VI.—Other Offences not Included in the foregoing Classes.</b>         |               |               |               |               |               |               |
| Breaches of the Trade Marks Act.....   | 82            | 75            | 85            | 83            | 41            | 37            |
| Attempt to commit suicide.....   | 172           | 147           | 192           | 155           | 198           | 163           |
| Carrying unlawful weapons.....   | 256           | 233           | 294           | 255           | 320           | 280           |
| Criminal negligence.....   | 175           | 89            | 215           | 109           | 159           | 88            |
| Conspiracy.....  | 250           | 165           | 210           | 120           | 222           | 143           |
| Indecent exposure and other offences against public morals.....                | 109           | 155           | 170           | 156           | 172           | 160           |
| Intimidation.....  | 173           | 107           | 111           | 45            | 130           | 122           |
| Keeping bawdy houses and inmates thereof.....                                  | 1,400         | 1,327         | 1,753         | 1,654         | 1,747         | 1,661         |
| Offences against gambling and lottery Acts.....                                | 2,965         | 2,879         | 3,788         | 3,700         | 3,917         | 3,747         |
| Offences against Opium and Narcotic Drug Act.....                              | 156           | 146           | 154           | 136           | 184           | 149           |
| Offences against revenue laws.....   | 521           | 481           | 435           | 398           | 454           | 453           |
| Illicit stills.....  | 431           | 419           | 263           | 247           | 349           | 355           |
| Perjury and subornation of perjury.....  | 192           | 114           | 176           | 110           | 168           | 97            |
| Prison breach and escape from prison....                                       | 201           | 184           | 241           | 234           | 310           | 249           |
| Riot and affray.....   | 179           | 140           | 376           | 294           | 159           | 136           |
| Sodomy and bestiality.....   | 89            | 75            | 96            | 85            | 120           | 100           |
| Various other misdemeanours.....   | 117           | 95            | 125           | 108           |               |               |
| <b>Totals, Class VI.....</b>   | <b>7,628</b>  | <b>6,831</b>  | <b>8,684</b>  | <b>7,889</b>  | <b>8,973</b>  | <b>8,153</b>  |
| <b>Grand Totals.....</b>   | <b>37,408</b> | <b>31,684</b> | <b>39,506</b> | <b>33,531</b> | <b>42,541</b> | <b>36,059</b> |

### 7.—Charges, Acquittals, Convictions, and Sentences in respect of Indictable Offences, years ended Sept. 30, 1930-36.

NOTE.—Juvenile delinquencies not included.

| Item.                                    | 1930.  | 1931.  | 1932.  | 1933.  | 1934.  | 1935.  | 1936.  |
|--|--------|--------|--------|--------|--------|--------|--------|
|  | No.    | No.    | No.    | No.    | No.    | No.    | No.    |
| Charges.....                             | 34,751 | 38,189 | 37,621 | 38,927 | 37,408 | 39,506 | 42,541 |
| Acquittals.....                          | 6,246  | 6,589  | 6,206  | 5,942  | 5,695  | 5,934  | 6,381  |
| Persons detained for lunacy.....         | 48     | 58     | 32     | 43     | 29     | 41     | 101    |
| Convictions.....                         | 28,457 | 31,542 | 31,383 | 32,942 | 31,684 | 33,531 | 36,059 |
| Males.....                               | 26,797 | 28,935 | 28,181 | 29,465 | 28,539 | 30,195 | 32,689 |
| Females.....                             | 2,660  | 2,607  | 3,202  | 3,477  | 3,145  | 3,336  | 3,370  |
| First convictions.....                   | 21,319 | 23,474 | 23,841 | 24,576 | 23,905 | 23,844 | 24,109 |
| Second convictions.....                  | 3,051  | 3,159  | 2,895  | 3,534  | 3,219  | 3,193  | 3,894  |
| Reiterated convictions.....              | 4,087  | 4,909  | 4,647  | 4,782  | 5,650  | 6,524  | 8,056  |
| Sentences—                               |        |        |        |        |        |        |        |
| Option of a fine.....                    | 7,473  | 8,036  | 8,143  | 8,973  | 8,614  | 9,374  | 9,593  |
| Under one year in gaol.....              | 7,474  | 8,794  | 9,307  | 10,128 | 10,492 | 10,631 | 11,319 |
| One year and over in gaol.....           | 2,502  | 2,728  | 2,760  | 2,656  | 2,391  | 2,337  | 1,651  |
| Indeterminate.....                       | 115    | 7      | 7      | 4      | Nil    | Nil    | Nil    |
| Two years and under five in penitentiary | 2,501  | 2,551  | 2,347  | 2,018  | 1,902  | 2,191  | 2,371  |
| Five years and over in penitentiary..... | 508    | 568    | 536    | 451    | 353    | 462    | 528    |
| For life in penitentiary.....            | 4      | 10     | 9      | 15     | 5      | 3      | 6      |
| Death.....                               | 17     | 25     | 23     | 24     | 19     | 15     | 22     |
| Committed to reformatories.....          | 224    | 597    | 376    | 108    | 297    | 467    | 2,572  |
| Other sentences.....                     | 7,639  | 8,226  | 7,875  | 8,505  | 7,611  | 8,031  | 7,997  |

### 8.—Persons Convicted of Indictable Offences, Classified by Occupation, Conjugal Condition, Birthplace, Religion, etc., years ended Sept. 30, 1930-36.

NOTE.—Juvenile delinquencies not included.

| Item.                               | 1930.  | 1931.  | 1932.  | 1933.  | 1934.  | 1935.  | 1936.  |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
|                                     | No.    | No.    | No.    | No.    | No.    | No.    | No.    |
| Occupation—                         |        |        |        |        |        |        |        |
| Agriculture.....                    | 1,509  | 1,780  | 2,026  | 2,087  | 2,267  | 1,935  | 2,531  |
| Lumbering.....                      | 115    | 117    | 101    | 119    | 92     | 85     | 98     |
| Fishing.....                        | 77     | 98     | 128    | 98     | 149    | 124    | 181    |
| Mining.....                         | 289    | 188    | 266    | 313    | 263    | 315    | 368    |
| Manufacturing and construction..... | 3,050  | 3,274  | 3,379  | 3,294  | 3,127  | 3,305  | 3,197  |
| Transportation.....                 | 940    | 941    | 804    | 786    | 769    | 827    | 1,406  |
| Trade.....                          | 3,235  | 3,672  | 3,221  | 3,609  | 3,991  | 4,875  | 6,003  |
| Domestic service.....               | 3,434  | 3,467  | 4,084  | 4,311  | 3,436  | 3,858  | 3,777  |
| Public service.....                 | —      | —      | —      | —      | —      | —      | 445    |
| Professional service.....           | 342    | 272    | 204    | 191    | 196    | 179    | 169    |
| Labouring.....                      | 9,974  | 11,409 | 11,072 | 10,911 | 10,077 | 11,773 | 13,470 |
| Students <sup>1</sup> .....         | —      | —      | —      | —      | —      | —      | 647    |
| Unemployed <sup>1</sup> .....       | —      | —      | —      | —      | —      | —      | 1,170  |
| Not given.....                      | 5,492  | 6,324  | 6,148  | 7,229  | 7,317  | 6,255  | 2,597  |
| Totals.....                         | 28,457 | 31,542 | 31,383 | 32,942 | 31,684 | 33,531 | 36,059 |
| Conjugal Condition—                 |        |        |        |        |        |        |        |
| Married.....                        | 9,587  | 10,141 | 9,801  | 10,687 | 10,731 | 11,197 | 12,392 |
| Single.....                         | 18,332 | 18,003 | 17,464 | 17,424 | 16,074 | 18,710 | 20,759 |
| Widowed.....                        | 371    | 327    | 525    | 485    | 485    | 515    | 581    |
| Divorced.....                       | —      | 7      | 5      | 12     | 9      | 7      | 23     |
| Not given.....                      | 3,160  | 6,066  | 3,581  | 4,365  | 4,385  | 3,102  | 2,304  |
| Educational Status—                 |        |        |        |        |        |        |        |
| Unable to read or write.....        | 711    | 464    | 595    | 485    | 378    | 569    | 375    |
| Elementary.....                     | 23,819 | 26,490 | 26,247 | 27,904 | 26,498 | 29,756 | 34,339 |
| Superior.....                       | 482    | 420    | 454    | 407    | 527    | 388    | 575    |
| Not given.....                      | 3,445  | 4,168  | 4,087  | 4,146  | 4,281  | 3,018  | 770    |

<sup>1</sup> Not reported separately prior to 1936.

**8.—Persons Convicted of Indictable Offences, Classified by Occupation, Conjugal Condition, Birthplace, Religion, etc., years ended Sept. 30, 1930-36—concluded.**

| Item.                          | 1930.  | 1931.  | 1932.  | 1933.  | 1934.  | 1935.  | 1936.  |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
|                                | No.    | No.    | No.    | No.    | No.    | No.    | No.    |
| <b>Age—</b>                    |        |        |        |        |        |        |        |
| 16 years and under 21.....     | 6,453  | 7,266  | 6,718  | 7,050  | 6,130  | 6,097  | 6,875  |
| 21 years and under 40.....     | 14,343 | 15,810 | 16,410 | 19,445 | 16,406 | 18,180 | 19,244 |
| 40 years or over.....          | 4,901  | 4,871  | 5,008  | 5,057  | 5,667  | 6,058  | 6,948  |
| Not given.....                 | 2,760  | 3,595  | 3,238  | 790    | 3,391  | 3,196  | 2,992  |
| <b>Use of Liquors—</b>         |        |        |        |        |        |        |        |
| Moderate.....                  | 17,305 | 17,753 | 22,498 | 23,938 | 22,809 | 26,827 | 30,561 |
| Immoderate.....                | 2,167  | 2,121  | 2,749  | 2,045  | 2,199  | 2,528  | 3,487  |
| Not given.....                 | 8,985  | 11,068 | 6,136  | 6,359  | 6,676  | 4,176  | 2,011  |
| <b>Birthplace—</b>             |        |        |        |        |        |        |        |
| England or Wales.....          | 2,245  | 2,100  | 2,098  | 1,650  | 1,394  | 1,503  | 1,518  |
| Ireland.....                   | 433    | 394    | 412    | 456    | 382    | 393    | 368    |
| Scotland.....                  | 764    | 943    | 737    | 761    | 643    | 678    | 813    |
| Canada.....                    | 17,256 | 18,297 | 19,899 | 21,522 | 21,176 | 23,082 | 26,751 |
| Other British possessions..... | 103    | 169    | 122    | 145    | 273    | 140    | 132    |
| United States.....             | 1,094  | 990    | 934    | 896    | 781    | 703    | 1,116  |
| Other foreign countries.....   | 3,486  | 3,508  | 3,387  | 3,844  | 3,556  | 3,614  | 3,536  |
| Not given.....                 | 3,016  | 5,141  | 3,794  | 3,659  | 3,479  | 3,418  | 1,825  |
| <b>Religion—</b>               |        |        |        |        |        |        |        |
| Baptist.....                   | 710    | 686    | 780    | 705    | 679    | 856    | 837    |
| Roman Catholic.....            | 9,804  | 10,141 | 11,221 | 12,088 | 11,271 | 13,341 | 15,464 |
| Church of England.....         | 3,213  | 3,562  | 3,118  | 2,961  | 2,865  | 3,024  | 3,323  |
| Methodist <sup>1</sup> .....   | 578    | 571    | 442    | 440    | 377    | 346    | 268    |
| Presbyterian.....              | 2,387  | 2,836  | 2,358  | 2,277  | 1,927  | 1,945  | 2,004  |
| United Church.....             | 1,958  | 2,050  | 2,321  | 2,212  | 2,230  | 2,356  | 2,887  |
| Other Protestant.....          | 3,388  | 3,695  | 3,943  | 4,528  | 4,447  | 4,684  | 4,747  |
| Jewish.....                    | 497    | 618    | 687    | 606    | 622    | 807    | 538    |
| Other denominations.....       | 2,340  | 2,793  | 2,489  | 2,806  | 2,873  | 2,555  | 3,120  |
| Not given.....                 | 3,582  | 4,590  | 4,024  | 4,810  | 4,893  | 3,617  | 2,862  |
| <b>Residence—</b>              |        |        |        |        |        |        |        |
| Cities and towns.....          | 21,986 | 24,210 | 24,547 | 22,395 | 24,718 | 26,263 | 27,749 |
| Rural districts.....           | 6,369  | 6,048  | 6,490  | 7,260  | 6,801  | 6,952  | 8,310  |
| Not given.....                 | 102    | 684    | 346    | 3,287  | 165    | 376    | N.I.   |

<sup>1</sup> Notwithstanding the fact that the United Church of Canada was completely organized in 1926, these persons still reported themselves as Methodists.

### Section 3.—Summary Convictions of Adults.

The following statistics relate to "non-indictable" offences committed by adults (persons 16 years of age or over) and disposed of by police magistrates or other justices of the peace, under authority of the Summary Convictions Act. Such convictions numbered 377,706 during the year ended Sept. 30, 1936, an increase of 15,064, or 4.2 p.c., as compared with 1935. With the exceptions of Quebec and the Northwest Territories, increases in the total convictions for non-indictable offences were shown everywhere.

#### 9.—Summary Convictions, by Provinces, years ended Sept. 30, 1911-36.

NOTE.—For figures for 1900-10, see p. 1020 of the 1933 Year Book.

| Year.    | P.E.I. | N.S.  | N.B.  | Que.   | Ont.   | Man.   | Sask.  | Alta.  | B.C.   | Yukon. | N.W.T. | Canada. |
|----------|--------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
|          | No.    | No.   | No.   | No.    | No.    | No.    | No.    | No.    | No.    | No.    | No.    | No.     |
| 1911.... | 375    | 5,306 | 2,769 | 17,729 | 34,871 | 12,366 | 7,317  | 9,350  | 10,380 | 145    | 28     | 100,633 |
| 1912.... | 437    | 5,920 | 3,022 | 24,335 | 42,104 | 13,985 | 9,184  | 15,254 | 16,472 | 163    | 84     | 130,960 |
| 1913.... | 443    | 6,353 | 3,136 | 28,714 | 51,396 | 16,513 | 11,711 | 17,513 | 17,832 | 157    |        | 154,818 |
| 1914.... | 498    | 6,613 | 2,872 | 30,563 | 56,874 | 14,840 | 11,854 | 16,806 | 20,481 | 196    |        | 161,597 |
| 1915.... | 346    | 5,774 | 2,833 | 24,152 | 49,942 | 11,266 | 9,650  | 12,331 | 15,993 | 143    |        | 132,430 |
| 1916.... | 405    | 5,924 | 2,964 | 20,767 | 41,732 | 7,826  | 9,287  | 9,526  | 6,344  | 159    | 1      | 104,631 |
| 1917.... | 323    | 4,709 | 2,564 | 22,560 | 42,655 | 7,065  | 6,007  | 5,726  | 6,765  | 84     |        | 98,452  |
| 1918.... | 209    | 4,794 | 1,611 | 25,374 | 46,448 | 7,298  | 6,536  | 6,744  | 6,821  | 64     |        | 105,899 |
| 1919.... | 236    | 5,533 | 2,447 | 30,881 | 44,687 | 8,128  | 6,180  | 5,961  | 7,638  | 33     |        | 111,623 |
| 1920.... | 340    | 5,790 | 3,408 | 40,801 | 55,049 | 11,093 | 6,523  | 7,219  | 18,996 | 49     |        | 144,265 |

<sup>1</sup> See footnote 1 to Table 4, p. 1023.

## 9.—Summary Convictions, by Provinces, years ended Sept. 30, 1911-36—concluded.

| Year.    | P.E.I. | N.S.  | N.B.  | Que.    | Ont.    | Man.   | Sask.  | Alta.  | B.C.   | Yukon. | N.W.T. | Canada. |
|----------|--------|-------|-------|---------|---------|--------|--------|--------|--------|--------|--------|---------|
|          | No.    | No.   | No.   | No.     | No.     | No.    | No.    | No.    | No.    | No.    | No.    | No.     |
| 1921.... | 373    | 4,639 | 2,680 | 45,042  | 63,874  | 9,563  | 6,127  | 8,571  | 14,460 | 37     | 1      | 155,376 |
| 1922.... | 309    | 3,332 | 2,281 | 31,441  | 63,015  | 9,530  | 6,876  | 7,766  | 11,720 | 52     |        | 136,322 |
| 1923.... | 321    | 3,033 | 2,179 | 27,563  | 64,639  | 11,377 | 8,346  | 8,359  | 11,639 | 37     |        | 137,493 |
| 1924.... | 232    | 3,355 | 2,409 | 22,803  | 73,768  | 11,189 | 7,274  | 8,342  | 13,508 | 29     |        | 142,999 |
| 1925.... | 235    | 2,790 | 2,417 | 25,364  | 79,470  | 10,724 | 8,020  | 7,840  | 14,875 | 29     | 61     | 151,825 |
| 1926.... | 345    | 3,568 | 2,418 | 24,428  | 90,061  | 12,913 | 8,614  | 8,142  | 18,337 | 45     | 42     | 160,913 |
| 1927.... | 392    | 4,362 | 2,565 | 28,732  | 101,345 | 16,420 | 8,243  | 8,801  | 22,292 | 54     | 34     | 193,240 |
| 1928.... | 652    | 4,499 | 3,031 | 29,302  | 146,586 | 19,921 | 9,108  | 10,927 | 21,598 | 72     | 57     | 246,763 |
| 1929.... | 783    | 6,231 | 4,032 | 61,099  | 153,355 | 26,536 | 11,413 | 13,939 | 22,499 | 94     | 32     | 290,043 |
| 1930.... | 906    | 6,299 | 4,072 | 60,098  | 163,913 | 26,879 | 11,574 | 12,904 | 21,989 | 86     | 39     | 308,759 |
| 1931.... | 838    | 5,324 | 4,533 | 99,381  | 153,451 | 22,025 | 10,691 | 13,113 | 17,671 | 80     | 71     | 327,778 |
| 1932.... | 825    | 3,673 | 3,841 | 112,132 | 131,374 | 18,218 | 7,538  | 8,180  | 12,148 | 55     | 25     | 297,909 |
| 1933.... | 655    | 3,022 | 3,483 | 117,433 | 124,589 | 15,396 | 6,355  | 9,608  | 11,051 | 68     | 23     | 292,673 |
| 1934.... | 733    | 4,216 | 3,508 | 115,313 | 160,895 | 16,385 | 5,680  | 7,896  | 13,369 | 28     | 31     | 328,744 |
| 1935.... | 924    | 4,818 | 3,968 | 118,499 | 190,763 | 15,685 | 5,749  | 8,398  | 13,759 | 41     | 38     | 362,642 |
| 1936.... | 956    | 5,593 | 4,601 | 111,254 | 204,744 | 17,476 | 5,760  | 8,810  | 18,349 | 58     | 25     | 377,706 |

<sup>1</sup> See footnote 1 to Table 4, p. 1023.

While the marked increase during the past eight or nine years has been due almost entirely to breaches of traffic regulations, which have risen from 78,027 in 1926 to 237,183 in 1936, this group shows a decrease of 8,940 or 3.63 p.c. in 1936 as compared with 1935. This is the first decrease shown in 15 years for breaches of traffic regulations. The bulk of the 1936 total increase over 1935 is accounted for by an extraordinary increase (14,781 convictions, or 57.09 p.c.) in convictions for gambling. Convictions for drunkenness, breaches of liquor Acts, municipal by-laws, and loose, idle, and disorderly conduct show substantial increases, with breaches of traffic regulations and offences against the railways showing the greatest decreases. By sex, the summary convictions were: in 1926, males 159,528, females 10,385; in 1930, males 292,557, females 16,202; in 1931, males 312,111, females 15,667; in 1932, males 281,318, females 16,591; in 1933, males 275,229, females 17,444; in 1934, males 311,542, females 17,202; in 1935, 339,494 males and 23,148 females; and in 1936, 355,772 males and 21,934 females.

## 10.—Summary Convictions, by Offences, years ended Sept. 30, 1933-36.

| Offence.   | 1933.  | 1934.  | 1935.  | 1936.  | Increase or Decrease, 1935-36. |
|--|--------|--------|--------|--------|--------------------------------|
|  | No.    | No.    | No.    | No.    | No.                            |
| Assault.....   | 3,658  | 3,777  | 3,690  | 3,433  | -257                           |
| Carrying fire-arms and unlawful weapons.....                   | 361    | 280    | 258    | 388    | +130                           |
| Contempt of court.....   | 26     | 13     | 66     | 116    | +50                            |
| Cruelty to animals.....  | 244    | 305    | 263    | 259    | -4                             |
| Disturbing religious and like meetings.....                    | 44     | 14     | 19     | 43     | +24                            |
| Fishery and game Acts, offences against.....                   | 1,755  | 1,442  | 1,724  | 2,149  | +425                           |
| Gambling Acts, offences against.....                           | 22,191 | 30,099 | 25,889 | 40,670 | +14,781                        |
| Immigration Act, offences against.....                         | 41     | 29     | 24     | 28     | +4                             |
| Inspection and Sales Act, offences against.....                | 303    | 423    | 399    | 340    | -59                            |
| Adulteration of food (food and drugs Acts).....                | 162    | 202    | 244    | 201    | -43                            |
| Weights and measures Acts, offences against.....               | 155    | 181    | 379    | 361    | -18                            |
| Liquor, prohibition and temperance Acts, offences against..... | 10,489 | 10,754 | 8,826  | 10,073 | +1,247                         |
| Maleficent or wilful damage to property.....                   | 811    | 720    | 790    | 785    | -5                             |
| Masters and servants Acts, offences against.....               | 219    | 205    | 224    | 292    | +68                            |

## 10.—Summary Convictions, by Offences, years ended Sept. 30, 1933-36—concluded.

| Offence.  | 1933.          | 1934.          | 1935.          | 1936.          | Increase or<br>Decrease,<br>1935-36. |
|---|----------------|----------------|----------------|----------------|--------------------------------------|
|   | No.            | No.            | No.            | No.            | No.                                  |
| Non-payment of wages.....   | 1,492          | 1,246          | 1,540          | 1,385          | -155                                 |
| Breach of traffic regulations.....  | 186,848        | 217,827        | 246,123        | 237,183        | -8,940                               |
| Breach of by-laws.....  | 14,218         | 15,098         | 17,646         | 20,456         | +2,810                               |
| Non-support of family and neglecting<br>children.....   | 1,363          | 1,435          | 1,415          | 1,607          | +192                                 |
| Contributing to delinquency of children.<br>Opium and Narcotic Drug Act, various<br>offences against..... | 952            | 939            | 862            | 1,033          | +171                                 |
| Profanation of the Lord's Day.....  | 929            | 994            | 869            | 1,087          | +218                                 |
| Railway Acts, various offences against...   | 1,663          | 1,297          | 1,150          | 959            | -191                                 |
| Trespass on railway.....  | 915            | 666            | 713            | 588            | -125                                 |
| Stealing ride on railway.....   | 2,277          | 1,076          | 1,017          | 524            | -493                                 |
| Revenue laws, offences against.....   | 1,076          | 923            | 2,604          | 3,345          | +741                                 |
| Trespass, offences against.....   | 844            | 518            | 381            | 505            | +124                                 |
| Vagrancy.....   | 11,109         | 6,424          | 7,966          | 7,416          | -550                                 |
| Drunkenness.....  | 18,910         | 20,764         | 25,643         | 28,433         | +2,790                               |
| Insulting, abusive and profane language...  | 346            | 163            | 180            | 347            | +167                                 |
| Frequenting bawdy houses.....   | 3,980          | 2,618          | 2,674          | 2,725          | +51                                  |
| Loose, idle, disorderly conduct and dis-<br>turb the peace.....   | 2,613          | 4,787          | 5,777          | 7,515          | +1,738                               |
| Various other offences.....   | 2,620          | 2,948          | 3,268          | 3,428          | +170                                 |
| <b>Totals.....</b>  | <b>292,673</b> | <b>328,744</b> | <b>362,642</b> | <b>377,706</b> | <b>+15,064</b>                       |

**Convictions for Drunkenness.**—The number of summary convictions for drunkenness in Canada in 1936 was 28,433, as compared with 38,826 as recently as 1929. Maximum figures were attained in the years 1913 and 1914; during the War there was an appreciable reduction and since the War, while figures have fluctuated, they have not approximated former high levels. Table 11 shows the numbers of convictions by provinces and years from 1911 to 1936. On both a numerical and a percentage basis, increases in convictions for drunkenness were greater in Ontario during 1936 than in any other province.

## 11.—Convictions for Drunkenness, by Provinces, years ended Sept. 30, 1911-36.

NOTE.—For figures for 1900-10, see p. 1021 of the 1933 Year Book.

| Year.     | P.E.I. | N.S.  | N.B.  | Que.   | Ont.   | Man.  | Sask. | Alta. | B.C.  | Yukon. | N.W.T. | Canada. |
|-----------|--------|-------|-------|--------|--------|-------|-------|-------|-------|--------|--------|---------|
|           | No.    | No.   | No.   | No.    | No.    | No.   | No.   | No.   | No.   | No.    | No.    | No.     |
| 1911..... | 238    | 3,149 | 1,944 | 8,805  | 11,347 | 5,832 | 2,359 | 4,041 | 5,594 | 63     | 7      | 41,379  |
| 1912..... | 309    | 3,693 | 2,116 | 9,863  | 12,785 | 6,925 | 2,462 | 6,657 | 8,275 | 72     | 14     | 53,171  |
| 1913..... | 324    | 3,955 | 2,073 | 12,265 | 16,236 | 7,493 | 2,970 | 7,283 | 8,316 | 60     |        | 60,975  |
| 1914..... | 342    | 3,999 | 1,755 | 12,776 | 17,703 | 6,193 | 2,142 | 5,710 | 9,376 | 61     |        | 60,067  |
| 1915..... | 231    | 3,436 | 1,094 | 8,939  | 12,553 | 4,154 | 1,332 | 2,802 | 5,960 | 60     |        | 41,161  |
| 1916..... | 219    | 3,614 | 1,066 | 7,108  | 11,728 | 3,114 | 1,062 | 1,809 | 2,327 | 53     |        | 32,730  |
| 1917..... | 207    | 2,546 | 1,516 | 8,025  | 10,945 | 1,085 | 770   | 391   | 2,372 | 25     |        | 27,882  |
| 1918..... | 96     | 2,435 | 794   | 6,080  | 7,932  | 1,123 | 434   | 825   | 776   | 19     |        | 21,026  |
| 1919..... | 116    | 2,679 | 1,350 | 7,116  | 8,468  | 1,570 | 618   | 1,057 | 1,004 | 9      | 1      | 24,217  |
| 1920..... | 120    | 3,140 | 1,882 | 11,853 | 15,021 | 2,330 | 919   | 1,536 | 2,948 | 10     |        | 39,769  |
| 1921..... | 144    | 2,156 | 1,264 | 9,944  | 14,498 | 1,429 | 708   | 1,838 | 2,379 | 2      |        | 34,362  |
| 1922..... | 162    | 1,492 | 1,088 | 7,103  | 10,063 | 1,623 | 816   | 1,608 | 1,081 | 12     |        | 25,048  |
| 1923..... | 164    | 1,392 | 1,074 | 6,260  | 11,370 | 1,680 | 884   | 1,277 | 1,443 | 21     |        | 25,505  |
| 1924..... | 94     | 1,450 | 1,176 | 6,146  | 12,993 | 1,948 | 505   | 1,464 | 1,545 | 11     |        | 27,338  |
| 1925..... | 112    | 1,466 | 1,171 | 6,342  | 11,811 | 1,948 | 668   | 1,374 | 1,844 | 9      |        | 26,751  |
| 1926..... | 168    | 1,898 | 1,234 | 5,384  | 13,752 | 1,871 | 487   | 1,413 | 2,114 | 6      | 10     | 28,317  |
| 1927..... | 182    | 2,053 | 1,397 | 7,030  | 14,334 | 1,883 | 618   | 1,182 | 2,496 | 26     | Nil    | 31,171  |
| 1928..... | 263    | 2,176 | 1,385 | 6,362  | 15,931 | 1,863 | 1,014 | 1,536 | 2,758 | 34     | Nil    | 33,224  |
| 1929..... | 406    | 3,284 | 1,814 | 8,328  | 17,020 | 1,830 | 794   | 1,810 | 2,898 | 42     | Nil    | 38,826  |
| 1930..... | 393    | 3,236 | 1,706 | 7,649  | 15,970 | 1,392 | 674   | 1,551 | 3,133 | 35     | Nil    | 35,789  |
| 1931..... | 440    | 2,137 | 1,541 | 7,461  | 12,404 | 1,089 | 466   | 1,191 | 2,372 | 41     | Nil    | 29,148  |
| 1932..... | 355    | 1,402 | 1,142 | 5,913  | 10,388 | 1,023 | 319   | 908   | 1,195 | 19     | Nil    | 23,664  |
| 1933..... | 297    | 1,478 | 1,127 | 4,575  | 8,724  | 737   | 286   | 589   | 1,068 | 28     | 1      | 18,910  |
| 1934..... | 401    | 1,486 | 1,505 | 4,776  | 9,060  | 826   | 304   | 609   | 1,781 | 12     | 4      | 20,764  |
| 1935..... | 475    | 1,933 | 1,755 | 4,705  | 12,386 | 1,064 | 379   | 692   | 2,230 | 29     | 5      | 25,643  |
| 1936..... | 558    | 2,221 | 2,187 | 5,333  | 13,049 | 1,125 | 418   | 785   | 2,734 | 21     | 3      | 28,433  |

<sup>1</sup> See footnote 1 to Table 4, p. 1023.



**Offences against the Liquor Acts.**—Until the Great War, alcoholic liquors were generally sold under specified conditions by licensed hotels or licensed shops. Offences against the liquor Acts usually represented a breach of the conditions of sale. During the War, prohibition was generally established but in more recent years the tendency has been for the Provincial Governments to take over the sale of liquor through commissions and derive a revenue therefrom (see pp. 632-635). Eight of the nine provinces now have their liquor commissions, Prince Edward Island being the only province in which prohibition prevails. In these circumstances, the convictions for offences against the liquor Acts in 1929 reached the highest figure on record, *viz.*, 19,327, but have since fallen off to 10,073 in 1936. The numbers of such convictions in each year since 1911 are given by provinces in Table 12.

**12.—Convictions for Offences against the Liquor Acts, by Provinces, years ended Sept. 30, 1911-36.**

*Notes.*—For figures for 1900-10, see p. 1022 of the 1933 Year Book.

| Year.     | P.E.I. | N.S. | N.B. | Que.  | Ont.  | Man.  | Sask. | Alta. | B.C.  | Yukon. | N.W.T. | Canada. |
|-----------|--------|------|------|-------|-------|-------|-------|-------|-------|--------|--------|---------|
|           | No.    | No.  | No.  | No.   | No.   | No.   | No.   | No.   | No.   | No.    | No.    | No.     |
| 1911..... | 38     | 592  | 278  | 1,032 | 1,759 | 46    | 240   | 423   | 318   | 33     | 16     | 4,775   |
| 1912..... | 36     | 551  | 361  | 859   | 2,117 | 85    | 366   | 605   | 625   | 40     | 26     | 5,671   |
| 1913..... | 26     | 502  | 447  | 791   | 2,167 | 166   | 528   | 560   | 741   | 41     |        | 5,969   |
| 1914..... | 72     | 000  | 365  | 882   | 2,328 | 166   | 404   | 551   | 394   | 49     |        | 5,871   |
| 1915..... | 42     | 033  | 390  | 1,021 | 2,018 | 124   | 378   | 573   | 246   | 27     |        | 5,452   |
| 1916..... | 75     | 646  | 352  | 1,015 | 2,002 | 172   | 967   | 713   | 295   | 11     |        | 6,248   |
| 1917..... | 36     | 449  | 312  | 1,076 | 2,927 | 289   | 774   | 885   | 576   | 15     |        | 7,339   |
| 1918..... | 42     | 412  | 258  | 1,155 | 3,410 | 230   | 422   | 678   | 812   | 23     | 1      | 7,472   |
| 1919..... | 37     | 479  | 387  | 1,479 | 3,353 | 175   | 434   | 456   | 597   | 6      |        | 7,883   |
| 1920..... | 23     | 394  | 585  | 1,975 | 4,385 | 380   | 452   | 618   | 1,427 | 8      |        | 10,247  |
| 1921..... | 44     | 362  | 419  | 1,384 | 4,938 | 427   | 583   | 907   | 1,394 | 2      |        | 10,460  |
| 1922..... | 28     | 267  | 366  | 954   | 3,246 | 392   | 708   | 1,043 | 1,503 | 12     |        | 8,519   |
| 1923..... | 39     | 264  | 364  | 1,724 | 3,958 | 542   | 997   | 990   | 1,196 | 14     |        | 10,088  |
| 1924..... | 29     | 293  | 375  | 1,549 | 4,678 | 452   | 966   | 817   | 1,256 | 4      |        | 10,449  |
| 1925..... | 51     | 235  | 319  | 1,919 | 5,047 | 512   | 1,078 | 758   | 1,699 | 9      | 9      | 11,636  |
| 1926..... | 53     | 499  | 393  | 2,104 | 6,362 | 786   | 1,231 | 737   | 1,345 | 2      | Nil    | 13,512  |
| 1927..... | 00     | 610  | 271  | 2,025 | 5,020 | 627   | 1,245 | 814   | 1,186 | 18     | Nil    | 12,477  |
| 1928..... | 09     | 088  | 478  | 2,096 | 7,812 | 598   | 1,174 | 944   | 1,360 | 22     | 32     | 15,263  |
| 1929..... | 81     | 804  | 486  | 3,392 | 9,034 | 1,399 | 1,542 | 1,017 | 1,556 | 8      | 8      | 19,327  |
| 1930..... | 98     | 532  | 469  | 3,043 | 8,995 | 1,180 | 1,392 | 970   | 1,432 | 14     | 7      | 18,132  |
| 1931..... | 52     | 588  | 541  | 2,956 | 8,044 | 1,144 | 1,042 | 888   | 907   | 13     | 10     | 16,185  |
| 1932..... | 50     | 353  | 489  | 2,379 | 6,057 | 900   | 629   | 557   | 790   | 14     | 8      | 12,226  |
| 1933..... | 52     | 586  | 559  | 1,755 | 5,067 | 708   | 553   | 410   | 782   | 13     | 4      | 10,489  |
| 1934..... | 80     | 750  | 622  | 2,325 | 4,324 | 826   | 543   | 452   | 820   | 3      | 9      | 10,754  |
| 1935..... | 79     | 699  | 567  | 1,776 | 3,225 | 792   | 506   | 472   | 692   | 8      | 10     | 8,826   |
| 1936..... | 37     | 698  | 610  | 1,262 | 4,185 | 940   | 570   | 784   | 965   | 24     | 8      | 10,073  |

<sup>1</sup> See footnote 1 to Table 4, p. 1023.

**Breaches of Traffic Regulations.**—Convictions for breaches of traffic regulations (Table 13), which at the beginning of the century numbered only 185 in all Canada, have, as a result of the growing density and increasing use of motor vehicles, become the largest element in the non-indictable offences. Such convictions reached a record total of 237,183 in 1936, when they represented 63 p.c. of the total of 377,706 (see Table 9) summary convictions. Convictions for breaches of traffic regulations in 1936 showed increases in all provinces with the exceptions of Prince Edward Island and Quebec.

### 13.—Convictions for Breaches of Traffic Regulations, by Provinces, years ended Sept. 30, 1911-36.

NOTE.—For figures for 1900-10, see p. 1023 of the 1933 Year Book.

| Year.     | P.E.I. | N.S.  | N.B.  | Que.   | Ont.    | Man.   | Sask. | Alta. | B.C.   | Yukon. | Canada. <sup>1</sup> |
|-----------|--------|-------|-------|--------|---------|--------|-------|-------|--------|--------|----------------------|
|           | No.    | No.   | No.   | No.    | No.     | No.    | No.   | No.   | No.    | No.    | No.                  |
| 1911..... | 19     | 86    | 17    | 267    | 3,376   | 1,116  | 96    | 139   | 661    | Nil    | 5,777                |
| 1912..... | 8      | 97    | 24    | 1,800  | 5,928   | 1,778  | 215   | 838   | 1,768  | Nil    | 13,403               |
| 1913..... | 9      | 83    | 5     | 3,373  | 6,697   | 3,080  | 248   | 672   | 1,883  | Nil    | 16,000               |
| 1914..... | 7      | 176   | 69    | 2,643  | 4,717   | 2,419  | 410   | 754   | 2,051  | Nil    | 13,246               |
| 1915..... | 6      | 62    | 101   | 1,509  | 4,494   | 1,865  | 204   | 503   | 1,804  | 1      | 10,549               |
| 1916..... | 7      | 228   | 57    | 2,140  | 5,577   | 1,043  | 321   | 380   | 615    | 7      | 10,381               |
| 1917..... | 13     | 324   | 54    | 1,677  | 9,854   | 2,619  | 441   | 533   | 813    | 10     | 16,338               |
| 1918..... | 17     | 523   | 80    | 3,505  | 12,206  | 2,700  | 418   | 736   | 995    | 1      | 21,181               |
| 1919..... | 15     | 509   | 62    | 4,971  | 13,374  | 3,123  | 863   | 701   | 1,677  | 1      | 25,296               |
| 1920..... | 129    | 600   | 49    | 11,499 | 19,708  | 4,987  | 744   | 1,673 | 3,780  | 1      | 43,170               |
| 1921..... | 109    | 443   | 87    | 12,335 | 26,880  | 4,965  | 700   | 1,845 | 4,412  | 2      | 51,788               |
| 1922..... | 38     | 289   | 315   | 3,344  | 31,813  | 4,968  | 1,112 | 1,996 | 4,101  | 1      | 47,977               |
| 1923..... | 36     | 397   | 196   | 1,740  | 33,402  | 6,182  | 1,246 | 2,514 | 4,095  | 1      | 49,815               |
| 1924..... | 49     | 350   | 237   | 3,818  | 40,530  | 6,412  | 1,282 | 2,301 | 5,084  | Nil    | 60,063               |
| 1925..... | 27     | 200   | 281   | 4,976  | 44,618  | 5,971  | 1,375 | 1,940 | 4,389  | 1      | 63,778               |
| 1926..... | 64     | 263   | 180   | 5,534  | 52,727  | 8,588  | 1,730 | 2,059 | 6,882  | Nil    | 78,027               |
| 1927..... | 69     | 402   | 244   | 6,418  | 62,637  | 10,871 | 1,610 | 2,459 | 12,268 | 2      | 95,389               |
| 1928..... | 228    | 402   | 516   | 6,273  | 191,356 | 14,099 | 2,100 | 3,481 | 12,970 | 2      | 141,493              |
| 1929..... | 152    | 859   | 887   | 19,427 | 105,708 | 19,460 | 3,643 | 5,612 | 10,592 | 2      | 160,337              |
| 1930..... | 212    | 831   | 757   | 28,633 | 115,073 | 20,672 | 3,727 | 4,903 | 10,776 | Nil    | 185,594              |
| 1931..... | 95     | 999   | 1,200 | 64,611 | 111,718 | 16,556 | 4,259 | 5,070 | 7,851  | 2      | 212,861              |
| 1932..... | 174    | 643   | 842   | 70,253 | 94,188  | 13,251 | 2,811 | 2,755 | 5,743  | Nil    | 190,660              |
| 1933..... | 82     | 628   | 693   | 72,464 | 91,521  | 11,021 | 1,859 | 3,282 | 5,298  | Nil    | 186,848              |
| 1934..... | 57     | 638   | 528   | 64,429 | 128,604 | 12,725 | 1,024 | 2,819 | 6,403  | Nil    | 217,827              |
| 1935..... | 101    | 760   | 609   | 69,671 | 153,142 | 11,664 | 1,720 | 2,069 | 5,787  | Nil    | 246,123              |
| 1936..... | 77     | 1,099 | 720   | 46,464 | 162,951 | 12,900 | 1,839 | 2,817 | 8,315  | 1      | 237,183              |

<sup>1</sup> No convictions were reported for the Northwest Territories.

For the year 1936, Ontario, which had 48 p.c. of the registrations of motor vehicles in Canada (see p. 672), had 69 p.c. of the total convictions; Quebec in the same year had 15 p.c. of the motor vehicles and 20 p.c. of the convictions; and Manitoba 6.1 p.c. of the motor vehicles and 5.5 p.c. of the convictions. In interpreting the figures in this way, however, it should be pointed out that traffic regulations are by no means uniform throughout Canada and no account is taken of the differences in the degrees of urbanization in the provinces. Thus, the above three provinces contain large centres of population, while in the Maritime Provinces, Saskatchewan, and Alberta, with a lower degree of urbanization, convictions were low in proportion to the number of motor vehicles registered.

### Section 4.—Juvenile Delinquency.

Juveniles under 16 years of age to the number of 7,210 were found guilty of various offences in the year ended Sept. 30, 1936, as compared with 7,679 in 1935, and 7,831 in 1926. Of the 1936 total, 4,970 were convicted of major offences and 2,240 of minor offences, terms which correspond very nearly to indictable and non-indictable offences as applied to adults. The offences proven against juveniles in 1935 and 1936 are shown, by province and sex, in Table 14.

**14.—Juvenile Delinquents Convicted of Major and Minor Offences, by Provinces and Sex, years ended Sept. 30, 1935 and 1936.**

| Province.                      | Major Offences. |              |            |            | Minor Offences. |              |            |            |
|--------------------------------|-----------------|--------------|------------|------------|-----------------|--------------|------------|------------|
|                                | Males.          |              | Females.   |            | Males.          |              | Females.   |            |
|                                | 1935.           | 1936.        | 1935.      | 1936.      | 1935.           | 1936.        | 1935.      | 1936.      |
|                                | No.             | No.          | No.        | No.        | No.             | No.          | No.        | No.        |
| Prince Edward Island.....      | 30              | 19           | 3          | 1          | 1               | Nil          | Nil        | Nil        |
| Nova Scotia.....               | 230             | 309          | 10         | 12         | 63              | 82           | 9          | 14         |
| New Brunswick.....             | 241             | 194          | 6          | 10         | 101             | 61           | 7          | 1          |
| Quebec.....                    | 1,559           | 1,278        | 74         | 46         | 674             | 633          | 177        | 224        |
| Ontario.....                   | 1,972           | 1,959        | 87         | 62         | 617             | 802          | 77         | 102        |
| Manitoba.....                  | 396             | 243          | 32         | 32         | 136             | 38           | 18         | 11         |
| Saskatchewan.....              | 228             | 217          | 11         | 11         | 42              | 8            | 1          | 2          |
| Alberta.....                   | 306             | 296          | 12         | 19         | 61              | 95           | 1          | 6          |
| British Columbia.....          | 306             | 250          | 11         | 3          | 158             | 138          | 22         | 23         |
| <b>Canada<sup>1</sup>.....</b> | <b>5,268</b>    | <b>4,774</b> | <b>246</b> | <b>196</b> | <b>1,853</b>    | <b>1,857</b> | <b>312</b> | <b>353</b> |

<sup>1</sup> No convictions were reported for the Territories.

**Major Offences.**—In Table 15 are shown the various major offences for which juvenile delinquents were convicted from 1930 to 1936. It will be observed that theft, house- and shop-breaking with theft, and other wilful damage to property account for the great bulk of the offences; in 1936, 94 p.c. of the major offences were of this character.

**15.—Juvenile Delinquents Convicted of Major Offences, by Offences, years ended Sept. 30, 1930-36.**

| Offence.                                       | 1930.        | 1931.        | 1932.        | 1933.        | 1934.        | 1935.        | 1936.        | Increase<br>or<br>Decrease<br>for 1936. |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---|
|  | No.          | No.          | No.          | No.          | No.          | No.          | No.          | No.                                     |
| Murder.....                                    | Nil          | Nil          | Nil          | Nil          | Nil          | Nil          | Nil          | -                                       |
| Manslaughter.....                              | Nil          | 1            | Nil          | 1            | Nil          | Nil          | 1            | + 1                                     |
| Rape, carnal knowledge and incest.....         | 5            | 8            | 5            | 8            | 15           | 8            | 10           | + 2                                     |
| Indecent assault.....                          | 49           | 42           | 34           | 28           | 24           | 29           | 31           | + 2                                     |
| Aggravated assault and wounding.....           | 10           | 52           | 65           | 16           | 36           | 60           | 24           | + 36                                    |
| Common assault.....                            | 101          | 112          | 104          | 139          | 115          | 98           | 102          | + 4                                     |
| Endangering life on railway.....               | 31           | 32           | 17           | 50           | 31           | 48           | 30           | + 18                                    |
| Other offences against the person.....         | 3            | 2            | 4            | 5            | 6            | 5            | 5            | Nil                                     |
| Breaking, entering and theft.....              | 944          | 948          | 914          | 957          | 1,071        | 1,022        | 1,015        | - 7                                     |
| Robbery.....                                   | 7            | 13           | 13           | 15           | 1            | 9            | 4            | - 5                                     |
| Theft and receiving stolen goods.....          | 3,662        | 3,139        | 3,093        | 3,155        | 3,094        | 3,548        | 3,094        | -454                                    |
| False pretences and fraud.....                 | 24           | 11           | 9            | 9            | 20           | 14           | 12           | - 2                                     |
| Arson.....                                     | 31           | 39           | 19           | 24           | 38           | 13           | 15           | + 2                                     |
| Other wilful damage to property.....           | 702          | 749          | 676          | 637          | 776          | 599          | 539          | - 60                                    |
| Forgery and offences against the currency..... | 17           | 10           | 11           | 4            | 11           | 12           | 11           | - 1                                     |
| Immorality.....                                | 52           | 100          | 85           | 72           | 73           | 35           | 52           | + 17                                    |
| Various other offences.....                    | 15           | 37           | 44           | 24           | 52           | 14           | 25           | + 11                                    |
| <b>Totals.....</b>                             | <b>5,653</b> | <b>5,311</b> | <b>5,096</b> | <b>5,144</b> | <b>5,353</b> | <b>5,514</b> | <b>4,970</b> | <b>-544</b>                             |

**Minor Offences.**—Of the 2,240 juvenile delinquents found guilty of minor offences in 1936, 333 were convicted of breaches of municipal by-laws, 476 of disorderly conduct and disturbing the peace, 530 of disobedience or incorrigibility, 251 of trespass, 277 of truancy, 161 of vagrancy and indecent language and 212 of other minor offences.

### Section 5.—Municipal Police Statistics.

Police statistics were collected in 1936 from 161 cities and towns of 4,000 population or over in 1931, aggregating a total of 4,432,750 persons. The total number of police was 5,435, which is an average of one policeman to each 816 persons in the population of those cities and towns.

The returns showed a total of 402,643 crimes known to have been committed; 123,140 arrests were made and 216,617 summonses issued. The prosecutions numbered 340,617 with 287,610 convictions.

Automobiles reported stolen numbered 8,212 during 1936, of which 8,148 or 99.2 p.c. were recovered; 11,976 bicycles were stolen with 6,970 or 58.2 p.c. recovered. The value of other goods reported stolen was \$2,977,212 with \$1,260,558 or 42.3 p.c. recovered. There were 47,237 automobile accidents reported to the police, and 292 deaths and 13,854 injuries resulted from such accidents. Other accidents reported resulted in the death of 629 persons and injuries to 6,552.

#### 16.—Police Statistics of Canadian Cities and Towns, by Provinces, calendar years 1935 and 1936.

| Year and Province.       | Cities and Towns. | Population.      | Police.      | Arrests.       | Summonses.     | Population per Policeman. | Arrests per Policeman. |
|--------------------------|-------------------|------------------|--------------|----------------|----------------|---------------------------|------------------------|
|                          | No.               | No.              | No.          | No.            | No.            | No.                       | No.                    |
| <b>1935.</b>             |                   |                  |              |                |                |                           |                        |
| Prince Edward Island.... | 1                 | 12,361           | 9            | 480            | 263            | 1,373                     | 53                     |
| Nova Scotia.....         | 13                | 176,444          | 142          | 4,119          | 1,678          | 1,243                     | 29                     |
| New Brunswick.....       | 6                 | 94,005           | 96           | 3,561          | 3,558          | 1,050                     | 40                     |
| Quebec.....              | 43                | 1,435,110        | 2,035        | 36,722         | 33,746         | 695                       | 18                     |
| Ontario.....             | 69                | 1,756,865        | 1,857        | 31,617         | 119,191        | 946                       | 17                     |
| Manitoba.....            | 7                 | 273,012          | 304          | 4,411          | 14,481         | 898                       | 15                     |
| Saskatchewan.....        | 8                 | 149,015          | 132          | 2,130          | 2,571          | 1,129                     | 16                     |
| Alberta.....             | 4                 | 186,747          | 195          | 3,334          | 4,718          | 958                       | 17                     |
| British Columbia.....    | 10                | 349,191          | 438          | 8,896          | 11,257         | 797                       | 20                     |
| <b>Totals, 1935.....</b> | <b>161</b>        | <b>4,432,750</b> | <b>5,231</b> | <b>95,260</b>  | <b>188,493</b> | <b>847</b>                | <b>18</b>              |
| <b>1936.</b>             |                   |                  |              |                |                |                           |                        |
| Prince Edward Island.... | 1                 | 12,361           | 9            | 517            | 180            | 1,373                     | 57                     |
| Nova Scotia.....         | 13                | 176,444          | 149          | 5,211          | 1,813          | 1,184                     | 35                     |
| New Brunswick.....       | 6                 | 94,005           | 96           | 3,768          | 539            | 979                       | 39                     |
| Quebec.....              | 43                | 1,435,110        | 2,230        | 57,560         | 50,814         | 644                       | 26                     |
| Ontario.....             | 69                | 1,756,865        | 1,832        | 34,729         | 125,907        | 959                       | 19                     |
| Manitoba.....            | 7                 | 273,012          | 306          | 4,757          | 17,320         | 892                       | 16                     |
| Saskatchewan.....        | 8                 | 149,015          | 130          | 2,344          | 2,652          | 1,146                     | 18                     |
| Alberta.....             | 4                 | 186,747          | 197          | 3,761          | 4,505          | 948                       | 19                     |
| British Columbia.....    | 10                | 349,191          | 486          | 10,493         | 12,827         | 719                       | 22                     |
| <b>Totals, 1936.....</b> | <b>161</b>        | <b>4,432,750</b> | <b>5,435</b> | <b>123,140</b> | <b>216,617</b> | <b>816</b>                | <b>23</b>              |

The Royal Canadian Mounted Police are dealt with in Chapter XXVIII—Miscellaneous Administration—at pp. 1063-1064.

### Section 6.—Penitentiary Statistics.

The Penitentiaries Branch of the Department of Justice is charged with the administration of the various penitentiaries of Canada. Seven institutions are included in the system, the two largest of which are at Portsmouth, Ont., and St.-Vincent de Paul, Que., while the other five are at Dorchester, N.B.; Prince Albert, Sask.; Stony Mountain, Man.; New Westminster, B.C.; and Collins Bay, Ont. During the fiscal year ended Mar. 31, 1937, the average daily population of these

institutions was 3,103 and the total net cash outlay for the year was \$2,307,716 or \$2.04 per convict per diem, compared with 3,148 average daily population and \$2,307,739 total net cash outlay or \$2.01 per convict per diem for the year 1936.

The special penitentiary for Doukhobors on Piers island, which was administered under the warden of the penitentiary at New Westminster, was in operation from 1932 to Mar. 28, 1935, when the 39 remaining inmates were transferred to New Westminster. The statistics of this special penal colony are included with those of the regular penitentiaries in the following tables, and the reader is referred to p. 1035 of the 1936 Year Book for details of the Piers Island colony, given by sex, age, race, and conjugal condition.

Female convicts are kept in the penitentiary at Portsmouth, Ont., a suburb of Kingston, where special quarters and staff are maintained for their detention and supervision. Female convicts in custody there on Mar. 31, 1937, numbered 32 compared with 30 in 1936, and 40 in 1935.

**Movement of Population of Penal Institutions.**—Penal institutions may be classified under four heads: (1) penitentiaries, with slow turnover, since prisoners have long sentences; (2) reformatories for boys and (3) reformatories for girls, also with rather slow turnovers, but more rapid in the case of boys than in that of girls; and (4) common gaols, where the turnover is extremely rapid. If the average population for the year be taken as the average of the inmates at the beginning and at the end of the year, and the number discharged be the turnover, the turnover in 1936 was: in penitentiaries, 61 p.c.; in reformatories for boys, 221 p.c.; in reformatories for girls, 84 p.c.; in gaols, no less than 1,984 p.c. Thus, the average time spent in gaol was about 2.5 weeks. In dealing with these figures it must be borne in mind that the common gaol population changes from day to day, and is partly made up of accused persons awaiting trial who may be liberated to-day or sent to a penitentiary or reformatory to-morrow.

### 17.—Population of Penal Institutions, 1934-36.

NOTE.—Penitentiary statistics until 1919 were supplied directly by each penitentiary and were for the calendar year. For 1920 and subsequent years they have been supplied by the Superintendent of Penitentiaries and are for the fiscal years ended Mar. 31. For other institutions, the figures are for the years ended Sept. 30.

| Year and Institution.        | In Custody,<br>Beginning<br>of Year. | Admitted<br>During<br>Year. | Discharged<br>During<br>Year. | In Custody,<br>End of<br>Year. |
|------------------------------|--------------------------------------|-----------------------------|-------------------------------|--------------------------------|
|                              | No.                                  | No.                         | No.                           | No.                            |
| <b>1934.</b>                 |                                      |                             |                               |                                |
| Penitentiaries.....          | 4,587                                | 1,713                       | 2,080                         | 4,220                          |
| Reformatories for boys.....  | 3,132                                | 6,326                       | 6,471                         | 2,987                          |
| Reformatories for girls..... | 764                                  | 515                         | 545                           | 734                            |
| Gaols.....                   | 4,174                                | 50,379                      | 50,595                        | 3,958                          |
| <b>Totals, 1934.....</b>     | <b>12,657</b>                        | <b>58,933</b>               | <b>59,691</b>                 | <b>11,899</b>                  |
| <b>1935.</b>                 |                                      |                             |                               |                                |
| Penitentiaries.....          | 4,220                                | 1,477                       | 2,145                         | 3,552                          |
| Reformatories for boys.....  | 2,987                                | 6,343                       | 6,507                         | 2,823                          |
| Reformatories for girls..... | 734                                  | 573                         | 585                           | 722                            |
| Gaols.....                   | 3,953                                | 53,128                      | 53,667                        | 3,419                          |
| <b>Totals, 1935.....</b>     | <b>11,899</b>                        | <b>61,521</b>               | <b>62,904</b>                 | <b>10,516</b>                  |
| <b>1936.</b>                 |                                      |                             |                               |                                |
| Penitentiaries.....          | 3,552                                | 1,558                       | 2,012                         | 3,098                          |
| Reformatories for boys.....  | 2,823                                | 6,894                       | 6,577                         | 3,140                          |
| Reformatories for girls..... | 722                                  | 487                         | 569                           | 640                            |
| Gaols.....                   | 3,419                                | 53,748                      | 53,223                        | 3,944                          |
| <b>Totals, 1936.....</b>     | <b>10,516</b>                        | <b>62,687</b>               | <b>62,381</b>                 | <b>10,822</b>                  |

Tables 18-20 give the more important penitentiary statistics as reported by the Superintendent. The number of convicts in penitentiaries was 1,865 in 1910, rose to 2,118 in 1916 and declined to 1,468 in 1918. After demobilization and the depression of 1921, the number of convicts rose to 2,640 in 1922, declined to 2,225 in 1924 and then increased to 4,164 in 1932. The increase was particularly rapid after 1929, amounting to 1,395 or 44 p.c. in three years. The number of convicts in 1936, at 3,098, was lower than in any year since 1929, but, in 1937 there was an increase of 5.4 p.c. The number of paroles, as shown in Table 18, numbered 351 in 1937, as compared with 431 in 1936, 554 in 1935, and 731 in 1934.

Table 19 shows the ages of convicts by groups. In 1937, of the total of 3,264, 9.7 p.c. were under 21 years of age and 46.4 p.c. between 21 and 30 years of age; thus 56.1 p.c. were under 30. In 1914 there were 2,003 convicts of whom 9.3 p.c. were under 20 and 44.4 p.c. between 20 and 30, a total of 53.7 p.c. under 30. In 1923 there were 2,486 convicts and 11.3 p.c. were under 20, 46.6 p.c. between 20 and 30, or 57.9 p.c. under 30 years of age. The average age of convicts appears to be slightly younger since the War, but no definite trend is shown in the past decade, although there is a good deal of variation from year to year. Detailed statistics of the race, nationality by place of birth, conjugal state, sex, and religion of convicts are presented in Table 20.

#### 18.—Movement of Convicts, fiscal years ended Mar. 31, 1930-37.

| Schedule.                                      | 1930.        | 1931.        | 1932.        | 1933.           | 1934.                    | 1935.          | 1936.        | 1937.                    |
|--|--------------|--------------|--------------|-----------------|--------------------------|----------------|--------------|--------------------------|
|  | No.          | No.          | No.          | No.             | No.                      | No.            | No.          | No.                      |
| <b>In Custody, Beginnings of Years</b>         | <b>2,769</b> | <b>3,187</b> | <b>3,714</b> | <b>4,164</b>    | <b>4,591<sup>1</sup></b> | <b>4,220</b>   | <b>3,552</b> | <b>3,097<sup>1</sup></b> |
| Received by—                                   |              |              |              |                 |                          |                |              |                          |
| Forfeiture of parole.....                      | 1            | 8            | 8            | 6               | 2                        | 11             | 8            | 12                       |
| Revoked paroles.....                           | 23           | 19           | Nil          | 3               | Nil                      | 4              | 6            | Nil                      |
| Recapture.....                                 | 1            | 1            | 3            | 1               | Nil                      | Nil            | Nil          | 1                        |
| Transfer.....                                  | 187          | 172          | 145          | 218             | 179                      | 241            | 180          | 176                      |
| Received from gaols, etc.....                  | 1,436        | 1,699        | 1,787        | 2,123           | 1,532                    | 1,221          | 1,364        | 1,332                    |
| <b>Totals Received.....</b>                    | <b>1,648</b> | <b>1,899</b> | <b>1,943</b> | <b>2,351</b>    | <b>1,713</b>             | <b>1,477</b>   | <b>1,558</b> | <b>1,521</b>             |
| Discharged by—                                 |              |              |              |                 |                          |                |              |                          |
| Death.....                                     | 14           | 12           | 16           | 15              | 21                       | 17             | 13           | 17                       |
| Escape.....                                    | 1            | 1            | 3            | 1               | Nil                      | 2 <sup>2</sup> | Nil          | 1                        |
| Expiry of sentence.....                        | 559          | 654          | 837          | 1,063           | 943                      | 1,226          | 1,263        | 738                      |
| Order of the Court.....                        | 2            | 1            | Nil          | 4               | 5                        | 5              | 2            | Nil                      |
| Pardon.....                                    | 15           | 26           | 19           | 44              | 74                       | 49             | 76           | 24                       |
| Parole.....                                    | 363          | 413          | 379          | 488             | 731                      | 554            | 431          | 351                      |
| Transfer.....                                  | 187          | 170          | 150          | 219             | 228                      | 241            | 182          | 178                      |
| Deportation.....                               | 77           | 89           | 83           | 88 <sup>1</sup> | 80                       | 50             | 45           | 35                       |
| Transfer to provincial gaol and execution..... | 2            | Nil          | Nil          | 5               | Nil                      | Nil            | Nil          | Nil                      |
| Return to provincial authorities..             | 10           | 6            | 6            | 1               | 2                        | 1              | Nil          | Nil                      |
| <b>Totals Discharged.....</b>                  | <b>1,230</b> | <b>1,372</b> | <b>1,493</b> | <b>1,928</b>    | <b>2,084</b>             | <b>2,145</b>   | <b>2,012</b> | <b>1,354</b>             |
| <b>In Custody, Ends of Years.....</b>          | <b>3,187</b> | <b>3,714</b> | <b>4,164</b> | <b>4,587</b>    | <b>4,220</b>             | <b>3,552</b>   | <b>3,098</b> | <b>3,264</b>             |

<sup>1</sup> This discrepancy between those in custody at the end of the previous fiscal year and the beginning of this year appears in the report of the Superintendent of Penitentiaries.

<sup>2</sup> Includes 1 by extradition.

<sup>2</sup> From asylum.

## 19.—Ages of Convicts as at Mar. 31, 1930-37.

| Age Group.                     | 1930. | 1931. | 1932. | 1933. <sup>1</sup> | 1934. <sup>1</sup> | 1935. | 1936. | 1937. |
|--------------------------------|-------|-------|-------|--------------------|--------------------|-------|-------|-------|
|                                | No.   | No.   | No.   | No.                | No.                | No.   | No.   | No.   |
| Under 20 years.....            | 377   | 484   | 527   | 467                | 409                | 325   | 280   | 317   |
| From 20 to under 30 years..... | 1,469 | 1,710 | 1,908 | 2,052              | 1,916              | 1,677 | 1,471 | 1,515 |
| From 30 to under 40 years..... | 738   | 842   | 970   | 1,027              | 941                | 861   | 740   | 806   |
| From 40 to under 50 years..... | 395   | 457   | 487   | 574                | 538                | 433   | 361   | 378   |
| From 50 to under 60 years..... | 144   | 173   | 196   | 257                | 214                | 167   | 178   | 174   |
| 60 years or over.....          | 73    | 68    | 76    | 210                | 202                | 89    | 68    | 74    |
| Totals.....                    | 3,187 | 3,714 | 4,164 | 4,587              | 4,220              | 3,552 | 3,098 | 3,264 |

<sup>1</sup> See footnote 1, Table 20, also p. 1034.

## 20.—Convicts in Penitentiaries, Classified by Race, Birthplace, Religion, etc., as at Mar. 31, 1930-37.

| Item.                      | 1930.           | 1931.           | 1932.           | 1933. <sup>1</sup> | 1934. <sup>1</sup> | 1935.           | 1936.           | 1937.           |
|----------------------------|-----------------|-----------------|-----------------|--------------------|--------------------|-----------------|-----------------|-----------------|
|                            | No.             | No.             | No.             | No.                | No.                | No.             | No.             | No.             |
| By Race—                   |                 |                 |                 |                    |                    |                 |                 |                 |
| African.....               | 60 <sup>2</sup> | 75 <sup>2</sup> | 79 <sup>2</sup> | 60 <sup>2</sup>    | 50 <sup>2</sup>    | 51 <sup>2</sup> | 45 <sup>2</sup> | 43 <sup>2</sup> |
| Caucasian.....             | 2,995           | 3,499           | 3,923           | 4,378              | 4,068              | 3,417           | 2,972           | 3,130           |
| Indian.....                | 52              | 59              | 81              | 67                 | 51                 | 48              | 57              | 62              |
| Mongolian.....             | 80              | 81              | 81              | 78                 | 61                 | 36              | 24              | 29              |
| By Place of Birth—         |                 |                 |                 |                    |                    |                 |                 |                 |
| British—                   |                 |                 |                 |                    |                    |                 |                 |                 |
| Canadian.....              | 2,056           | 2,441           | 2,806           | 2,976              | 2,803              | 2,502           | 2,216           | 2,401           |
| English or Welsh.....      | 240             | 282             | 309             | 255                | 230                | 215             | 175             | 155             |
| Irish.....                 | 31              | 42              | 46              | 42                 | 41                 | 42              | 32              | 32              |
| Scottish.....              | 95              | 118             | 118             | 102                | 88                 | 79              | 69              | 80              |
| Other British.....         | 33              | 30              | 41              | 33                 | 25                 | 20              | 22              | 23              |
| Foreign—                   |                 |                 |                 |                    |                    |                 |                 |                 |
| Austrian or Hungarian..... | 94              | 92              | 90              | 86                 | 74                 | 85              | 73              | 79              |
| Chinese.....               | 74              | 75              | 72              | 71                 | 46                 | 31              | 18              | 21              |
| Italian.....               | 60              | 64              | 74              | 73                 | 67                 | 68              | 62              | 63              |
| Russian.....               | 119             | 95              | 102             | 446                | 362                | 94              | 59              | 71              |
| United States.....         | 253             | 274             | 307             | 282                | 232                | 218             | 181             | 194             |
| Other foreign.....         | 132             | 191             | 199             | 221                | 222                | 198             | 191             | 145             |
| By Conjugal State—         |                 |                 |                 |                    |                    |                 |                 |                 |
| Single.....                | 1,967           | 2,328           | 2,636           | 2,581              | 2,373              | 2,105           | 1,934           | 2,034           |
| Married.....               | 1,088           | 1,240           | 1,352           | 1,777              | 1,647              | 1,227           | 1,008           | 1,039           |
| Widowed.....               | 123             | 139             | 161             | 203                | 179                | 144             | 130             | 140             |
| Divorced.....              | 9               | 7               | 15              | 26                 | 21                 | 16              | 26              | 51              |
| By Sex—                    |                 |                 |                 |                    |                    |                 |                 |                 |
| Male.....                  | 3,149           | 3,670           | 4,116           | 4,261              | 3,907              | 3,512           | 3,068           | 3,232           |
| Female.....                | 38              | 44              | 48              | 326                | 313                | 40              | 30              | 32              |
| By Social Habits—          |                 |                 |                 |                    |                    |                 |                 |                 |
| Abstainers.....            | 611             | 872             | 1,076           | 1,682              | 1,560              | 999             | 884             | 873             |
| Temperate.....             | 2,033           | 2,338           | 2,639           | 2,544              | 2,311              | 2,191           | 1,898           | 2,037           |
| Intemperate.....           | 543             | 504             | 449             | 361                | 349                | 362             | 316             | 354             |
| By Religion—               |                 |                 |                 |                    |                    |                 |                 |                 |
| Anglican.....              | 546             | 618             | 678             | 603                | 547                | 488             | 447             | 471             |
| Baptist.....               | 158             | 169             | 173             | 168                | 169                | 172             | 136             | 129             |
| Buddhist.....              | 62              | 68              | 61              | 58                 | 34                 | 19              | 4               | 2               |
| Doukhorobor.....           | Nil             | Nil             | Nil             | 593                | 542                | 46              | 2               | 8               |
| Greek Catholic.....        | 54              | 69              | 84              | 54                 | 51                 | 50              | 57              | 63              |
| Jewish.....                | 62              | 66              | 89              | 80                 | 53                 | 72              | 53              | 55              |
| Lutheran.....              | 74              | 83              | 67              | 96                 | 90                 | 75              | 66              | 87              |
| Methodist.....             | —               | —               | 96 <sup>3</sup> | 82 <sup>3</sup>    | 73 <sup>3</sup>    | 58 <sup>3</sup> | 42 <sup>3</sup> | 34 <sup>3</sup> |
| Presbyterian.....          | 318             | 407             | 458             | 437                | 403                | 398             | 293             | 270             |
| Roman Catholic.....        | 1,561           | 1,810           | 2,070           | 2,008              | 1,842              | 1,800           | 1,646           | 1,658           |
| United Church.....         | 273             | 329             | 257             | 257                | 244                | 264             | 259             | 338             |
| Others.....                | 79              | 95              | 131             | 151                | 142                | 110             | 93              | 149             |
| Totals.....                | 3,187           | 3,714           | 4,164           | 4,587              | 4,220              | 3,552           | 3,098           | 3,264           |

<sup>1</sup> The unusually high figures for many items and the totals in 1933 and 1934 are due to the confinement of Doukhorobors in the special penitentiary on Piers Island, B.C. See p. 1034.<sup>2</sup> These persons returned themselves as Methodists in spite of the union with Presbyterians and Congregationalists to form the United Church of Canada in 1925.<sup>3</sup> All 'coloured'.

# CHAPTER XXVIII.—MISCELLANEOUS ADMINISTRATION.

## Section 1.—Public Lands.

Table 1, summarizes the land area of Canada by tenure. Items 3, 4, and 5 are obtained from Dominion Government sources and Items 1, 2, and 7 from Provincial Government sources. In the majority of cases the area of provincial lands (Item 6), as calculated by balancing the figures, agrees with the area as estimated by the provincial Departments concerned. Thus, any differences reported from year to year in the area of lands alienated or in process of alienation are compensated for by the adjustment of lands still remaining under the Crown in the right of the provinces concerned. The total land areas shown are the equivalents in thousands of acres of those given by provinces in square miles on p. 7 and pp. 60-61.

### 1.—Summary of Classification of Lands in Canada, by Tenure (circa) 1937.

NOTE.—The land area of Canada is shown classified by surface resources on p. 60.

| Tenure.  | P.E.I.       | N.S.          | N.B.          | Que.           | Ont.           |
|--|--------------|---------------|---------------|----------------|----------------|
|  | '000 acres.  | '000 acres.   | '000 acres.   | '000 acres.    | '000 acres.    |
| 1. Alienated, patented, granted, etc. <sup>1</sup> .....                                       | 1,301        | 11,026        | 10,494        | 24,686         | 25,819         |
| 2. In process of alienation.....   | Nil          | -             | 300           | 4,997          | -              |
| 3. Dominion lands other than National Parks and Indian Reserves.....                           | Nil          | 8             | 2             | 18             | 103            |
| 4. Dominion National Parks.....  | 5            | 293           | Nil           | Nil            | 7              |
| 5. Indian Reserves.....  | 2            | 20            | 38            | 194            | 1,021          |
| 6. Provincial lands, including leased lands and forest reserves, but not provincial parks..... | Nil          | 1,028         | 6,749         | 302,330        | 202,421        |
| 7. Provincial parks.....   | Nil          | Nil           | Nil           | 2,837          | 3,129          |
| <b>Totals, Land Area<sup>2</sup>.....</b>  | <b>1,398</b> | <b>13,275</b> | <b>17,583</b> | <b>335,062</b> | <b>232,500</b> |

| Tenure.  | Man.           | Sask.          | Alta.               | B.C.           | Yukon and N.W.T.     | Total for Canada.   |
|--|----------------|----------------|---------------------|----------------|----------------------|---------------------|
|  | '000 acres.    | '000 acres.    | '000 acres.         | '000 acres.    | '000 acres.          | '000 acres.         |
| 1. Alienated, patented, granted, etc. <sup>1</sup> ....  | 28,001         | 64,307         | 50,535              | 15,368         | 5                    | 231,632             |
| 2. In process of alienation.....   | 143            | 2,470          | 229                 | 5,254          | Nil                  | 13,393 <sup>3</sup> |
| 3. Dominion lands other than National Parks and Indian Reserves.....                           | 2              | 30             | 66                  | 103            | 934,354 <sup>4</sup> | 934,686             |
| 4. Dominion National Parks.....  | 735            | 1,196          | 13,436 <sup>4</sup> | 1,098          | 2,320 <sup>6</sup>   | 19,000              |
| 5. Indian Reserves.....  | 484            | 1,335          | 1,280               | 795            | 1                    | 5,170               |
| 6. Provincial lands, including leased lands and forest reserves, but not provincial parks..... | 111,258        | 82,616         | 93,684              | 202,118        | Nil                  | 1,003,104           |
| 7. Provincial parks.....   | Nil            | 350            | 2                   | 5,203          | Nil                  | 11,521              |
| <b>Totals, Land Area<sup>2</sup>.....</b>  | <b>140,623</b> | <b>152,304</b> | <b>159,233</b>      | <b>229,939</b> | <b>936,686</b>       | <b>2,218,596</b>    |

<sup>1</sup> This item includes lands in process of alienation where such are not reported under Item 2. <sup>2</sup> Estimated by the Hydrographic and Map Service, Department of Mines and Resources.

<sup>3</sup> For the provinces indicated only. <sup>4</sup> In Yukon and N.W.T. areas aggregating 380,542,080 acres have been set apart by Order in Council as game preserves and sanctuaries in which only native Indians and Eskimos may hunt, but have not been permanently dedicated to this purpose by Parliament and are not, therefore, regarded as parks. <sup>5</sup> Including the Wood-Buffer Park (which, though reserved by the Dominion, is not administered as a National Park) and the Tar Sands Reserve. <sup>6</sup> That portion of the Wood-Buffer Park in the Northwest Territories.



**Subsection 1.—Dominion Public Lands.\***

As stated on p. 1019 of the 1931 Year Book, the lands and other natural resources lying within the boundaries of the provinces of Manitoba, Saskatchewan, Alberta, and British Columbia, which had formerly been administered by the Dominion Government, were transferred in 1930 to the administration of the provinces concerned.

The public lands remaining under the administration of the Dominion Government now comprise lands in the Northwest Territories, including the Arctic archipelago and the islands in Hudson strait and bay; lands in Yukon Territory; National Parks (see pp. 61-64) and historic sites; Indian reserves (see p. 1050); Ordnance and Admiralty lands; and, in general, all lands held by the several departments of the Dominion Government for various purposes connected with Dominion administration.

The great bulk of the land areas under Dominion administration are those of the Yukon and Northwest Territories, amounting to about 936,680,000 acres or 42 p.c. of the land surface of Canada. In general the southern border of both the Yukon and Northwest Territories is 60° N. latitude. In Europe, Oslo, Stockholm, and Leningrad are near this line, and about three-fourths of Norway, two-thirds of Sweden, all of Finland and a large proportion of Russia are north of it. This northern part of the national domain is under the administration of the Lands, Parks, and Forests Branch of the Department of Mines and Resources. The Royal Canadian Mounted Police maintain law and order throughout the Yukon and Northwest Territories. More detailed particulars of the administration of each territory follow:—

**The Northwest Territories.**—The government of the Northwest Territories is vested in a Commissioner, a Deputy Commissioner, and a Council of five members appointed by the Governor General in Council, with Ottawa as the seat of government. The Territories are subdivided for administrative purposes into the provisional districts of Mackenzie, Keewatin, and Franklin. The District of Mackenzie is the most widely known and developed, trading posts and settlements being located all along the great stretch of inland waterways known as the Mackenzie system.

The administrative headquarters for the Mackenzie District is located at Fort Smith on the Slave river, immediately north of the Alberta provincial boundary. From this point there is uninterrupted navigation to the Arctic ocean, a distance of 1,300 miles, and along the Arctic coast as far east as King William island. When navigation conditions are favourable it is possible to effect inter-communication between the Western and Eastern Arctic through Bellot strait which separates Boothia peninsula, the most northerly tip of the Canadian mainland, from Somerset island.

The Administration provides for a medical and nursing service, assists the Anglican and Roman Catholic missions in providing educational and hospital facilities, and cares for the general welfare of the population of the Territories. The population of the Territories at the time of the 1931 Census was 9,723.

Areas totalling approximately 584,000 square miles comprising many of the finest hunting grounds of the natives have been set aside as preserves wherein only resident Indians, Eskimos, and half-breeds may hunt and trap game. With a view

\* Prepared under the direction of R. A. Gibson, Director, Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.

to conserving the game in the districts not included in the game preserves, licences to hunt and trap game may, under the regulations, be issued only to:—

1. Residents of the Northwest Territories as defined by these regulations who at the present time hold hunting and trapping licences and who continue to reside in the Northwest Territories.

2. The children of those who have had their domicile in the Northwest Territories for the past four years, provided such children continue to reside in the Northwest Territories.

The Wood-Buffalo Park in the vicinity of Fort Smith, which covers an area of 17,300 square miles (a portion of which is in Alberta), has been reserved specially for the protection of buffalo. The Thelon Game Sanctuary to the east of Great Slave lake, which was set aside primarily to aid in the conservation of musk-oxen, provides sanctuary for all species of game. Under the Northwest Game Act, musk-oxen may not be killed anywhere in the Northwest Territories.

In order to augment the supply of wild life available as a source of food and clothing for the natives, the Dominion Government, in 1935, established a herd of Alaskan reindeer on a reserve of approximately 6,600 square miles, immediately east of the Mackenzie delta. The herd has increased in numbers and is contributing to the well-being of the native population, certain of whom are being trained in the handling of the deer.

In view of the great increase in the use of aircraft for mail and general transportation, the Administration is undertaking the development of landing facilities throughout the Mackenzie District. A winter landing field has been provided at Fort Smith and others are in course of completion at Resolution, Providence, Simpson, and Norman. Floating docks, etc., have been constructed at several points for the use of seaplanes.

An excellent air-mail service is provided by the Post Office Department, while the Department of National Defence operates a system of radio stations linking up the chief settlements and mining centres of the Northwest Territories and the Yukon Territory with Edmonton, Alberta. Radio stations are in operation at Fort Smith, Resolution, Simpson, Norman, Aklavik, Tuktoyaktuk (seasonal), Herschel Island (seasonal), Port Radium, Rae, Yellowknife, Dawson, Mayo, Whitehorse, and Burwash Landing. Direction-finding and meteorological stations are operated by the Department of Transport at Chesterfield, Nottingham Island, Resolution Island, and Coppermine.

Exploratory work has been carried on throughout the Territories and much aerial surveying has been done particularly in the mineralized areas of Mackenzie District. Mineral prospectors are exploring new areas, the aeroplane being used as the chief means of transportation. The Precambrian Shield, which has proved so rich in valuable minerals in southerly Canada, is continued into the Territories—that portion lying between Great Slave and Great Bear lakes and Hudson bay—and valuable discoveries have been made in this area. The rich native silver and high-grade pitchblende ores discovered, during the past few years, near Great Bear lake are now under development. The oil wells near Norman on Mackenzie river have been in active operation since 1932, the bulk of the oil produced being used by mining interests operating at the eastern end of Great Bear lake. In recent years much prospecting has been carried out in the Great Slave Lake area where

discoveries of gold have been reported. Active development is now in progress at many points. The agricultural land of the Territories lies almost entirely in the extension of the central plain along the Mackenzie valley.

It is known that there are many possible water-power sites throughout the Territories and certain of them may be developed as a consequence of mining enterprises. Much of the Mackenzie valley carries a forest cover, which furnishes timber and fuel for local needs. Fishing, agriculture, and lumbering are engaged in to some extent, but the principal industry of the Territories is still the taking and exportation of furs, with mining rapidly increasing in importance. Many trading posts operate throughout the regions tributary to the Arctic coast, Hudson bay, and the great inland systems of waterways.

**Yukon.**—Yukon was created a separate Territory in June, 1898. Provision is made for a local Government composed of a chief executive classified as Controller, also an Elective Legislative Council with jurisdiction over local matters and composed of three members with a three-year tenure of office. The Controller administers the Government under instructions from the Governor General in Council or the Minister of Mines and Resources. The seat of government is at Dawson. The Territory has hospitals, schools, and other amenities of modern life, including wireless and telegraphic facilities. The population in 1931 was 4,230.

The usual route followed by travellers to Yukon Territory is by steamer from ports on the Pacific coast to Skagway, Alaska, from that point to Whitehorse by the White Pass and Yukon railway, and thence by river boat to Dawson.

The use of aircraft for transportation purposes is increasing and landing fields have been conditioned at Dawson, Mayo, Whitehorse, and Carcross. A temporary licence has been issued for the field at Whitehorse which is becoming important through its being on the main route for international traffic. Some work has been done on emergency fields at Selkirk, Carmacks, and McQuesten.

Yukon has produced over \$200,000,000 worth of gold since the Klondike rush, but the old placer claims, operated with cradle, pick, and shovel, have given place to consolidated holdings worked with hydraulic dredges and other modern machinery. The development of the silver-lead ores of the Mayo district has been one of the major factors in the growth of lode-mining enterprises. Copper, tungsten, and coal are also found in the Yukon Territory. There is a hydro-electric installation of 13,200 h.p. in Yukon, which is used to supply electric energy for placer-mining operations and for the city of Dawson.

Although fishing, agriculture (including fur-farming), and some lumbering are carried on as auxiliary industries, the future of Yukon is inevitably bound up with mining development and the fur trade.

#### Subsection 2.—Provincial Public Lands.

In the Maritime Provinces, in Quebec, Ontario, and British Columbia (except the Railway Belt and the Peace River Block) the public lands have been administered by the Provincial Governments since Confederation. Owing to the transfer of the natural resources to the Prairie Provinces and British Columbia, as outlined

in Chapter XXVII, p. 1019 of the 1931 Year Book, public lands in all provinces are now under provincial administration. In Prince Edward Island, all the land is alienated and there are no provincial public lands.

Those interested in securing information regarding provincial public lands are referred to the following officials of the respective provinces: Minister of Lands and Forests, Halifax, N.S.; Deputy Minister of Lands and Mines, Fredericton, N.B.; Deputy Minister of Lands and Forests, Quebec, Que.; Deputy Minister of Lands and Forests, Toronto, Ont.; Director of Lands, Department of Mines and Natural Resources, Winnipeg, Man.; Director of Lands, Department of Natural Resources, Regina, Sask.; Director of Lands, Department of Lands and Mines, Edmonton, Alta.; Deputy Minister of Lands, Victoria, B.C.

## Section 2.—National Defence.

Before the outbreak of the Great War, the Canadian Militia consisted of a Permanent Force, which on Mar. 31, 1914, numbered 3,000 officers, non-commissioned officers, and men, and an Active Militia, which at the same date numbered 5,615 officers and 68,991 non-commissioned officers and men. After the outbreak of war on Aug. 4, 1914, successive contingents of troops of all arms were recruited, equipped, trained, and dispatched by the Dominion Government to England for active service. When hostilities ceased on Nov. 11, 1918, there had been sent overseas, for active service in the Canadian Expeditionary Force, about 418,000 officers, non-commissioned officers, and men.\* In addition to these, several thousand Canadians served with the Royal Air Force.

**Organization.**—Prior to 1922, three departments of the Canadian Government were concerned with the defence of Canada, *viz.*, the Department of Militia and Defence, the Department of the Naval Service, and the Air Board.

During the session of 1922, the National Defence Act was passed, consolidating the Department of Militia and Defence, the Department of the Naval Service, and the Air Board into the Department of National Defence. This Act became effective by proclamation on Jan. 1, 1923. Under it, there is a Minister of National Defence and a Deputy Minister of National Defence. To advise the Minister, a Defence Council has been constituted by Order in Council, consisting of a President (the Minister), a Vice-President (the Deputy Minister), and the following members: the Chief of the General Staff, the Chief of the Naval Staff, and the Senior Air Officer, Royal Canadian Air Force. The Adjutant-General, the Quartermaster-General, the Master-General of the Ordnance, and the Judge Advocate-General, are associate members. There is also a Secretary of the Council.

### Subsection 1.—The Naval Service.

The Naval Service of Canada was established by the Naval Service Act, 1910 (9-10 Edw. VII, c. 43), the main provisions of which were described in the 1910 Year Book, pp. xxvi-xxix.

\* For the detailed expenditures of the Dominion Government on account of war appropriations in the fiscal years 1915-21, see the Canada Year Book, 1921, p. 798.

The Royal Canadian Navy and its Reserve Forces are under the direction of the Chief of the Naval Staff, who is a member of the Defence Council. The Service consists of:—

1. Royal Canadian Navy (permanent).
2. Royal Canadian Naval Reserve (non-permanent).
3. Royal Canadian Naval Volunteer Reserve (non-permanent).

Administrative and operational staff for all three Forces is provided from the Royal Canadian Navy.

**The Royal Canadian Navy.**—The Royal Canadian Navy has an authorized complement of 137 officers and 1,582 ratings. A large majority of the men of the R.C.N. are serving under 7-year engagements. A small proportion consists of specialist gunnery, torpedo, and engine-room ratings, lent from the Royal Navy. (On Dec. 31, 1937, there were 3 Royal Navy officers and 8 Royal Navy ratings on loan to the Royal Canadian Navy.)

A proportion of the officers of the Royal Canadian Navy serve periodically in ships of the Royal Navy, to acquire experience in capital ships, cruisers, etc., and training courses are arranged for selected officers at the instructional schools of the Royal Navy to qualify in war staff, gunnery, torpedo, wireless, and other duties. Courses for selected men in the gunnery, torpedo, wireless telegraphy, and mechanical training schools of the Royal Navy are similarly arranged.

The ships of the Royal Canadian Navy are:—

- H.M.C.S. *Saguenay* (destroyer—in commission).
- H.M.C.S. *Skeena* (destroyer—in commission).
- H.M.C.S. *St. Laurent* (destroyer—in commission).
- H.M.C.S. *Fraser* (destroyer—in commission).
- H.M.C.S. *Armentières* (minesweeper—in commission).
- H.M.C.S. *Venture* (training schooner—in commission).

Four new minesweepers are under construction. These ships will be completed and commissioned under the names of H.M.C. Ships *Gaspé*, *Fundy*, *Nootka*, and *Comox*.

Naval training establishments comprising: naval barracks; gunnery drill sheds, with all modern appliances for teaching gun-laying, sight-setting, etc.; torpedo and electrical schools; parade grounds, and other equipment are maintained at Halifax and Esquimalt. Naval dockyards, with workshops, etc., for refitting and supplying necessary stores to H.M.C. ships, are also maintained at Halifax and Esquimalt.

**Royal Canadian Naval Reserve.**—The establishment of the Royal Canadian Naval Reserve is 70 officers and 430 men recruited from among sea-faring personnel. Officers have been appointed to act as registrars at Halifax, Charlottetown, Quebec, Montreal, and Vancouver.

Officers and men of the Royal Canadian Naval Reserve attend naval training at Halifax and Esquimalt for 42 days for the first year of enrolment and for 14 days annually or biennially thereafter. They are permitted to volunteer for service afloat up to a maximum of six months during each period of enrolment. The period of enrolment in the Royal Canadian Naval Reserve is five years.

**Royal Canadian Naval Volunteer Reserve.**—The establishment of the Royal Canadian Naval Volunteer Reserve is 87 List "A" officers, 20 List "B" officers, 19 instructors, and 1,096 ratings, distributed as follows: Halifax, Saint John, Charlottetown, Quebec, Montreal, Ottawa, Toronto, Hamilton, Port Arthur, Winnipeg, Saskatoon, Regina, Edmonton, Calgary, Vancouver, Prince Rupert. An additional Division is in process of establishment.

Each Division is under the immediate command of an officer of the R.C.N.V.R., appointed as commanding officer. The commanding officer is assisted by other commissioned officers of the Force.

A petty officer instructor (a highly qualified ex-petty officer of the Royal Navy or of the Royal Canadian Navy) is employed at each Division to give instruction to men of the Division in gunnery, torpedo practice, seamanship, and other naval subjects.

Each List "A" officer and man of the R.C.N.V.R. performs annually a minimum of 30 drills, of a duration of not less than one hour each, at Division headquarters. In actual practice 40 to 50 drills have been performed annually by each member of the R.C.N.V.R. Officers and men also attend from two to three weeks naval training annually at the naval bases at Halifax or Esquimalt, or at sea in H.M.C. or H.M. ships.

Officers and men who can obtain the necessary leave of absence are permitted to perform a maximum of four months voluntary service during each period of enrolment, and a large number have availed themselves of this opportunity of gaining extended naval experience under sea-going conditions. The period of enrolment and of re-enrolment in the R.C.N.V.R. is three years.

### Subsection 2.—Military Forces.

The Militia of Canada is constituted by the Militia Act. The Active Militia is divided into the Permanent and the Non-Permanent Militia.

**Permanent Active Militia.**—The Permanent Force consists of the following units:—

**CAVALRY.**—The Royal Canadian Dragoons; Lord Strathcona's Horse (Royal Canadians).  
**ARTILLERY.**—The Royal Canadian Horse Artillery Brigade ("A", "B" and "C" Batteries); Royal Canadian Artillery (Nos. 1, 2 and 5 Heavy Batteries, No. 3 Medium Battery and No. 4 Anti-Aircraft Battery).  
**ENGINEERS.**—Royal Canadian Engineers (13 detachments and 1 field company).  
**SIGNALS.**—The Royal Canadian Corps of Signals.  
**INFANTRY.**—The Royal Canadian Regiment; Princess Patricia's Canadian Light Infantry; The Royal 22<sup>d</sup> Regiment (a French-Canadian regiment).  
**ARMY SERVICE CORPS.**—The Royal Canadian Army Service Corps (12 detachments and 1 depot).  
**MEDICAL CORPS.**—The Royal Canadian Army Medical Corps (12 detachments).  
**VETERINARY CORPS.**—The Royal Canadian Army Veterinary Corps (5 detachments).  
**ORDNANCE CORPS.**—The Royal Canadian Ordnance Corps (12 detachments).  
**PAY CORPS.**—The Royal Canadian Army Pay Corps (13 detachments).  
**MILITARY CLERKS.**—The Corps of Military Staff Clerks (12 detachments).

The strength of the Permanent Active Militia is limited by the Amending Act of 1919 to 10,000, but at present the limited establishment is less than 4,300.

**Schools of Instruction.**—The Canadian Small Arms School is the only school which is an independent unit of the Permanent Force, but at all stations of the Permanent Force in Canada Royal Schools of Instruction are conducted.

**Non-Permanent Active Militia.**—The Non-Permanent Active Militia consists of:—

**CAVALRY.**—

- 20 Regiments of Cavalry,  
Cavalry (Armoured Car), and  
Cavalry (Mechanized).

**ARTILLERY.**—

- 108 Field Batteries.  
21 Medium Batteries.  
9 Heavy Batteries.  
4 Anti-Aircraft Batteries.  
1 Light Anti-Aircraft Battery.  
1 Survey Company.

**ENGINEERS.**—

- 1 Field Squadron.  
17 Field Companies.  
6 Field Park Companies.  
9 Army Troops Companies.  
1 Electrical and Mechanical Company.  
1 Workshop and Park Company.  
2 Anti-Aircraft Companies.  
2 Corps Field Survey Companies.  
2 Fortress Companies.

**SIGNALS.**—

- 7 Cavalry Signal Troops.  
2 Armoured Car Regiment Signal Troops.  
4 Divisional Signals.  
7 District Signals.  
2 Corps Signals.  
10 Cables, Wireless, etc., Sections.  
2 Fortress Signal Companies.

**CANADIAN OFFICERS' TRAINING CORPS.**—

- 22 Contingents.

**INFANTRY.**—

- 50 Battalions (rifle).  
26 Battalions (machine-gun).  
6 Battalions (tank).

**ARMY SERVICE CORPS.**—

- 1 Cavalry Divisional R.C.A.S.C.  
6 Divisional R.C.A.S.C.  
2 Corps Troops R.C.A.S.C.  
2 Corps Ammunition Parks.  
2 Pontoon Bridge Parks.  
1 Reserve Mechanical Transport Company.  
1 Advance Horse Transport Depot.  
2 Railhead Supply Detachments.  
1 Mechanical Transport Vehicle Reception Depot.  
2 Composite Companies.

**MEDICAL CORPS.**—

- 2 Cavalry Field Ambulances.  
22 Field Ambulances.  
1 Cavalry Field Hygiene Section.  
11 Field Hygiene Sections.  
6 Casualty Clearing Stations.

**DENTAL CORPS.**—

- General List.

**VETERINARY CORPS.**—

- 1 Veterinary Hospital.  
2 Cavalry Mobile Veterinary Sections.  
7 Mobile Veterinary Sections.  
1 Veterinary Evacuating Station.

**ORDNANCE CORPS.**—

- 6 Army Field Workshops.  
1 Ordnance Workshop Company.  
1 Ordnance Store Company.  
1 Anti-Aircraft Group Workshop.  
1 Ordnance Ammunition Company.  
1 Cavalry Divisional Ordnance Workshop.  
11 District Store Sections.

**POSTAL CORPS.**—

- 1 Base Post Office.  
11 Postal Units.

The total establishment of the Non-Permanent Militia is 7,006 officers and 79,551 other ranks, a total of 86,557, distributed as shown in the following table.

**2.—Permanent and Non-Permanent Active Militia in Canada, 1937.**

| Arm of Service.                                     | Permanent Active Militia. |            | Non-Permanent Active Militia. |              |
|---|---------------------------|------------|-------------------------------|--------------|
|   | Personnel.                | Horses.    | Personnel.                    | Horses.      |
| Staff and General List.....                         | 65                        | Nil        | Nil                           | Nil          |
| Cavalry.....  | 446                       | 329        | 7,319                         | 4,690        |
| Field Batteries of Artillery.....                   | 401                       | 17         | 11,639                        | Nil          |
| Medium Batteries of Artillery.....                  | 56                        | Nil        | 2,224                         | Nil          |
| Heavy Batteries of Artillery and Anti-Aircraft..... | 300                       | 2          | 1,702                         | Nil          |
| Engineers.....                                      | 286                       | Nil        | 4,609                         | 66           |
| Signals.....  | 416                       | Nil        | 4,297                         | 1,160        |
| Officers' Training Corps.....                       | Nil                       | Nil        | 4,777                         | Nil          |
| Infantry.....                                       | 1,005                     | 31         | 42,305                        | 57           |
| Army Service Corps.....                             | 285                       | Nil        | 1,521                         | 4            |
| Non-Combatants.....                                 | 974                       | Nil        | 6,074                         | 50           |
| <b>Totals.....</b>                                  | <b>4,234</b>              | <b>379</b> | <b>86,557</b>                 | <b>6,036</b> |

**Reserve Militia.**—In addition to the Active Militia, there is also the Reserve Militia—a framework designed to serve as a basis for contingent military organization. Drill and training are voluntary and entail no expense to the public.

The reserves of the Active Militia, as distinguished from the Reserve Militia mentioned above, comprise:—

- (a) The Reserve of Officers (general list).
- (b) Reserve Regimental Depots.
- (c) Corps Reserves and Corps Reserve Lists of the Non-Permanent Active Militia consisting of qualified officers who are permitted to withdraw from the training establishment of Corps of the Non-Permanent Active Militia.
- (d) Certain Reserve units of the R.C.A.M.C. (N.P.)—"General Hospitals" and "Motor Ambulance Convoys".

**Military Districts.**—For the command, training, and administration of the Canadian Militia, Canada is divided into 11 military districts, each under a District Officer Commanding, assisted by a district staff.

**Militia Appropriations.**—The Militia appropriations for the six fiscal years ended Mar. 31, 1934-39, are shown in Table 3.

### 3.—Money Voted by Parliament for the Militia, fiscal years ended Mar. 31, 1934-39.

| Item.                               | 1934.            | 1935.            | 1936.             | 1937.             | 1938.             | 1939.                |
|-------------------------------------|------------------|------------------|-------------------|-------------------|-------------------|----------------------|
|                                     | \$               | \$               | \$                | \$                | \$                | \$                   |
| Administration.....                 | 321,000          | 318,000          | 359,000           | 1                 | 1                 | 1                    |
| Cadet Services.....                 | 300,000          | 150,000          | 150,000           | 150,000           | 140,000           | 139,500              |
| Contingencies.....                  | 35,000           | 31,500           | 31,500            | 28,800            | 28,800            | 1                    |
| Engineer Service and Works.         | 297,500          | 297,500          | 700,150           | 949,100           | 3,067,450         | 2,483,500            |
| General Stores.....                 | 667,800          | 837,800          | 1,451,083         | 2,551,200         | 6,060,669         | 3,854,437            |
| Non-Permanent Active Militia.....   | 1,994,000        | 1,994,000        | 2,401,603         | 2,353,100         | 2,578,740         | 2,830,488            |
| Permanent Force.....                | 4,910,034        | 4,910,034        | 5,230,147         | 5,613,325         | 5,848,039         | 6,087,700            |
| Royal Military College.....         | 358,150          | 344,030          | 359,500           | 368,400           | 377,200           | 381,500              |
| Grants to Associations.....         | —                | —                | —                 | —                 | —                 | 103,450 <sup>1</sup> |
| <b>Totals.....</b>                  | <b>8,883,484</b> | <b>8,882,864</b> | <b>10,482,933</b> | <b>12,013,925</b> | <b>13,690,938</b> | <b>15,880,635</b>    |
| Civil Government <sup>2</sup> ..... | 476,378          | 451,738          | 478,033           | 463,925           | 465,347           | 1                    |
| <b>Grand Totals.....</b>            | <b>9,359,862</b> | <b>9,334,602</b> | <b>11,161,016</b> | <b>12,482,851</b> | <b>14,156,275</b> | <b>15,880,635</b>    |

<sup>1</sup> Discontinued as a separate vote.  
ment of National Defence.

<sup>2</sup> Not shown separately in previous years.

<sup>3</sup> Depart-

### Subsection 3.—Air Force.

The Royal Canadian Air Force is comprised of the Permanent Active Air Force, the Non-Permanent Active Air Force, and a Reserve of Officers. The Royal Canadian Air Force administers and controls all military air operations and certain air operations for civil government departments. The duties of the Royal Canadian Air Force are as follows:—

- (a) To organize, train, and maintain an air force for the defence of Canada.
- (b) The conduct of limited flying operations (chiefly photography) for civil government departments.



Permanent Active Air Force Stations and units are located as follows:—

| Location.  | Duty.   |
|--|---|
| R.C.A.F. Headquarters, Ottawa, Ont.                      |   |
| No. 1 Aircraft Depot, R.C.A.F., Ottawa, Ont.             | Stores and repair.  |
| No. 2 Equipment Depot, R.C.A.F., Winnipeg, Man.          | Stores.   |
| R.C.A.F. Station Headquarters, Ottawa, Ont.              | } Test and experimental work and civil government air operations. |
| R.C.A.F. Photographic Establishment                      |   |
| No. 2 (Army Co-operation) Squadron                       |   |
| No. 3 (Bomber) Squadron                                  |   |
| No. 7 (General Purpose) Squadron                         |   |
| No. 8 (General Purpose) Squadron                         |   |
| R.C.A.F. Training Group:                                 |   |
| R.C.A.F. Station Headquarters, Camp Borden, Ont.         | }   |
| No. 2 Technical Training School                          |   |
| R.C.A.F. Station Headquarters, Trenton, Ont.             | } Training.   |
| No. 1 Technical Training School                          |   |
| School of Army Co-operation                              |   |
| Flying Training School                                   |   |
| Air Armament School                                      |   |
| Air Navigation and Seaplane School                       |   |
| Wireless School  |   |
| Equipment Training School                                |   |
| Administered by Station Headquarters, Trenton, Ont.      | }   |
| No. 1 (Fighter) Squadron                                 |   |
| No. 6 (Torpedo Bomber) Squadron                          |   |
| No. 5 (General Reconnaissance) Squadron, Dartmouth, N.S. |   |
| Western Air Command Headquarters, Vancouver, B.C.        | }   |
| R.C.A.F. Station Headquarters, Vancouver, B.C.           |   |
| No. 4 (General Reconnaissance) Squadron                  |   |
| No. 3 Repair Depot, R.C.A.F.                             |   |
| No. 111 P. F. Detachment, Vancouver, B.C.                |   |
| No. 118 P. F. Detachment, Calgary, Alta.                 | Service duties according to type of unit.                         |
| No. 11 (Technical) Detachment, Montreal, Que.            |   |
| No. 12 (Technical) Detachment, Hamilton, Ont.            |   |
| No. 110 P. F. Detachment, Toronto, Ont.                  |   |
| No. 112 P. F. Detachment, Winnipeg, Man.                 |   |
| No. 115 P. F. Detachment, Montreal, Que.                 |   |
| No. 118 P. F. Detachment, Montreal, Que.                 |   |
| No. 119 P. F. Detachment, Hamilton, Ont.                 |   |
| No. 120 P. F. Detachment, Regina, Sask.                  |   |
| No. 121 P. F. Detachment, Quebec, Que.                   |   |

Non-Permanent Active Air Force units are located as follows:—

- No. 110 (City of Toronto) (Army Co-operation) Squadron, Toronto, Ont.
- No. 111 (Coast Artillery Co-operation) Squadron, Vancouver, B. C. (Under Western Air Command Headquarters).
- No. 112 (Army Co-operation) Squadron, Winnipeg, Man.
- No. 113 (Fighter) Squadron, Calgary, Alta. (now in process of organization—Under Western Air Command Headquarters).
- No. 115 (Fighter) Squadron, Montreal, Que.
- No. 118 (Bomber) Squadron, Montreal, Que.
- No. 119 (Bomber) Squadron, Hamilton, Ont.
- No. 120 (Bomber) Squadron, Regina, Sask.
- No. 121 (Fighter) Squadron, Quebec, Que. (now in process of organization).

The strength of the Royal Canadian Air Force on Mar. 31, 1938, was:—

|                                | Officers. | Airmen. |
|--------------------------------|-----------|---------|
| Permanent Active Air Force     | 183       | 1,523   |
| Non-Permanent Active Air Force | 80        | 729     |
| Reserve of Officers            | 151       | -       |

#### Subsection 4.—The Royal Military College.

The Royal Military College of Canada was founded in 1876 by the Honourable Alexander Mackenzie, then Prime Minister of Canada. Since its foundation, 2,616 gentlemen cadets have been enrolled, and of this number 200 are now in attendance.

The maximum number of cadets who may be in residence at any one time is restricted by Order in Council to 200.

The Royal Military College has a very distinguished record in connection with the War. Of the 914 graduates and ex-cadets who served, 353 were granted commissions direct from the College, and 43 enlisted with a view to obtaining commissions; 156 ex-cadets were reported as killed in action, died of wounds, or missing. Ex-cadets of the College won the following honours and decorations: 1 Victoria Cross, 106 Distinguished Service Orders, 109 Military Crosses, 2 Distinguished Flying Crosses, 62 other British decorations, 42 foreign decorations. Three Canadian and one Australian Divisions were commanded by graduates of the College.

The establishment of the College, as stated in the Act of 1874 (37 Vict., c. 36) was "for the purpose of imparting a complete education in all branches of military tactics, fortifications, engineering, and general scientific knowledge in the subjects connected with and necessary to a thorough knowledge of the military profession, and for qualifying officers for command and staff appointments". In addition to the foregoing, the course of instruction is such as to afford a thorough practical and scientific training in civil engineering, surveying, physics, chemistry, English, and French. The strict discipline maintained at the College is a valuable feature, and the constant practice of gymnastics, riding, drills, and outdoor exercises of all kinds promotes the health and good physical condition of the cadets.

The College is situated one mile from Kingston on the St. Lawrence river where it emerges from lake Ontario. The buildings of the College proper occupy a beautiful peninsula of 60 acres, lying between the mouth of the Cataraqui river and Navy bay. Additional adjacent grounds, on which stands the historic Fort Henry, make up a total of about 500 acres which are at the disposal of the College for use as a training area. On the point of the peninsula is situated Fort Frederick, built in 1837 just before Kingston became the capital of the "Province of Canada", the fort forming part of the defences of Kingston at that time. The College is under the supervision of the Department of National Defence, and is inspected annually by an advisory board composed of leading Canadian citizens, both civil and military, which makes its reports and recommendations to the Minister of National Defence. The College is commanded by a commandant, who is assisted by a staff adjutant and a competent staff of civil and military professors and instructors.

A four-year course leads to a 'diploma with honours', a 'diploma' or a 'certificate of military qualification'. A number of commissions in the Canadian Permanent Force and the Royal Canadian Air Force, as well as commissions in the British Regular Forces, the Indian Army, and the Royal Air Force, are offered annually to graduates; and for cadets who desire to obtain commissions in the Royal Canadian Navy a limited number of naval cadetships are available each year to cadets who successfully complete the first two years of study, and who are not over 20 years of age on the first of September of the year in which they desire to enter the Navy. To those graduates joining the British Army, the privilege of one and one-half years seniority is granted. This has been arranged in order to equalize

the seniority of graduates of the Royal Military College of Canada with those of the Royal Military Academy, Woolwich, or the Royal Military College, Sandhurst, since the courses at the latter institutions are shorter than the Canadian.

The principal Canadian universities admit recommended graduates to the fourth year of their civil engineering courses and to the third year of other engineering courses; and some of the universities admit graduates to the third years of arts and science courses. Cadets in their graduating year may now take special courses in mechanical, electrical, and mining engineering which, subject to recommendation, may permit them to enter fourth year in these subjects at Universities.

The R.M.C. diploma is accepted by the Law Societies and Bar Associations of Nova Scotia, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia as the equivalent of a B.A. degree for admission to the study of law. The Dominion Association of Chartered Accountants likewise accepts R.M.C. graduates as registered students under the same conditions as university graduates.

Entrance to the College is on a competitive basis. Candidates are required to pass a rigid medical examination, and to have obtained junior matriculation or an acceptable equivalent. Applications for admission to the College should reach The Secretary, Department of National Defence, Ottawa, before May 31 of each year

### Section 3.—Department of Public Works.\*

Since Confederation and before, the constructing department of the Dominion Government has been known as the Department of Public Works. In 1879 the railways and canals were placed under the control of a new department, the building and maintenance of penitentiaries were transferred to the Department of Justice, the maintenance and construction of lighthouses to the Marine and Fisheries Department, and the smaller drill halls and armouries to the Department of National Defence. The work of the Department of Public Works is now divided into three principal branches, *viz.*, the Engineering Branch, the Architect's Branch, and the Telegraph Branch.

**Engineering.**—The Engineering Branch conducts the construction and repair of wharves, piers, breakwaters, dams, weirs, bank and beach protection works; the improvement of harbours and rivers by dredging; the construction, operation, and maintenance of dredging plant and the construction, operation, and maintenance of graving or dry docks. The construction and maintenance of interprovincial bridges and approaches thereto, also the construction, operation, and maintenance of bridges with movable spans on certain highways; hydrographical and topographical surveys which are required for the preparation of plans, reports, and estimates; test borings for the purpose of ascertaining the nature of foundations; the testing of cements and materials of construction; the licensing of international and interprovincial ferries, and the control of works constructed in or over navigable waters by authority of the Navigable Waters Protection Act (R.S.C., 1927, c. 140).

**Architecture.**—The Architect's Branch constructs and maintains Government buildings, post offices, customs houses, examining warehouses, quarantine stations, immigration and experimental farm buildings, military hospitals, and telegraph offices. It also constructs armouries and drill halls and leases office accommodation as required for the various Departments.

\* Revised by J. M. Somerville, Secretary, Department of Public Works.

**Telegraphs.**—The Telegraph Branch has control of the construction, operation, and maintenance of all Government-owned telegraph lines and cables. These lines are located in the provinces of Nova Scotia, New Brunswick, Quebec, Ontario, Saskatchewan, Alberta, British Columbia, and Yukon (see also p. 722).

**Graving Docks.**—The Department constructed five dry docks and is responsible for subsidies under the Dry Dock Subsidies Act, 1910 (9-10 Edw. VII, c. 17). A description of these docks is given in the Transportation Chapter, pp. 687-688.

**Expenditure and Revenue.**—Table 4 shows the expenditures and revenues of the Public Works Department of the Dominion Government, for the fiscal years 1932-37.

**4.—Expenditures and Revenues of the Public Works Department, fiscal years ended Mar. 31, 1932-37.**

| Item.  | 1932.<br>\$       | 1933.<br>\$       | 1934.<br>\$       | 1935.<br>\$       | 1936.<br>\$       | 1937.<br>\$       |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| EXPENDITURES (Exclusive of Civil Government Appropriations). |                   |                   |                   |                   |                   |                   |
| Harbour and river works...                                   | 5,000,984         | 3,044,495         | 2,408,303         | 4,801,170         | 6,748,662         | 5,807,294         |
| Dredging plant, etc.....                                     | 2,520,843         | 1,510,174         | 1,172,582         | 1,683,714         | 2,262,102         | 2,229,535         |
| Roads and bridges.....                                       | 342,330           | 138,598           | 53,776            | 103,795           | 494,456           | 521,198           |
| Public buildings.....  | 11,264,114        | 7,980,561         | 6,371,217         | 8,439,151         | 20,396,875        | 14,892,505        |
| Telegraphs.....  | 644,627           | 529,852           | 497,037           | 534,906           | 563,647           | 517,965           |
| Miscellaneous.....   | 235,177           | 131,090           | 115,318           | 112,712           | 99,782            | 191,975           |
| Unemployment relief works.                                   | 1,592,934         | 138,370           | 1                 | 1                 | 1                 | 1                 |
| <b>Totals.....</b>   | <b>21,601,009</b> | <b>13,473,149</b> | <b>10,618,233</b> | <b>15,675,457</b> | <b>30,565,524</b> | <b>24,151,472</b> |
| REVENUES.  |                   |                   |                   |                   |                   |                   |
| Graving docks.....   | 78,167            | 64,732            | 66,809            | 73,983            | 62,500            | 80,330            |
| Rents.....   | 179,958           | 103,070           | 88,304            | 76,839            | 110,062           | 96,731            |
| Telegraphs.....  | 188,248           | 170,984           | 162,562           | 172,017           | 174,691           | 191,511           |
| Casual revenue.....  | 464,470           | 37,031            | 27,287            | 101,674           | 138,550           | 157,919           |
| Ferries.....   | 2,869             | 2,740             | 2,723             | 2,706             | 3,022             | 2,847             |
| <b>Totals.....</b>   | <b>913,722</b>    | <b>378,557</b>    | <b>347,685</b>    | <b>427,219</b>    | <b>488,925</b>    | <b>529,338</b>    |

<sup>1</sup> No expenditure reported for this year under this head.

## Section 4.—The Indians and Eskimos of Canada.

### Subsection 1.—The Indians of Canada.\*

The Indians of Canada whose affairs are administered by the Department of Mines and Resources, Indian Affairs Branch, number about 112,510 (according to a departmental census taken in 1934), their numbers varying slightly from year to year. A small yearly increase is evident, and the popular notion that the race is disappearing is not in accordance with facts. Before they were subjected to the degenerating effects of European civilization and the devastating results of the many colonial

\* Revised by T. R. L. MacInnes, Secretary, Indian Affairs Branch, Department of Mines and Resources.

wars, the numbers of the Indians were undoubtedly larger, but any reliable information as to the aboriginal population during either the French or the early British régime is non-existent, and there is no adequate basis for a comparison between the past and present aboriginal populations. An interesting sketch of the progress of the Indians of Canada since Confederation will be found in the Report of the Department of Indian Affairs, 1927.

**Administration.\***—Reserves have been set aside for the various bands of Indians throughout the Dominion, and the Indians located thereon are under the supervision of the local agents of the Department. The activities of the Department as guardian of the Indians, include the control of Indian education and health, the development of agriculture and other pursuits among them, the administration of their lands, community funds, estates, and the general supervision of their welfare.

The local administration of the Indian bands on the reserves scattered throughout the Dominion is conducted through the Department's agencies, of which there are in all 116. The number of bands included in an agency varies from one to more than 30. The staff of an agency usually includes various officers in addition to the agent, such as medical officer, clerk, farm instructor, field matron, constable, stockman, etc., according to the special requirements of the agency in question. The work of the agencies is supervised by the Department's inspectors, each inspector having charge of a certain number of agencies. Expenditures upon destitute Indians are made by the Dominion Government, either from public funds or from tribal funds of the Indians themselves.

The Indian Act provides for the enfranchisement of Indians. When an Indian is enfranchised he ceases to be an Indian under the law and acquires the full status of citizenship. In the older provinces, where the Indians have been longer in contact with civilization, many are becoming enfranchised. Great discretion, however, is exercised by the Government in dealing with this problem, as Indians who become enfranchised lose the special protection attached to their wardship, so that it is necessary to guard against premature enfranchisement.

**Treaties.**—In the older eastern provinces, the history of the Indians has been one of slow development with that of the community. In western Ontario, the Prairie Provinces, and the Territories the situation has been different. There, the rapid spread of civilization made it necessary to take prompt and effective measures to protect the moral claims of the Indians, which are recognized by the Government. Accordingly, treaties were entered into with the Indians, whereby the latter ceded to the Crown their aboriginal title and interest in the country. In consideration of such cession the Crown agreed to set aside adequate reserves, make cash grants, provide per capita annuities, give assistance in agriculture, stock-raising, hunting, trapping, etc., as particular circumstances might require, provide education for the Indian children, and otherwise safeguard the Indians' interests. These treaties have been made from time to time as occasion arose and as new territories were opened up. No treaty has been made with the Indians of British Columbia, except in the Peace River Block, but their welfare has received no less attention from the Government on that account.

**Government Expenditure.**—On Mar. 31, 1937, the capital of the Indian Trust Fund, which a year earlier had amounted to \$13,877,863, had increased to \$13,997,644. The amounts expended from the Consolidated Revenue Fund were

\* For an outline of the early administration, see p. 937 of the 1932 Year Book.

as follows: voted by Parliament for the purposes of the Department, \$4,642,296; annuities by statute, \$245,063; and special supplementary, \$167,126.

**Statistics.**—Statistical tables of population, school attendance, income, and agricultural activities of the Indians in Canada follow. In Table 5 the populations for 1871-1931 are compiled from reports of the various censuses since Confederation, while the statistics and other information in the remaining tables are taken from the last Annual Report of the late Department of Indian Affairs. The Department takes a quinquennial census of Indians under its control, whereas census figures include all persons of Indian origin. The quinquennial census taken by the Department in 1934 showed a total of 112,510 as compared with 108,012 in 1929 and 104,894 in 1924, an increase of 7.3 p.c. in ten years. The details of the Census of 1934 are given in the Annual Report of the Department for that year. The figures of the decennial census include some thousands of persons of Indian race who are living off the reserves as ordinary citizens of Canada.

#### 5.—Indian Population of Canada at the Decennial Censuses of 1871-1931.

| Province or Territory.     | 1871. <sup>1</sup> | 1881. <sup>1</sup> | 1891. <sup>2</sup> | 1901.                      | 1911.          | 1921.              | 1931.          |
|----------------------------|--------------------|--------------------|--------------------|----------------------------|----------------|--------------------|----------------|
| Prince Edward Island.....  | 323                | 281                | 314                | 258                        | 248            | 235                | 233            |
| Nova Scotia.....           | 1,666              | 2,125              | 2,076              | 1,629                      | 1,915          | 2,048              | 2,191          |
| New Brunswick.....         | 1,403              | 1,401              | 1,521              | 1,465                      | 1,541          | 1,331              | 1,685          |
| Quebec.....                | 6,988              | 7,515              | 13,361             | 10,142                     | 9,993          | 11,566             | 12,312         |
| Ontario.....               | 12,978             | 15,325             | 17,915             | 24,674                     | 23,044         | 26,436             | 30,368         |
| British Columbia.....      | 23,000             | 25,661             | 34,202             | 28,949                     | 20,134         | 22,377             | 24,599         |
| Manitoba.....              |                    |                    |                    | 16,277                     | 7,876          | 13,869             | 15,417         |
| Saskatchewan.....          |                    |                    |                    |                            | 11,718         | 12,914             | 15,268         |
| Alberta.....               | 56,000             | 56,239             | 51,240             | 26,304                     | 11,630         | 14,557             | 15,258         |
| Yukon.....                 |                    |                    |                    | 3,322                      | 1,489          | 1,390              | 1,543          |
| Northwest Territories..... |                    |                    |                    | 14,921                     | 15,904         | 3,873 <sup>2</sup> | 4,046          |
| <b>Totals.....</b>         | <b>102,358</b>     | <b>108,547</b>     | <b>120,638</b>     | <b>127,941<sup>4</sup></b> | <b>105,492</b> | <b>110,596</b>     | <b>123,920</b> |

<sup>1</sup> Census figures in the organized provinces and estimates for the rest of Canada. <sup>2</sup> Racial origin not taken in 1891; the figures have been taken from the report of the Department of Indian Affairs of that year.

<sup>3</sup> The smaller Indian population of the Northwest Territories in 1921 is to be ascribed to the extension of the boundaries of Quebec, Ontario, and Manitoba in 1912. This also accounts for the increase in the 1921 Indian population of these provinces.

<sup>4</sup> Includes 34,481 'half-breeds'.

**Indian Education.**—The educational work of the Department is now very extensive. In the fiscal year ended Mar. 31, 1937, a total of 365 Indian schools were in operation, including 80 residential schools for Indians with an enrolment of 9,040, and 275 day schools for Indians with an enrolment of 9,027 Indian pupils, also 10 combined public and Indian schools, with 230 Indian pupils enrolled. The total enrolment in the Indian schools has increased from 12,799 in 1915-16 to 18,297 in 1936-37 and the average attendance from 8,080 to 13,966 or from 63.1 p.c. to 76.3 p.c. of the enrolment. Continuation and high school work is now being taught in several of the day and residential schools. The amount spent on Indian education in the fiscal year ended Mar. 31, 1937, was \$1,820,977.

**6.—Enrolment and Average Attendance of Pupils at Indian Schools, fiscal years ended Mar. 31, 1916-37.**

| Fiscal Year. | Residential Schools. |                     | Day Schools. |                     | All Schools. |             |                        |
|--------------|----------------------|---------------------|--------------|---------------------|--------------|-------------|------------------------|
|              | Enrolment.           | Average Attendance. | Enrolment.   | Average Attendance. | Enrolment.   | Attendance. |                        |
|              |                      |                     |              |                     |              | Number.     | Per cent of Enrolment. |
| 1916.....    | 4,661                | 4,029               | 8,138        | 4,051               | 12,799       | 8,080       | 63.1                   |
| 1917.....    | 4,520                | 4,149               | 7,658        | 4,136               | 12,178       | 8,285       | 68.0                   |
| 1918.....    | 4,692                | 4,081               | 7,721        | 3,797               | 12,413       | 7,878       | 63.5                   |
| 1919.....    | 4,640                | 4,014               | 7,312        | 3,587               | 11,952       | 7,601       | 63.6                   |
| 1920.....    | 4,719                | 4,133               | 7,477        | 3,516               | 12,196       | 7,649       | 62.7                   |
| 1921.....    | 4,783                | 4,143               | 7,775        | 3,931               | 12,558       | 8,074       | 64.3                   |
| 1922.....    | 5,031                | 4,360               | 7,990        | 4,308               | 13,021       | 8,668       | 66.6                   |
| 1923.....    | 5,347                | 4,695               | 8,376        | 4,411               | 13,723       | 9,106       | 66.4                   |
| 1924.....    | 5,673                | 4,856               | 8,199        | 4,332               | 13,872       | 9,188       | 66.2                   |
| 1925.....    | 6,031                | 5,278               | 8,191        | 4,601               | 14,222       | 9,879       | 69.5                   |
| 1926.....    | 6,327                | 5,658               | 8,455        | 4,940               | 14,782       | 10,598      | 71.7                   |
| 1927.....    | 6,641                | 5,881               | 8,069        | 4,660               | 14,710       | 10,541      | 71.7                   |
| 1928.....    | 6,795                | 6,043               | 8,223        | 4,823               | 15,018       | 10,866      | 72.4                   |
| 1929.....    | 7,075                | 6,282               | 8,272        | 4,976               | 15,347       | 11,258      | 73.4                   |
| 1930.....    | 7,302                | 6,476               | 8,441        | 5,103               | 15,743       | 11,579      | 73.6                   |
| 1931.....    | 7,831                | 6,917               | 8,584        | 5,314               | 16,415       | 12,231      | 74.5                   |
| 1932.....    | 8,213                | 7,400               | 8,950        | 5,707               | 17,163       | 13,107      | 76.4                   |
| 1933.....    | 8,465                | 7,613               | 8,900        | 5,874               | 17,425       | 13,487      | 77.4                   |
| 1934.....    | 8,596                | 7,760               | 8,852        | 5,592               | 17,448       | 13,352      | 76.5                   |
| 1935.....    | 8,709                | 7,882               | 8,851        | 5,560               | 17,560       | 13,442      | 76.5                   |
| 1936.....    | 8,906                | 8,061               | 9,127        | 5,788               | 18,033       | 13,840      | 76.8                   |
| 1937.....    | 9,040                | 8,176               | 9,257        | 5,790               | 18,297       | 13,966      | 76.3                   |

**Economic Data.**—Statistical information concerning the economic position of the Indians of Canada, including: acreages and value of Indian lands, by provinces; areas and yields of principal field crops of Indians, by provinces; numbers of farm live stock of Indians, with total value, by provinces; and sources and values of income of Indians, by provinces, will be found in Tables 7-10, which follow.

**7.—Acreages (Classified) and Value of Indian Lands, by Provinces, Mar. 31, 1937.**

| Province.                 | Total<br>under of<br>Reserves. | Area<br>under of<br>Wood. | Lands<br>Closed<br>but not<br>under<br>Cultivation. | Lands<br>under<br>Cultivation. | Value<br>of<br>Lands. |
|---------------------------|--------------------------------|---------------------------|---|--------------------------------|-----------------------|
|                           | acres.                         | acres.                    | acres.  | acres.                         | \$                    |
| Prince Edward Island..... | 1,668                          | 1,457                     | 23  | 188                            | 1,600                 |
| Nova Scotia.....          | 19,656                         | 16,415                    | 2,322   | 919                            | 83,110                |
| New Brunswick.....        | 37,752                         | 36,161                    | 1,227   | 364                            | 76,478                |
| Quebec.....               | 193,721                        | 165,022                   | 17,568  | 11,132                         | 1,419,035             |
| Ontario.....              | 1,021,334                      | 875,711                   | 93,554  | 52,069                         | 4,484,067             |
| Manitoba.....             | 481,162                        | 330,107                   | 142,558   | 8,497                          | 2,807,094             |
| Saskatchewan.....         | 1,272,665                      | 494,618                   | 739,462   | 38,585                         | 13,713,973            |
| Alberta.....              | 1,273,644                      | 401,925                   | 807,097   | 64,622                         | 16,283,278            |
| British Columbia.....     | 789,255                        | 461,471                   | 291,285   | 36,499                         | 13,599,201            |
| Yukon and N.W.T.....      | 1,734                          | 1,622                     | 45  | 66                             | 9,878                 |
| <b>Totals.....</b>        | <b>5,092,591</b>               | <b>2,784,509</b>          | <b>2,095,141</b>                                    | <b>212,941</b>                 | <b>52,478,314</b>     |

## 8.—Areas and Yields of Principal Field Crops of Indians, by Provinces, calendar year 1936.

| Province.                 | Wheat.        |                | Oats.         |                | Other Grains. |               |
|---------------------------|---------------|----------------|---------------|----------------|---------------|---------------|
|                           | acres.        | bu.            | acres.        | bu.            | acres.        | bu.           |
| Prince Edward Island..... | 2             | 25             | 40            | 680            | Nil           | -             |
| Nova Scotia.....          | Nil           | -              | 33            | 649            | 3             | 30            |
| New Brunswick.....        | 2             | 30             | 105           | 880            | 17            | 165           |
| Quebec.....               | 56            | 420            | 1,490         | 22,741         | 560           | 8,155         |
| Ontario.....              | 1,502         | 27,194         | 18,498        | 187,564        | 3,283         | 21,772        |
| Manitoba.....             | 1,583         | 12,794         | 1,737         | 23,855         | 1,414         | 12,044        |
| Saskatchewan.....         | 11,656        | 96,666         | 10,597        | 117,841        | 1,053         | 8,877         |
| Alberta.....              | 14,254        | 51,266         | 10,360        | 128,262        | 1,317         | 21,520        |
| British Columbia.....     | 4,152         | 103,076        | 3,496         | 72,313         | 367           | 8,518         |
| Yukon and N.W.T.....      | Nil           | -              | Nil           | -              | Nil           | -             |
| <b>Totals.....</b>        | <b>33,207</b> | <b>291,471</b> | <b>46,356</b> | <b>551,785</b> | <b>8,014</b>  | <b>81,090</b> |

| Province.                 | Peas, Beans, etc. |               | Potatoes.    |                | Other Roots. |               | Fodder,<br>Hay,<br>Cultivated,<br>Wild,<br>etc. |
|---------------------------|-------------------|---------------|--------------|----------------|--------------|---------------|---|
|                           | acres.            | bu.           | acres.       | bu.            | acres.       | bu.           | tons.   |
| Prince Edward Island..... | Nil               | -             | 9            | 725            | 1            | 125           | 47  |
| Nova Scotia.....          | 11                | 207           | 103          | 4,940          | 14           | 901           | 366   |
| New Brunswick.....        | 9                 | 154           | 65           | 2,910          | 13           | 1,050         | 167   |
| Quebec.....               | 128               | 989           | 621          | 18,094         | 73           | 2,085         | 5,584   |
| Ontario.....              | 867               | 11,882        | 1,857        | 60,299         | 617          | 17,913        | 25,574  |
| Manitoba.....             | 30                | 346           | 407          | 18,479         | 15           | 505           | 22,580  |
| Saskatchewan.....         | 1                 | 10            | 368          | 14,430         | 84           | 1,082         | 37,341  |
| Alberta.....              | 17                | 1,010         | 154          | 13,348         | 38           | 1,245         | 28,929  |
| British Columbia.....     | 524               | 14,213        | 2,015        | 178,109        | 571          | 48,400        | 28,467  |
| Yukon and N.W.T.....      | 1                 | 20            | 43           | 1,241          | 15           | 545           | 90  |
| <b>Totals.....</b>        | <b>1,588</b>      | <b>28,831</b> | <b>5,642</b> | <b>312,575</b> | <b>1,441</b> | <b>73,851</b> | <b>149,145</b>                                  |

## 9.—Numbers of Farm Live Stock of Indians, with Total Value, by Provinces, calendar year 1936.

| Province.                 | Horses.       | Cattle.       | Pigs,<br>Sheep,<br>etc. | Poultry.      | Value of<br>Live Stock<br>and Poultry. |
|---------------------------|---------------|---------------|-------------------------|---------------|--|
|                           | No.           | No.           | No.                     | No.           | \$                                     |
| Prince Edward Island..... | 6             | 19            | 2                       | 86            | 1,050                                  |
| Nova Scotia.....          | 44            | 177           | 100                     | 610           | 9,130                                  |
| New Brunswick.....        | 9             | 54            | 24                      | 415           | 4,672                                  |
| Quebec.....               | 610           | 2,425         | 770                     | 6,200         | 106,625                                |
| Ontario.....              | 2,841         | 5,270         | 4,013                   | 36,562        | 401,775                                |
| Manitoba.....             | 1,537         | 3,803         | 414                     | 6,215         | 204,975                                |
| Saskatchewan.....         | 4,658         | 7,333         | 771                     | 9,175         | 435,510                                |
| Alberta.....              | 9,851         | 11,162        | 397                     | 5,675         | 563,805                                |
| British Columbia.....     | 9,291         | 11,681        | 3,735                   | 23,792        | 750,936                                |
| Yukon and N.W.T.....      | 44            | 7             | 2                       | 30            | 4,280                                  |
| <b>Totals.....</b>        | <b>28,891</b> | <b>41,931</b> | <b>10,228</b>           | <b>88,760</b> | <b>2,482,808</b>                       |



## 10.—Values and Sources of Income of Indians, by Provinces, calendar year 1936.

| Province.                               | Value Received from—          |                             |          |                       |                   | Wages Earned. | Total Income of Indians. <sup>1</sup> |
|---|-------------------------------|-----------------------------|----------|-----------------------|-------------------|---------------|---------------------------------------|
|   | Farm Products, Including Hay. | Beef Sold or Used for Food. | Fishing. | Hunting and Trapping. | Other Industries. |               |                                       |
|   | \$                            | \$                          | \$       | \$                    | \$                | \$            | \$                                    |
| Prince Edward Island <sup>2</sup> ..... | —                             | —                           | —        | —                     | —                 | —             | —                                     |
| Nova Scotia.....                        | 6,930                         | 635                         | 1,205    | 2,195                 | 11,040            | 14,080        | 37,755                                |
| New Brunswick.....                      | 6,500                         | 350                         | 1,365    | 1,575                 | 2,930             | 11,475        | 26,884                                |
| Quebec.....                             | 149,324                       | 8,053                       | 3,750    | 75,706                | 25,460            | 128,816       | 428,619                               |
| Ontario.....                            | 337,759                       | 22,033                      | 227,105  | 326,389               | 139,335           | 376,645       | 1,829,862                             |
| Manitoba.....                           | 121,771                       | 20,141                      | 45,190   | 189,600               | 38,125            | 79,700        | 588,051                               |
| Saskatchewan.....                       | 209,105                       | 59,189                      | 33,775   | 97,591                | 34,205            | 42,730        | 683,706                               |
| Alberta.....                            | 204,611                       | 69,068                      | 10,737   | 81,260                | 55,174            | 30,982        | 663,699                               |
| British Columbia.....                   | 359,530                       | 81,505                      | 384,984  | 169,240               | 133,524           | 401,960       | 1,596,241                             |
| Yukon and N.W.T.....                    | 7,074                         | 408                         | 17,330   | 173,186               | 7,230             | 22,133        | 247,141                               |
| Totals <sup>1</sup> .....               | 1,463,264                     | 261,472                     | 725,441  | 1,116,742             | 445,023           | 1,108,521     | 6,102,050                             |

<sup>1</sup> Includes income received from timber and mining dues and from annuities earned as interest on Indian trust funds, but does not include money received from land rentals for which figures are not available by provinces. <sup>2</sup> No income was reported for Indians of Prince Edward Island in 1936. <sup>3</sup> See footnote 2.

## Subsection 2.—The Eskimos of Canada.\*

The Eskimos of Canada are found principally on the northern and Hudson Bay coasts of the mainland and on islands in the Arctic archipelago and in Hudson bay, although in the Baker Lake-Chesterfield Inlet area on the west side of Hudson bay there are bands of Eskimos who are essentially an inland people, and who subsist chiefly on caribou. The diet of the coast Eskimos is largely marine mammals and fish, varied at times by caribou obtained from the interior during the seasonal migrations of these animals. The skins of the caribou are used for winter clothing.

The wandering life of the Eskimos and the vast area over which they are scattered present great difficulties in ascertaining their exact numbers. The total for the entire Dominion, according to the latest returns, is about 6,000, located mainly in the Northwest Territories, with approximately 1,590 in Quebec, 85 in Yukon Territory, 62 in Manitoba, and 3 in Alberta.

The administrative care of Eskimos outside of the organized provinces devolves upon the Department of Mines and Resources which, by regulative measures (including the setting aside of game preserves where only natives may hunt and the establishment of a reindeer herd), conserves the natural resources necessary to their subsistence. Contact with the Eskimos is maintained through permanent stations in the Eastern, Central, and Western Arctic, (at a number of which medical officers are located), by patrols of the Royal Canadian Mounted Police, and by means of the annual Canadian Eastern Arctic Patrol by steamship.

\* Prepared under the direction of R. A. Gibson, Director, Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.

## Section 5.—Pensions and other Provision for War Veterans.\*

**Pensions Section.**—This Section is responsible for the administration of returned soldiers' affairs under the Department of Pensions and National Health Act, the War Veterans' Allowance Act, and the Veterans' Assistance Commission Act. It is also responsible, by direction of the Canadian Pension Commission, for certain administrative duties under the Pension Act and the Returned Soldiers' Insurance Act. The Representative of the Treasury is responsible for all payments under these Acts.

The Annual Report for the fiscal year ended Mar. 31, 1937, shows a decrease from the previous year in the number of ex-members of the Forces who received in-patient hospital treatment, the number being 11,742 as against 12,835 in 1935-36, 12,560 in 1934-35, 11,718 in 1933-34, and 13,342 in 1932-33. The Department maintains eight hospitals, situated in the following centres: Halifax, Saint John, Ste. Anne de Bellevue, Toronto, London, Winnipeg, Calgary, and Vancouver. A sheltered employment workshop is operated at Montreal and one shop by the Red Cross Society at Victoria.

One of the features of the activities of the Department is provision in a departmental institution for pensioners who through age or infirmity are unable to care for themselves. The number of such cases showed an increase during the year, the total on Mar. 31, 1937, being 299 as against 286 a year previously, 235 on Mar. 31, 1935, 250 on Mar. 31, 1934, 213 on Mar. 31, 1933, and 198 on Mar. 31, 1932. The issue of orthopaedic and surgical appliances has been maintained with a slight decrease. The number of pensioners who have been granted relief was 12,322 in 1936-37 as compared with 12,083 in 1935-36, 11,541 in 1934-35, 12,735 in 1933-34, 14,368 in 1932-33, 12,303 in 1931-32, and 8,811 in 1930-31. The expenditure on relief in 1936-37 was \$2,435,285; in 1935-36, \$2,365,579; in 1934-35, \$2,042,355; in 1933-34, \$1,912,563; in 1932-33, \$1,978,284; 1931-32, \$2,082,052; and 1930-31, \$907,010.

The provision under which the Department assumes responsibility in respect of accidents sustained by pensioners of 25 p.c. and upwards when engaged in industry has been continued. During the fiscal year under review, the number of claims was 260; in 1935-36, 279; in 1934-35, 222; in 1933-34, 180; in 1932-33, 179; and in 1931-32, 200. The expenditure was as follows; 1936-37, \$18,590; 1935-36, \$27,138; 1934-35, \$23,103; 1933-34, \$36,420; 1932-33, \$17,641; 1931-32, \$49,878. The expenditure is largely governed by the number of fatal and serious accidents.

The following is a summary statement of the manner in which the funds appropriated by Parliament have been dealt with, and also sets forth the costs of administration and the adjudication of pensions.

### NET PAYMENTS BY DEPARTMENT OF PENSIONS AND NATIONAL HEALTH FOR THE FISCAL YEAR ENDED MAR. 31, 1937.

#### PENSIONS BRANCH.

##### Net Cash Payments—

|                               |               |
|-------------------------------|---------------|
| European War pensions.....    | \$ 41,424,433 |
| War Veterans' allowances..... | 3,178,016     |
| Unemployment relief.....      | 2,435,285     |
| Sheltered employment.....     | 18,421        |
| Hospital allowances.....      | 1,083,919     |

Total Paid in Cash.....\$48,140,074

\* Revised by F. H. Brown, Assistant Secretary, Department of Pensions and National Health. See also the 1930 Year Book, pp. 982-983.

**NET PAYMENTS BY DEPARTMENT OF PENSIONS AND NATIONAL HEALTH FOR THE  
FISCAL YEAR ENDED MAR. 31, 1937—concluded.**

**PENSIONS BRANCH—concluded.**

|  |                      |
|--|----------------------|
| <i>Net Cost of Services—</i>   |                      |
| Hospital treatment.....  | \$ 2,732,088         |
| Employers' liability compensation.....   | 13,590               |
| Last Post Fund.....  | 60,000               |
| Canadian Legion.....   | 9,000                |
| Transportation, pensioners, patients, etc.....   | 84,945               |
| After-care of the blind and transportation of blinded ex-soldiers.....   | 6,311                |
| Indirect Payments to and on behalf of Ex-Members of the Forces<br>and their Dependants.....  | \$ 2,910,934         |
| <i>Other Expenditures and Operations, including Payment of Militia (Statute) and other<br/>Pensions, Trust Funds under Administration, Recoverable Expenditures,<br/>Returned Soldiers' Insurance, etc.—</i> |                      |
| Militia pensions (statute).....  | \$ 1,356,182         |
| North West Rebellion and civil flying.....   | 20,056               |
| Interest on trust funds.....   | 6,488                |
| War service gratuities.....  | 17,355               |
| Returned soldiers' insurance.....  | 852,549              |
| Pensions under administration.....   | 652,885              |
| Capital expenditures.....  | 27,934               |
| Recoverable expenditures.....  | 68,554               |
| Veterans' Assistance Commission.....   | 99,572               |
|  | <u>\$ 3,416,575</u>  |
| Total Expenditure apart from Cost of Administration.....   | \$ 54,468,183        |
| <i>Cost of Administration—</i>   |                      |
| <i>Departmental—</i>   |                      |
| Salaries.....  | \$ 910,206           |
| General.....   | 150,166              |
|  | <u>\$ 1,060,372</u>  |
| Canadian Pension Commission.....   | 517,012              |
| Veterans' Bureau.....  | 190,481              |
| Pension Appeal Court.....  | 66,233               |
| Comptroller of the Treasury.....   | 413,418              |
|  | <u>\$ 2,248,421</u>  |
| Total Expenditure.....   | <u>\$ 56,710,604</u> |

To arrive at the actual cost of administration, not only expenditure, but income and turnover of trust funds must be included. In addition, therefore, to the foregoing, the administration cost should be spread over the following:—

|  |                     |
|--|---------------------|
| Revenue and refunds.....   | \$ 877,836          |
| Casual revenue.....  | 144,374             |
| Deposits to War Service Gratuity Fund.....                                 | 451                 |
| Returned Soldiers' Insurance premiums and interest.....                    | 1,941,204           |
| Funds deposited to trust accounts, pensions under administration, etc..... | 961,538             |
|  | <u>\$ 3,925,403</u> |

**The Canadian Pension Commission.**—By c. 45 of the Statutes of 1933, the Board of Pension Commissioners for Canada and the Pension Tribunal ceased to exist; their duties were taken over by the Canadian Pension Commission, which was formed by the Act referred to, and the personnel of the Commission was increased from three to not less than eight nor more than twelve. Twelve members have been appointed.

The Commission is responsible for the adjudication and awarding of pensions in respect of disabilities connected with military service and the awarding of pensions to the dependants of those who die. It operates under the authority of the Pension Act. The following table shows the number of pensions in force at the end of the fiscal years 1918 to 1937, together with the annual liability. The large increase in disability pensioners from 1930 to 1933, inclusive, was primarily due to the reinstatement on pension of those who had commuted their pensions from 1920 onwards. This restoration was under the authority of an amendment to the Pension Act in 1930.

## 11.—Pensions in Force as at Mar. 31, 1918-37.

| Fiscal Year. | Dependants.         |            | Disabilities.       |            | Totals.             |            |
|--------------|---------------------|------------|---------------------|------------|---------------------|------------|
|              | Number of Pensions. | Liability. | Number of Pensions. | Liability. | Number of Pensions. | Liability. |
|              |                     | \$         |                     | \$         |                     | \$         |
| 1918.....    | 10,488              | 4,168,602  | 15,335              | 3,105,126  | 25,823              | 7,273,728  |
| 1919.....    | 16,753              | 9,503,056  | 42,932              | 7,470,729  | 59,685              | 17,003,785 |
| 1920.....    | 17,823              | 10,841,170 | 69,203              | 14,335,118 | 87,026              | 25,176,288 |
| 1921.....    | 16,209              | 12,354,141 | 61,452              | 18,230,607 | 70,661              | 31,184,838 |
| 1922.....    | 19,606              | 12,687,237 | 45,133              | 17,901,335 | 64,739              | 30,578,772 |
| 1923.....    | 19,704              | 12,279,621 | 43,293              | 18,142,145 | 63,057              | 30,421,766 |
| 1924.....    | 19,971              | 12,037,843 | 43,300              | 18,787,206 | 63,271              | 30,825,049 |
| 1925.....    | 20,015              | 11,804,825 | 44,508              | 19,816,380 | 64,613              | 31,621,205 |
| 1926.....    | 20,005              | 11,608,530 | 46,385              | 21,456,941 | 66,390              | 33,065,471 |
| 1927.....    | 19,999              | 11,419,276 | 48,027              | 22,811,373 | 68,026              | 34,230,649 |
| 1928.....    | 19,975              | 11,209,351 | 50,635              | 24,374,502 | 70,610              | 35,583,853 |
| 1929.....    | 20,002              | 11,000,158 | 54,620              | 26,095,150 | 74,622              | 37,185,308 |
| 1930.....    | 19,644              | 10,742,518 | 56,996              | 27,069,922 | 76,640              | 37,802,510 |
| 1931.....    | 19,678              | 10,355,518 | 66,669              | 29,226,208 | 86,345              | 40,211,726 |
| 1932.....    | 19,308              | 10,859,806 | 75,878              | 30,998,571 | 95,186              | 41,858,377 |
| 1933.....    | 18,745              | 10,624,775 | 77,967              | 31,124,543 | 96,712              | 41,749,318 |
| 1934.....    | 18,236              | 10,399,971 | 77,855              | 30,453,454 | 96,091              | 40,793,425 |
| 1935.....    | 18,241              | 10,372,607 | 78,404              | 30,406,414 | 96,645              | 40,779,021 |
| 1936.....    | 18,175              | 10,381,121 | 79,124              | 30,473,353 | 97,299              | 40,854,474 |
| 1937.....    | 18,186              | 10,417,158 | 79,789              | 30,365,805 | 97,975              | 40,783,023 |

The number of medical examinations for pension purposes carried out during the fiscal year was 24,909, being a decrease of 799 as compared with the previous year.

## STATEMENT SHOWING THE TOTAL NUMBERS OF PERSONS IN RECEIPT OF BENEFITS UNDER THE PENSION ACT AS AT MAR. 31, 1936 AND 1937.

|   | 1936.   | 1937.   |
|---|---------|---------|
| Disability pensioners.....  | 79,124  | 79,789  |
| Disability pensioners' wives.....   | 57,371  | 57,439  |
| Disability pensioners' children.....  | 95,052  | 88,543  |
| Disability pensioners' other relatives.....                                   | 1,503   | 1,411   |
| Disability pensioners (housekeepers, Sections 22-9 and 77B, Pension Act)..... | 155     | 412     |
|   | 233,205 | 227,504 |
| Dependent pensioners.....   | 18,175  | 18,186  |
| Dependent pensioners' children.....   | 3,819   | 3,075   |
| Other relatives in addition to main dependants.....                           | 1,547   | 1,507   |
|   | 23,541  | 23,368  |

## SUPPLEMENTARY PENSIONS IN EFFECT.

|   |         |  |         |
|---|---------|--|---------|
| <i>Disability—</i>  |         |  |         |
| Militia Pension Act (Sections 48 and 49, Pension Act)....                                 | 22      |  | 22      |
| Supplementary to awards paid by the United Kingdom (Sections 45 and 47, Pension Act)..... | 261     |  | 257     |
| R.N.W.M. Police Supplementary (Sec. 48, Pension Act).....                                 | 3       |  | 2       |
|   | 286     |  | 281     |
| <i>Dependent—</i>   |         |  |         |
| Militia Pension Act (Sections 48 and 49, Pension Act)....                                 | 6       |  | 6       |
| Supplementary to awards paid by the United Kingdom (Sections 46 and 47, Pension Act)..... | 48      |  | 50      |
| Supplementary to awards paid by Belgium (Section 46, Pension Act).....                    | 1       |  | 1       |
| Supplementary to awards paid by France (Section 46, Pension Act).....                     | 31      |  | 31      |
| Supplementary to awards paid by Italy (Section 46, Pension Act).....                      | 3       |  | 4       |
|   | 89      |  | 92      |
| Grand Totals.....   | 257,121 |  | 251,335 |

Rates of pensions for all ranks will be found in tables on pp. 960-962 of the 1925 Year Book, to which the reader is referred.

**Pension Appeal Court.**—This Court continues to function and the following is a summary of decisions rendered during the year ended Mar. 31, 1937:—

**DECISIONS RENDERED ON APPEALS.**

|  |       |              |
|--|-------|--------------|
| By applicants from Pension Tribunal decisions—                   |       |              |
| Allowed.....   | Nil   |              |
| Disallowed.....  | 122   | 122          |
| By applicants from decisions of the Canadian Pension Commission— |       |              |
| Allowed.....   | 9     |              |
| Disallowed.....  | 105   |              |
| Remitted.....  | 2     | 116          |
| By applicants from decisions of Quorums of the Commission—       |       |              |
| Allowed.....   | 13    |              |
| Disallowed.....  | 2,172 |              |
| Remitted.....  | 17    | 2,202        |
| By the Crown from decisions of Quorums of the Commission—        |       |              |
| Allowed.....   | 24    |              |
| Disallowed.....  | 34    |              |
| Remitted.....  | 27    | 85           |
|  |       | <u>2,525</u> |

**DECISIONS RENDERED ON APPLICATIONS.**

|  |     |            |
|--|-----|------------|
| That leave be granted to the Canadian Pension Commission to entertain a new application—                             |     |            |
| Allowed.....   | 72  |            |
| Disallowed.....  | 181 | 253        |
| For leave to renew before the Court applications for Compassionate Pension or Allowance under Section 21 of the Act— |     |            |
| Allowed.....   | 2   |            |
| Disallowed.....  | 17  | 19         |
| For Compassionate Pension or Allowance under Section 21 of the Act—  |     |            |
| Allowed.....   | 1   |            |
| Disallowed.....  | 1   | 2          |
|  |     | <u>274</u> |

**Veterans' Bureau.**—Pursuant to legislation passed in 1930, a Veterans' Bureau was organized as a branch of the Department and came into active operation on Oct. 1, 1930. The duties of the Bureau are set forth on p. 945 of the Canada Year Book, 1932. Briefly stated, the Bureau was created and is operated to assist applicants for pension in the preparation and presentation of their cases. There is a Chief Pensions Advocate with his staff at Ottawa, and Pensions Advocates have their offices in all the principal cities of Canada.

**War Veterans' Allowances.**—A synopsis of the War Veterans' Allowance Act, which came into force on Sept. 1, 1930, appears on p. 946 of the Canada Year Book, 1932. The following statistics show the activities of the War Veterans' Allowance Board for the fiscal years ended Mar. 31, 1936 and 1937.

**NUMBERS OF RECIPIENTS AND ANNUAL LIABILITY.**

| Item.  | 1936.            |                   | 1937.            |                   |
|--|------------------|-------------------|------------------|-------------------|
|  | Number of Cases. | Annual Liability. | Number of Cases. | Annual Liability. |
|  |                  | \$                |                  | \$                |
| Veterans' allowance payments in force at beginnings of fiscal years..... | 7,186            | 2,243,475         | 8,320            | 2,780,271         |
| Awards during fiscal years.....  | 2,107            | 652,780           | 3,024            | 935,677           |
| Increases due to change in rates.....                                    | —                | 29,040            | —                | 29,529            |
| Reinstatements.....  | 158              | 45,254            | 173              | 49,395            |
| Totals.....  | 9,451            | 2,973,549         | 12,017           | 3,794,872         |
| Cancellations, on account of death, etc.....                             | 631              | 193,278           | 711              | 211,493           |
| Payments in force, Mar. 31, 1936, and Mar. 31, 1937....                  | 8,820            | 2,780,271         | 11,306           | 3,583,379         |

ANALYSIS OF AWARDS AND REINSTATEMENTS MADE FROM SEPT. 1, 1930, TO  
MAR. 31, 1937.

| Item.   | Over 60. | Under 60. | Total. |
|---|----------|-----------|--------|
| Allowances approved and reinstated from Sept. 1, 1930, to Mar. 31, 1936.....              | 6,864    | 4,893     | 11,757 |
| Awards Apr. 1, 1936, to Mar. 31, 1937.....  | 1,340    | 1,684     | 3,024  |
| Reinstatements, Apr. 1, 1936, to Mar. 31, 1937.....                                       | 87       | 86        | 173    |
| Total awards and reinstatements to Mar. 31, 1937.....                                     | 8,291    | 6,663     | 14,954 |
| Cancellations for all reasons, by deaths, etc., from Sept. 1, 1930, to Mar. 31, 1937..... | -        | -         | 3,648  |
| Total number of veterans in receipt of allowances at Mar. 31, 1937.....                   | -        | -         | 11,306 |

**Returned Soldiers' Insurance.\***—The Returned Soldiers' Insurance Act is under the jurisdiction of the Canadian Pension Commission as agent for the Minister of Finance. Collections are made through the Department and payments by the Representative of the Treasury. After several extensions, the date to which applications could be received expired on Aug. 31, 1933. The following statement shows the operations under this Act during the fiscal years ended Mar. 31, 1935-38.

|  | 1935.        | 1936.        | 1937.        | 1938.        |
|--|--------------|--------------|--------------|--------------|
| Applications received.....                                   | Nil          | Nil          | Nil          | Nil          |
| Applications accepted.....                                   | 4            | Nil          | Nil          | Nil          |
| Applications rejected.....                                   | 4            | Nil          | Nil          | Nil          |
| Numbers of policies issued.....                              | 4            | Nil          | Nil          | Nil          |
| Numbers of policies reinstated.....                          | 1,967        | 1,557        | 444          | 1,051        |
| Numbers of policies surrendered for cash.....                | 844          | 604          | 583          | 441          |
| Numbers of policies in force.....                            | 26,933       | 25,845       | 24,501       | 23,880       |
| Amounts of insurance.....                                    | \$57,903,583 | \$55,326,246 | \$52,802,084 | \$50,077,796 |
| Amounts of premium income.....                               | \$ 1,498,467 | \$ 1,410,220 | \$ 1,327,149 | \$ 1,250,510 |
| Expenditures.....  | \$ 844,241   | \$ 778,317   | \$ 652,548   | \$ 843,813   |
| Numbers of death claims from commencement of operations..... | 3,500        | 3,776        | 4,085        | 4,351        |
| Amounts of death claims.....                                 | \$ 8,957,368 | \$ 9,514,848 | \$ 1,663,031 | \$ 531,019   |
| Balances on hand.....  | \$13,487,884 | \$14,676,572 | \$15,765,227 | \$16,826,686 |

## Section 6.—Soldier Settlement of Canada.†

At the end of the calendar year 1937 the Soldier Settlement of Canada had 19,871 farm properties under administration, representing a net investment of \$49,690,377. Under the Soldier Settlement Act of 1919, 25,014 soldier settlers were established on the land with loans. On Dec. 31, 1937, there were 9,683 soldier settlers, 5,811 civilian settlers, and 1,778 settlers under the British Family Scheme. There were 2,599 farms on hand of which 1,882 were leased; 3,559 settlers had repaid their loans in full in cash; 1,977 properties had been transferred to municipalities and provinces under Sec. 21A of the Soldier Settlement Act.

Under the 3,000 British Family Scheme 3,346 families came forward for settlement. Of these 1,740 had withdrawn as at Dec. 31, 1937, 21 had repaid their loans, leaving 1,585 families still operating their farms. Under the New Brunswick Family Settlement Agreement, 359 families came forward; of these 166 had withdrawn, and 193 remained on the land.

\* Revised by D. S. Drew, Chief, Insurance Division, Department of Pensions and National Health.

† Revised by F. C. Blair, Director, Soldier Settlement of Canada.

The following numbers of settlers had applied for the benefits of the Farmers' Creditors Arrangement Act; 950 soldier settlers, 562 civilian settlers, 527 British Family settlers. Of this number 534 cases of soldier settlers had been disposed of, involving indebtedness of \$1,911,508 and a reduction of \$562,765; civilians, 370 cases disposed of, debt \$1,309,763, reduction \$391,620; British Family settlers, 285 cases disposed of, indebtedness \$1,195,159, reduction \$443,214.

The supervision staff of the Department have made land appraisals and reported on the application of settlers (other than those under the Soldier Settlement of Canada) under the Farmers' Creditors Arrangement Act. To Dec. 31, 1937, 7,573 land appraisals and reports had been made in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, and the Maritime Provinces.

Other investigational services in the calendar year 1937 were: 844 investigations for the Department of Mines and Resources; 4,014 investigations in rural districts with respect to applications under the War Veterans' Allowance Act of 1930; 3,057 investigations for the Department of Pensions and National Health and the Canadian Pension Commission with respect to applications for relief allowances and special investigations of pension cases in rural districts.

### Section 7.—Department of the Secretary of State.\*

The Department of the Secretary of State was constituted in its present form in 1873, through the merging of the previously-existing offices of the Secretaries of State for Canada and for the provinces. The Secretary of State is the official mouthpiece of the Government as well as the medium of communication between the Dominion and Provincial Governments, all correspondence between the Governments being conducted by him with the Lieutenant-Governors. He is also the custodian of the Great Seal of Canada and the Privy Seal as well as the channel by which the general public may approach the Crown.

The Secretary of State is also the Registrar General, registering all proclamations, commissions, licences, warrants, writs, and other instruments issued under the Great Seal and the Privy Seal. He is further charged with the administration of the Boards of Trade Act, the Companies Act, the Canada Temperance Act, the Copyright Act, the Naturalization Act, the Patent Act, the Trade Unions Act, the Ticket of Leave Act, the Unfair Competition Act, and with the collection and tabling of parliamentary returns. Statistics regarding patents and copyrights appear under Chapter XVII at pp. 611-613. The following information on other subjects has been secured in the course of administration.

**Charters of Incorporation.**—The number of companies incorporated under the Companies Act and amending Acts during the fiscal year ended Mar. 31, 1937, was 410 with a total capitalization of \$130,767,280. Supplementary letters patent were granted during the year to 341 companies, 72 of which increased their capital stock by the aggregate amount of \$143,597,766; 105 decreased their capital stock by \$123,837,999; the remaining 84 were granted supplementary letters patent for various purposes, such as changing names, extending powers, etc. The total capitalization of new companies plus the increase of capital of existing companies amounted to \$274,365,046, partly offset by the above-mentioned decreases in capitalization totalling \$123,837,999.

\* Revised by E. H. Coleman, K.C., LL.D., Under-Secretary of State, Department of the Secretary of State.

In Table 12 will be found the number and capitalization of companies incorporated during the years 1900-37.

12.—Number and Capitalization of Companies Incorporated under the Companies Act and Amending Acts, calendar years 1900-07, and fiscal years ended Mar. 31, 1908-37.

| Year.         | New Companies. |                              | Old Companies. |                                   | Gross Increase in Capitalization. <sup>1</sup> | Old Companies. |                                   | Net Increase of Capitalization. <sup>1</sup> |
|---------------|----------------|------------------------------|----------------|-----------------------------------|--|----------------|-----------------------------------|--|
|               | Number.        | Capitalization. <sup>1</sup> | Number.        | Increase in Capital. <sup>1</sup> |  | Number.        | Decrease in Capital. <sup>1</sup> |  |
|               |                | \$                           |                | \$                                | \$   |                | \$                                | \$   |
| 1900.....     | 53             | 9,558,900                    |                | 3,351,000                         | 12,909,900                                     |                |                                   | 12,909,900                                   |
| 1901.....     | 55             | 7,662,552                    |                | 3,420,000                         | 11,082,552                                     |                |                                   | 11,082,552                                   |
| 1902.....     | 126            | 51,132,850                   |                | 5,055,000                         | 56,237,850                                     |                |                                   | 56,237,850                                   |
| 1903.....     | 187            | 83,405,340                   |                | 5,854,520                         | 89,259,860                                     |                |                                   | 89,259,860                                   |
| 1904.....     | 206            | 90,597,752                   |                | 3,300,000                         | 93,897,752                                     |                |                                   | 93,897,752                                   |
| 1905.....     | 293            | 99,910,900                   |                | 9,685,000                         | 109,595,900                                    |                |                                   | 109,595,900                                  |
| 1906.....     | 374            | 180,173,075                  |                | 32,403,000                        | 212,576,075                                    |                |                                   | 212,576,075                                  |
| 1907.....     | 373            | 132,680,300                  |                | 19,091,900                        | 151,772,200                                    |                |                                   | 151,772,200                                  |
| 1908 (3 mos.) | 64             | 13,299,000                   |                | 865,000                           | 14,164,000                                     |                |                                   | 14,164,000                                   |
| 1909.....     | 366            | 121,624,875                  |                | 72,293,000                        | 193,917,875                                    |                |                                   | 193,917,875                                  |
| 1910.....     | 420            | 301,788,300                  | 44             | 46,539,500                        | 348,327,800                                    | 4              | 670,600                           | 347,707,200                                  |
| 1911.....     | 454            | 455,415,800                  | 45             | 24,715,600                        | 480,131,400                                    | 4              | 10,650,000                        | 472,481,400                                  |
| 1912.....     | 575            | 447,626,999                  | 44             | 42,939,000                        | 490,565,999                                    | 7              | 17,880,800                        | 472,685,199                                  |
| 1913.....     | 335            | 625,212,300                  | 54             | 55,549,900                        | 680,762,200                                    | 5              | 11,811,351                        | 668,950,849                                  |
| 1914.....     | 647            | 361,708,567                  | 61             | 63,599,003                        | 425,307,570                                    | 3              | 3,290,000                         | 422,017,570                                  |
| 1915.....     | 461            | 208,283,633                  | 34             | 26,050,000                        | 234,333,633                                    | 4              | 6,840,000                         | 228,093,633                                  |
| 1916.....     | 534            | 157,342,800                  | 28             | 68,996,000                        | 226,338,800                                    | 11             | 4,311,700                         | 221,527,100                                  |
| 1917.....     | 606            | 207,967,810                  | 36             | 26,540,000                        | 234,507,810                                    | 3              | 5,050,000                         | 229,457,810                                  |
| 1918.....     | 574            | 335,932,400                  | 41             | 69,321,400                        | 405,303,800                                    | 4              | 1,884,300                         | 403,419,500                                  |
| 1919.....     | 512            | 214,326,000                  | 69             | 67,583,625                        | 281,909,625                                    | 11             | 2,115,985                         | 279,793,640                                  |
| 1920.....     | 991            | 603,210,850                  | 88             | 85,187,750                        | 688,398,600                                    | 10             | 19,530,000                        | 668,868,600                                  |
| 1921.....     | 852            | 752,062,653                  | 135            | 79,803,000                        | 831,865,653                                    | 17             | 7,698,300                         | 824,167,353                                  |
| 1922.....     | 973            | 351,555,900                  | 43             | 18,275,000                        | 369,830,900                                    | 13             | 5,121,450                         | 364,709,450                                  |
| 1923.....     | 752            | 314,603,050                  | 45             | 46,105,000                        | 360,711,550                                    | 30             | 10,751,123                        | 349,960,427                                  |
| 1924.....     | 604            | 204,646,233                  | 58             | 15,352,755                        | 219,999,038                                    | 27             | 57,944,410                        | 162,054,628                                  |
| 1925.....     | 663            | 231,044,300                  | 47             | 15,549,573                        | 246,594,373                                    | 28             | 43,863,633                        | 202,730,740                                  |
| 1926.....     | 801            | 353,342,800                  | 48             | 33,306,500                        | 386,646,300                                    | 47             | 43,797,780                        | 342,848,520                                  |
| 1927.....     | 836            | 692,540,900                  | 70             | 33,524,000                        | 726,064,900                                    | 40             | 16,905,045                        | 709,159,855                                  |
| 1928.....     | 1,102          | 538,595,570                  | 82             | 179,167,100                       | 717,762,670                                    | 31             | 37,123,580                        | 680,639,090                                  |
| 1929.....     | 1,202          | 1,406,006,340                | 128            | 412,396,320                       | 1,818,402,660                                  | 40             | 48,005,533                        | 1,770,397,127                                |
| 1930.....     | 1,290          | 1,346,138,367                | 127            | 293,496,800                       | 1,639,635,167                                  | 35             | 46,955,000                        | 1,592,680,167                                |
| 1931.....     | 998            | 592,913,797                  | 75             | 153,524,000                       | 746,437,797                                    | 39             | 50,004,545                        | 696,433,252                                  |
| 1932.....     | 760            | 294,770,312                  | 43             | 27,931,750                        | 322,702,062                                    | 44             | 52,773,618                        | 269,928,444                                  |
| 1933.....     | 543            | 145,453,718                  | 38             | 44,621,950                        | 190,075,668                                    | 46             | 31,636,447                        | 158,439,221                                  |
| 1934.....     | 531            | 175,239,320                  | 38             | 62,615,060                        | 237,854,380                                    | 61             | 36,810,799                        | 151,043,581                                  |
| 1935.....     | 472            | 171,689,140                  | 47             | 35,416,353                        | 207,105,493                                    | 67             | 73,634,742                        | 133,470,750                                  |
| 1936.....     | 371            | 141,237,550                  | 41             | 54,073,000                        | 195,310,550                                    | 76             | 79,640,610                        | 115,669,940                                  |
| 1937.....     | 410            | 130,767,280                  | 72             | 143,597,706                       | 274,365,046                                    | 105            | 123,837,999                       | 150,527,047                                  |

<sup>1</sup> Includes consideration of the amounts of capital received on the issue of shares without nominal or par value.

<sup>2</sup> Not reported prior to 1910.

**Naturalizations.**—The naturalizations effected under the Naturalization Act (R.S.C., 1906, c. 77) for the calendar years 1908-17, inclusive, were given on p. 594 of the Year Book for 1919. Since Jan. 1, 1918, the only method of obtaining naturalization has been under what is known as the 'Imperial' Naturalization Act, which came into force on Jan. 1, 1915. This Act was known under the title of the Naturalization Act, 1914, until July 7, 1919, when it was repealed and the Naturalization Act, 1919, came into force. On July 1, 1920, the Naturalization Act, 1919, was repealed, and the Naturalization Act, 1914, was revived and amended under the title of the Naturalization Acts, 1914 and 1920. By an amendment passed by Parliament in 1923, the restriction by which persons of alien enemy birth were



ineligible to receive certificates of naturalization for a period of 10 years after the termination of the War was removed, and at the present time any alien may apply for naturalization, regardless of his nationality. All these Acts have been consolidated in R.S.C., 1927, c. 138. Since Jan. 15, 1932, women British subjects, marrying aliens, retain their British nationality, unless they, by marriage, acquire their husbands' nationalities, and the wives of aliens no longer become British subjects through their husbands' naturalization. They must apply to the Secretary of State.

Table 13 shows the number of naturalization certificates issued to single persons or heads of families under these Acts during the calendar years from 1927 to 1936. The total numbers of persons naturalized during the fiscal years ended Mar. 31, 1936 and 1937, were 30,678 and 31,744, respectively, including (except as stated above) the wives and minor children of those to whom naturalization certificates were issued.

**13.—Naturalizations in Canada, by Principal Nationalities, under the Naturalization Act, calendar years 1927-36.**

| Nationality.                        | 1927.        | 1928.        | 1929.         | 1930.         | 1931.         | 1932.         | 1933.         | 1934.         | 1935.                     | 1936.         |
|-------------------------------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------------------|---------------|
| Albanian.....                       | 8            | 11           | 9             | 4             | 4             | 2             | 2             | 4             | 4                         | 5             |
| Argentinian.....                    | 2            | 2            | 1             | 4             | 3             | 3             | 2             | 5             | 4 <sup>1</sup>            | 10            |
| Austrian.....                       | 925          | 728          | 890           | 1,004         | 1,050         | 1,057         | 659           | 804           | 1,015                     | 996           |
| Austro-Hungarian.....               | 7            | 2            | 5             | 4             | 5             | 3             | 5             | Nil           | 8                         | 4             |
| Belgian.....                        | 157          | 169          | 264           | 274           | 257           | 284           | 305           | 267           | 383                       | 373           |
| Brazilian.....                      | —            | —            | 3             | 1             | Nil           | 2             | Nil           | 2             | Nil                       | 4             |
| Bulgarian.....                      | 59           | 46           | 64            | 41            | 37            | 44            | 30            | 37            | 46                        | 53            |
| Chinese.....                        | 29           | 23           | 24            | 23            | 22            | 5             | 1             | 1             | 7                         | 6             |
| Costa Rican.....                    | —            | —            | —             | —             | —             | —             | —             | —             | 1                         | Nil           |
| Czechoslovak.....                   | 38           | 57           | 287           | 287           | 646           | 1,078         | 964           | 910           | 1,052                     | 1,080         |
| Danish.....                         | 116          | 132          | 208           | 217           | 249           | 285           | 390           | 418           | 677                       | 771           |
| Danishgers.....                     | 1            | 1            | Nil           | 1             | 2             | 5             | 4             | 5             | 2                         | 3             |
| Dutch.....                          | 79           | 64           | 112           | 143           | 203           | 229           | 197           | 181           | 356                       | 434           |
| Egyptian.....                       | 2            | Nil          | 1             | 1             | Nil           | Nil           | 2             | Nil           | 1                         | Nil           |
| Estonian.....                       | 2            | 8            | 9             | 10            | 14            | 16            | 24            | 34            | 51                        | 44            |
| Finnish.....                        | 128          | 133          | 233           | 276           | 319           | 329           | 359           | 410           | 601                       | 601           |
| French.....                         | 123          | 98           | 118           | 119           | 154           | 127           | 128           | 103           | 154                       | 219           |
| German.....                         | 183          | 171          | 288           | 420           | 449           | 530           | 675           | 899           | 1,495                     | 2,079         |
| Greek <sup>1</sup> .....            | 162          | 153          | 173           | 181           | 97            | 121           | 113           | 157           | 216                       | 193           |
| Hungarian.....                      | 37           | 45           | 184           | 396           | 780           | 829           | 721           | 856           | 1,166                     | 1,138         |
| Icelandic.....                      | 15           | 17           | 12            | 17            | 30            | 21            | 8             | 24            | 31                        | 29            |
| Italian.....                        | 1,270        | 1,146        | 1,739         | 1,186         | 1,133         | 1,418         | 1,265         | 779           | 829                       | 894           |
| Japanese.....                       | 17           | 35           | 18            | 33            | 7             | Nil           | 1             | 10            | 49                        | 49            |
| Latvian.....                        | 17           | 30           | 25            | 25            | 29            | 34            | 29            | 39            | 61                        | 56            |
| Lithuanian.....                     | 46           | 55           | 55            | 46            | 130           | 102           | 275           | 332           | 427                       | 514           |
| Luxemburger.....                    | 2            | 5            | 4             | 2             | 4             | 8             | 5             | Nil           | 4                         | 12            |
| Mamel Territory.....                | —            | —            | —             | —             | —             | —             | —             | —             | —                         | —             |
| Mexican.....                        | 1            | Nil          | 1             | Nil           | 2             | Nil           | 1             | Nil           | 3                         | Nil           |
| Montegrin.....                      | —            | —            | —             | —             | —             | —             | —             | —             | 2 <sup>1</sup>            | Nil           |
| Norwegian.....                      | 202          | 197          | 424           | 381           | 412           | 453           | 498           | 521           | 687                       | 737           |
| Palestinian.....                    | 2            | 4            | 6             | 6             | 4             | 1             | 5             | 10            | 15                        | 11            |
| Persian.....                        | 2            | 3            | 1             | 4             | 1             | 4             | 3             | Nil           | 3                         | 4             |
| Polish.....                         | 1,189        | 962          | 1,295         | 1,213         | 2,623         | 4,240         | 3,749         | 4,279         | 6,113                     | 6,302         |
| Roumanian.....                      | 570          | 437          | 671           | 588           | 614           | 781           | 720           | 852           | 1,195                     | 1,157         |
| Russian.....                        | 981          | 858          | 1,687         | 1,940         | 2,527         | 2,936         | 1,970         | 1,807         | 2,178                     | 2,256         |
| Spanish.....                        | 5            | 10           | 7             | 8             | 8             | 9             | 5             | 5             | 5                         | 7             |
| Swedish.....                        | 258          | 242          | 295           | 310           | 442           | 375           | 385           | 444           | 638                       | 704           |
| Swiss.....                          | 9            | 13           | 26            | 38            | 27            | 61            | 47            | 64            | 90                        | 125           |
| Syrian.....                         | —            | —            | —             | —             | 53            | 86            | 77            | 60            | 69                        | 55            |
| Turkish.....                        | 136          | 128          | 160           | 174           | 56            | 40            | 30            | 33            | 54                        | 28            |
| United States.....                  | 963          | 939          | 1,073         | 1,104         | 1,632         | 1,877         | 1,374         | 1,240         | 1,905                     | 2,170         |
| Yugo-Slav (Serb-Croat-Slovene)..... | 80           | 78           | 295           | 404           | 646           | 1,018         | 1,160         | 979           | 882                       | 888           |
| All others.....                     | 6            | 12           | 12            | 16            | 11            | 24            | 54            | 47            | 66 <sup>1</sup>           | 55            |
| <b>Totals.....</b>                  | <b>7,828</b> | <b>7,619</b> | <b>10,734</b> | <b>10,906</b> | <b>14,752</b> | <b>18,527</b> | <b>16,240</b> | <b>16,618</b> | <b>22,541<sup>1</sup></b> | <b>24,070</b> |

<sup>1</sup> Revised since the publication of the 1936 Year Book.

and 1 Greek Macedonian for 1930.

<sup>2</sup> Includes 1 Greek Albanian for 1927

Palestinian, and Mesopotamian Turks.

<sup>3</sup> Turkish includes also Syrian, Armenian, Greek, Bulgarian,

**Canada Temperance Act.**—Under Parts I and II of this Act, provision is made for the prohibition of the sale of intoxicating liquors in counties and cities. The last vote taken under these parts was in the County of Compton, Quebec, on Apr. 28, 1930, in response to a petition for the repeal of the Act in that county. The vote resulted in favour of the repeal, which became effective on June 14, 1930. Part III of the Act relates to penalties and prosecutions, Part IV to the prohibition of the importation and exportation of intoxicating liquors into and from the provinces, while Part V enacts provisions in aid of provincial legislation for the control of the liquor traffic.

### Section 8.—Royal Canadian Mounted Police.\*

The Royal Canadian Mounted Police is a constabulary maintained by the Dominion Government. It was organized in 1873, and was known as the North West Mounted Police, whose duties were confined to what was then known as the Northwest Territories. In 1904 its name was changed to Royal North West Mounted Police.

In 1905, when Alberta and Saskatchewan were constituted provinces, an arrangement was made whereby the Force continued to discharge its duties as formerly, each province making a contribution towards defraying the cost. This was continued until 1917. Soon after the close of the Great War an extension of Governmental activities made it obvious that the enforcement of Dominion Statutes was assuming increasing proportions, and that it would soon be necessary to have a police force responsible therefor. In 1918, to the Royal North West Mounted Police was assigned the duty of the enforcement of Dominion legislation for the whole of Western Canada, west of Port Arthur and Fort William, and in 1920 for the whole of Canada.

In 1920, the name of the Force was changed to the Royal Canadian Mounted Police, and the former Dominion Police with headquarters at Ottawa, whose duties were largely connected with guarding public buildings in that city and the Canadian Government dockyards at Halifax, N.S., and Esquimalt, B.C., were absorbed by the Royal Canadian Mounted Police.

At the present time, the R.C.M. Police is responsible throughout Canada for the enforcement of the laws against smuggling by land, sea, and air. It enforces the provisions of the Excise Act, is responsible for the suppression of the traffic in narcotic drugs, enforcement of the Migratory Birds Convention Act, and assists the Mines and Resources, Fisheries, and numerous other Dominion Departments, in executing the provisions of their respective Acts, and in some cases in administrative duties. It is responsible for the protection of government buildings and dockyards. It is the sole police force operating in the Yukon Territory and the Northwest Territories, and performs a variety of services in all provinces and both Territories for the Dominion Government.

Under the R.C.M. Police Act, any province may enter into an agreement with the Dominion Government for the services of the Royal Canadian Mounted Police, to enforce provincial laws and the Criminal Code, upon payment for its services, and at the present time such agreements are in force with the provinces of Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan, and Alberta.

The Force is controlled and administered by a Minister of the Crown (at present the Minister of Justice) and it may be employed anywhere in Canada. From a force of 300 in 1873, it had a strength on Dec. 31, 1937, of 2,620. Its means of trans-

\* Revised by Col. S. T. Wood, Commissioner, Royal Canadian Mounted Police.

port at that time consisted of 206 horses, 526 motor vehicles and 444 sleigh dogs. The Force is organized into 14 divisions of varying strength, distributed over the entire country. The term of engagement is five years for recruits, with re-enlistment for a period not exceeding five years. The Officers are commissioned by the Crown. Recruits are trained at Regina, Sask. The course of training is six months, and consists of drill, both mounted and dismounted, physical training including instruction in wrestling, boxing, and jiu-jitsu. Special attention is paid to police duties, both Dominion and provincial, and detailed lectures are given in these, including court procedure. Instructional courses for promotion are held, and, where practicable, an annual refresher course of training is given.

In 1937, a 'Reserve' strength of 300 men was authorized by Parliament, and during the months of July and August, 1937, 300 'Reservists' were given training at Fredericton, N.B., Ottawa, Ont., Regina, Sask., and Vancouver, B.C., and in future these 'Reservists' will be the principal source from which recruits for the Force will be drawn.

**14.—Strength and Distribution of the Royal Canadian Mounted Police as at Dec. 31, 1937.**

| Place.                 | Com-mis-sioner. | Deputy Com-mis-sioners. | Asst. Com-mis-sioners. | Super-intend-ents. | Inspec-tors. | De-ctective Inspec-tors. | Sub-Inspec-tors. | Sur-geons. | Staff Ser-geants | Ser-geants | Cor-por-als.    |
|------------------------|-----------------|-------------------------|------------------------|--------------------|--------------|--------------------------|------------------|------------|------------------|------------|-----------------|
| P.E.I.....             | Nil             | Nil                     | Nil                    | Nil                | 1            | Nil                      | Nil              | Nil        | 1                | 1          | 3               |
| N.S.....               | "               | "                       | 1                      | 1                  | 5            | "                        | "                | "          | 3                | 17         | 19              |
| N.B.....               | "               | "                       | Nil                    | 1                  | 5            | "                        | "                | "          | 2                | 8          | 18              |
| Que.....               | "               | "                       | 2                      | Nil                | 1            | 1                        | 2                | "          | 2                | 11         | 11              |
| Ont.....               | 1               | 1                       | 3                      | 9                  | 12           | Nil                      | 3                | "          | 20               | 43         | 57 <sup>1</sup> |
| Man.....               | Nil             | Nil                     | 1                      | 1                  | 4            | "                        | 1                | "          | 4                | 13         | 24              |
| Sask.....              | "               | "                       | 1                      | 3                  | 12           | "                        | Nil              | 1          | 9                | 33         | 41              |
| Alta. "K" Div..        | "               | "                       | 2                      | 1                  | 8            | 1                        | "                | Nil        | 3                | 27         | 32              |
| N.W.T.<br>"G" Div..... | "               | "                       | Nil                    | Nil                | 2            | Nil                      | "                | "          | Nil              | 2          | 3               |
| B.C.....               | "               | "                       | 1                      | "                  | 3            | "                        | "                | "          | 4                | 14         | 15              |
| Yukon.....             | "               | "                       | Nil                    | 1                  | 1            | "                        | "                | "          | Nil              | 2          | 3               |
| <b>Totals.....</b>     | <b>1</b>        | <b>1</b>                | <b>11</b>              | <b>17</b>          | <b>54</b>    | <b>2</b>                 | <b>6</b>         | <b>1</b>   | <b>48</b>        | <b>171</b> | <b>226</b>      |

| Place.                 | Lance Cor-por-als. | Con-stables.     | Sub-Con-stables. | Special Con-stables. | Marine Section. | Total Per-sonnel. | Saddle Horses. | Team and Pack Horses | Total Horses. | Dogs.      |
|------------------------|--------------------|------------------|------------------|----------------------|-----------------|-------------------|----------------|----------------------|---------------|------------|
| P.E.I.....             | 3                  | 19               | 1                | 4                    | 6               | 39                | Nil            | Nil                  | Nil           | Nil        |
| N.S.....               | 12                 | 109              | 2                | 2                    | 185             | 356               | "              | "                    | "             | "          |
| N.B.....               | 7                  | 76               | 4                | 3                    | 12              | 136               | "              | "                    | "             | 1          |
| Que.....               | 11                 | 99               | Nil              | 2                    | 22              | 164               | "              | "                    | "             | Nil        |
| Ont.....               | 36                 | 843              | 12               | 17                   | Nil             | 557               | 49             | 2                    | 51            | 25         |
| Man.....               | 9                  | 127              | Nil              | 7                    | "               | 191               | Nil            | Nil                  | Nil           | 42         |
| Sask.....              | 28                 | 412 <sup>2</sup> | 6                | 25                   | "               | 571               | 92             | 5                    | 97            | 34         |
| Alta. "K" Div..        | 17                 | 209              | 1                | 27                   | "               | 328               | 6              | 4                    | 10            | 14         |
| N.W.T.<br>"G" Div..... | 17                 | 30               | Nil              | 25                   | "               | 79                | Nil            | Nil                  | Nil           | 285        |
| B.C.....               | 6                  | 107              | 1                | 6                    | 2               | 159               | 45             | "                    | 45            | Nil        |
| Yukon.....             | 2                  | 27               | Nil              | 4                    | Nil             | 40                | 1              | 2                    | 3             | 47         |
| <b>Totals.....</b>     | <b>148</b>         | <b>1,558</b>     | <b>27</b>        | <b>122</b>           | <b>227</b>      | <b>2,620</b>      | <b>193</b>     | <b>13</b>            | <b>206</b>    | <b>448</b> |

<sup>1</sup> Including 1 at the Canadian Legation at Washington.

<sup>2</sup> Including 2 trumpeters in Saskat-  
chewan.

## Section 9.—The Civil Service of Canada.

**Organization.\***—Prior to 1882, appointments to the Civil Service were made directly by the Government. In that year, a Board of Civil Service Examiners was appointed to examine candidates and issue certificates of qualification to those successful at examinations. Appointments, however, were still made by the Government of the day.

The Royal Commission of 1907, appointed to inquire into the Civil Service Act and its operation, reported in favour of the creation of a Civil Service Commission. In 1908 this body was established; it consisted of two members appointed by the Governor in Council and holding office during good behaviour, but removable by the Governor General on address of the Senate and House of Commons. The Civil Service was classified into three divisions under the Deputy Heads of Departments, each division consisting of two subdivisions, each of these having its scale of salaries. The Commission was charged with the organization of and appointments to the Inside Service (at Ottawa), certain appointments to be made after open competition and others after qualifying tests, also with holding qualifying examinations for the Outside Service (the Service apart from Ottawa) to obtain lists from which selections could be made by the various Departments. All British subjects between 18 and 35 years of age who had resided in Canada for three years were eligible to try these examinations.

In 1918 a third member of the Civil Service Commission was appointed, and by the Civil Service Act of that year the principle of appointment after open competition was applied to the Outside as well as the Inside Service. The Act also provided for the organization by the Commission of the various Government Departments, for a classification of all positions in the Service on a duties basis, for the establishment of new rates of compensation, and for the principle of promotion by merit wherever consistent with the best interests of the Service. Provision was also made for preference, in the matter of appointment to the Service, to be given to qualified applicants who had served in the Great War.

**Civil Service Statistics.†**—From April, 1924, a monthly return of personnel and salaries has been made by each Department to the Dominion Bureau of Statistics, according to a plan that ensures comparability between Departments and continuity in point of time. The institution of this system was preceded by an investigation back to 1912, the summary results of which are presented in Table 15.

During the war years, as will be seen from Table 15, the number of employees increased very rapidly, as a result of the enlargement of the functions of government and the imposition of new taxes, necessitating additional officials as collectors. Such new services as the Department of Pensions and National Health and the Soldier Settlement Board were also created. The maximum was reached in January, 1920, when 47,133 persons were employed; this number has since decreased to 43,224 in January, 1937. It may be added that, out of 42,780 in March, 1937 (see Table 16), 1,214 in the Income Tax Branch and 2,354 in the Department of Pensions and National Health, or 3,568 in all, were engaged in services of outstanding importance which had no existence before the War. Further, an additional 11,649 persons were, in March, 1937, employed in the Post Office Department, performing services of an industrial rather than of a governmental type, and receiving their salaries out of payments made by the public for services immediately rendered, rather than out of taxation.

\* Revised by Wm. Foran, Secretary, Civil Service Commission, Ottawa.

† Revised by Col. J. R. Munro, Chief of the Finance Branch of the Dominion Bureau of Statistics, Ottawa.

The statistics of numbers of employees and of salaries, now being secured monthly, are more comprehensive than those previously published, as a result of the inclusion of various classes of employees, largely part-time, seasonal and 'fees of office' employees, who were not included in the report published in 1925. These employees are largely in the Departments of Transport, Fisheries, and Public Works. There remain, however, many persons in the "non-enumerated classes" whose numbers cannot be supplied monthly by the departmental officials but whose compensation is included in the monthly figures of expenditure on personnel, as shown in Table 16.

15.—Summary of Civil Service Employees (Permanent and Temporary) of the Government of Canada, together with Total Salaries, in the months of January of the years 1912-37, inclusive.

| Year.                   | Employees. | Salaries. | Bonuses. | Salaries and Bonuses. |
|-------------------------|------------|-----------|----------|-----------------------|
|                         | No.        | \$        | \$       | \$                    |
| 1912.....               | 20,016     | 1,519,778 | 16,413   | 1,536,191             |
| 1913.....               | 22,621     | 1,780,703 | 22,569   | 1,803,272             |
| 1914.....               | 25,107     | 1,960,238 | 27,971   | 1,988,209             |
| 1915.....               | 28,010     | 2,268,700 | 32,167   | 2,300,867             |
| 1916.....               | 29,219     | 2,400,068 | 31,431   | 2,431,499             |
| 1917.....               | 32,435     | 2,673,767 | 29,167   | 2,702,934             |
| 1918.....               | 38,369     | 3,147,461 | 94,321   | 3,241,782             |
| 1919.....               | 41,825     | 3,552,686 | 557,882  | 4,110,568             |
| 1920.....               | 47,133     | 4,423,157 | 965,538  | 5,388,695             |
| 1921.....               | 41,957     | 4,414,669 | 861,973  | 5,276,642             |
| 1922.....               | 41,094     | 4,369,509 | 616,105  | 4,985,614             |
| 1923.....               | 38,992     | 4,268,357 | 403,470  | 4,731,827             |
| 1924.....               | 38,062     | 4,297,467 | 449,228  | 4,746,695             |
| 1925 <sup>1</sup> ..... | 38,645     | 4,473,470 | 166,461  | 4,639,931             |
| 1926.....               | 39,097     | 4,699,076 |          | 4,699,076             |
| 1927.....               | 39,440     | 4,786,615 |          | 4,786,615             |
| 1928.....               | 40,740     | 5,161,558 |          | 5,161,558             |
| 1929.....               | 42,038     | 5,428,063 |          | 5,428,063             |
| 1930.....               | 43,525     | 5,543,749 |          | 5,543,749             |
| 1931.....               | 45,167     | 5,757,554 | Nil      | 5,757,554             |
| 1932.....               | 43,784     | 5,653,169 |          | 5,653,169             |
| 1933.....               | 41,920     | 4,775,591 |          | 4,775,591             |
| 1934.....               | 41,346     | 4,098,536 |          | 4,098,536             |
| 1935.....               | 41,348     | 4,757,045 |          | 4,757,045             |
| 1936.....               | 40,813     | 5,000,539 |          | 5,000,539             |
| 1937.....               | 43,224     | 5,190,282 |          | 5,190,282             |

<sup>1</sup> Figures for January, 1925-37, are not comparable with those for preceding Januaries, because monthly records now being published include various classes of employees not included in the historical record for the 13 years 1912-24.

Table 16, which gives statistics by Departments, with a further classification by principal branches where such are recorded, is included to give comparable figures for the latest months. In the month of March, 1937, the total number of employees in the enumerated classes was 42,836 as compared with 41,132 in March, 1936. The total expenditure on wages and salaries for all classes of employees except "non-enumerated classes" for March, 1937, was \$9,076,651 as compared with \$8,745,072 for March, 1936.

16.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ("Non-Enumerated Classes" Included), March, 1936, and March, 1937.

| Department.                                      | March, 1936. |                     | March, 1937. |                     |
|--|--------------|---------------------|--------------|---------------------|
|  | No.          | Expenditure.        | No.          | Expenditure.        |
|  |              | \$                  |              | \$                  |
| 1. Agriculture—                                  |              |                     |              |                     |
| Main Department.....                             | 1,206        | 154,068             | 1,406        | 190,261             |
| Experimental Farms.....                          | 542          | 132,868             | 546          | 122,714             |
| Health of Animals.....                           | 596          | 95,919              | 681          | 102,030             |
| Totals, Agriculture.....                         | 2,344        | 382,855             | 2,633        | 415,005             |
| 2. Archives.....                                 | 77           | 11,558              | 69           | 10,458              |
| 3. Auditor-General.....                          | 233          | 34,073              | 220          | 32,809              |
| 4. Canadian Radio Broadcasting Commission.....   | 181          | 21,155              | 1            | 1                   |
| 5. Civil Service Commission.....                 | 147          | 19,929              | 195          | 22,866              |
| 6. Chief Electoral Officer.....                  | 14           | 1,371               | 6            | 875                 |
| 7. External Affairs—                             |              |                     |              |                     |
| Prime Minister's Office.....                     | 26           | 3,709 <sup>2</sup>  | 23           | 3,036 <sup>2</sup>  |
| Administrative and Passport.....                 | 59           | 3,842               | 61           | 9,451               |
| The High Commissioner's Office.....              | 38           | 6,625 <sup>2</sup>  | 35           | 5,802 <sup>2</sup>  |
| Director Canadian Trade Publicity.....           | 6            | 963 <sup>2</sup>    | 4            | 438                 |
| Canadian Legation, Washington, U.S.A.....        | 16           | 4,402 <sup>2</sup>  | 16           | 3,836 <sup>2</sup>  |
| Canadian Legation, Paris, France.....            | 10           | 1,899 <sup>2</sup>  | 10           | 1,910 <sup>2</sup>  |
| The League of Nations.....                       | 5            | 1,530 <sup>2</sup>  | 6            | 1,655 <sup>2</sup>  |
| Canadian Legation, Tokyo, Japan.....             | 12           | 2,511 <sup>2</sup>  | 12           | 2,499 <sup>2</sup>  |
| Totals, External Affairs.....                    | 172          | 30,661 <sup>2</sup> | 167          | 28,627 <sup>2</sup> |
| 8. Finance.....                                  | 276          | 35,097              | 280          | 85,869              |
| Comptroller of Treasury.....                     | 983          | 133,173             | 982          | 128,735             |
| Government Contracts Supervision Commission..... | 5            | 790                 | 5            | 794                 |
| Royal Canadian Mint.....                         | 93           | 14,176              | 106          | 15,005              |
| Superintendent of Bankruptcy.....                | 12           | 2,168               | 13           | 2,152               |
| Tariff Board.....                                | 30           | 6,778               | 23           | 6,422               |
| 9. Fisheries.....                                | 320          | 63,012              | 309          | 64,814              |
| 10. Governor General's Secretary.....            | 12           | 2,535               | 12           | 2,588               |
| 11. House of Commons—                            |              |                     |              |                     |
| Clerk of the House.....                          | 262          | 41,052              | 272          | 44,575              |
| Sergeant-at-Arms.....                            | 223          | 21,093              | 243          | 21,351              |
| Totals, House of Commons.....                    | 485          | 62,145              | 520          | 65,926              |
| 12. Immigration and Colonization.....            | 615          | 81,778              | 4            | 4                   |
| 13. Indian Affairs—                              |              |                     |              |                     |
| Main Department.....                             | 620          | 56,823              | 4            | 4                   |
| Educational Branch.....                          | 409          | 25,843              |              |                     |
| Totals, Indian Affairs.....                      | 1,029        | 82,665              | 4            | 4                   |
| 14. Insurance.....                               | 50           | 9,163               | 49           | 9,274               |
| 15. Interior.....                                | 945          | 145,663             | 4            | 4                   |
| 16. International Joint Commission.....          | 6            | 2,497               | 7            | 2,635               |
| 17. Justice—                                     |              |                     |              |                     |
| Main Department.....                             | 44           | 8,282               | 48           | 8,980               |
| Clemency Branch.....                             | 15           | 2,234               | 14           | 2,174               |
| Purchasing Agent's Office.....                   | 6            | 795                 | 6            | 804                 |
| Penitentiaries.....                              | 950          | 113,325             | 916          | 110,133             |
| Supreme Court.....                               | 22           | 3,717               | 22           | 3,728               |
| Exchequer Court.....                             | 12           | 1,957               | 10           | 1,893               |
| Totals, Justice.....                             | 1,049        | 130,312             | 1,016        | 127,712             |

For footnotes, see end of table, p. 1069.

16.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ("Non-Enumerated Classes" Included), March, 1936, and March, 1937—continued.

| Department.   | March, 1936.     |                     | March, 1937. |              |
|---|------------------|---------------------|--------------|--------------|
|   | No.              | Expenditure.        | No.          | Expenditure. |
|   |                  | \$                  |              | \$           |
| 18. Labour—   |                  |                     |              |              |
| Main Department.....                                | 97               | 15,422              | 102          | 15,732       |
| Annuities.....                                      | 35               | 4,014               | 46           | 4,957        |
| Technical Education.....                            | 2                | 358                 | 1            | 182          |
| Dominion Unemployment Relief.....                   | 66               | 9,623               | 89           | 12,071       |
| Totals, Labour.....                                 | 200              | 29,417              | 238          | 33,542       |
| 19. Library of Parliament.....                      | 25               | 4,688               | 24           | 4,502        |
| 20. Marine—   |                  |                     |              |              |
| Main Department.....                                | 3,055            | 333,503             | 3            | 3            |
| Meteorological Branch.....                          | 472              | 18,727              |              |              |
| Totals, Marine.....                                 | 3,527            | 352,230             | 3            | 3            |
| 21. Mines and Resources—                            |                  |                     |              |              |
| Immigration.....                                    | —                | —                   | 621          | 84,844       |
| Indian Affairs.....                                 | —                | —                   | 1,072        | 86,284       |
| Lands, Parks and Forests, Surveys and Engineering.. | —                | —                   | 971          | 147,460      |
| Mines and Geology.....                              | —                | —                   | 400          | 77,247       |
| Totals, Mines and Resources.....                    | 456 <sup>a</sup> | 76,922 <sup>a</sup> | 3,124        | 395,835      |
| 22. National Defence—                               |                  |                     |              |              |
| General Defence Administration.....                 | 162              | 21,610              | 161          | 21,770       |
| Militia Services.....                               | 570              | 49,874              | 619          | 53,873       |
| Naval Services.....                                 | 152              | 35,249              | 156          | 31,053       |
| Air Services.....                                   | 117              | 13,933              | 250          | 25,802       |
| Military Topographic Surveys.....                   | 20               | 4,042               | 20           | 3,939        |
| Royal Military College.....                         | 78               | 10,325              | 85           | 11,016       |
| Dominion Arsenal, Quebec, Inc. Ammun. Inspection..  | 44               | 24,201              | 45           | 38,539       |
| Totals, National Defence.....                       | 1,143            | 159,634             | 1,336        | 185,992      |
| 23. National Research Council.....                  | 144              | 29,667              | 171          | 29,866       |
| 24. National Revenue—                               |                  |                     |              |              |
| Main Department.....                                | 4,266            | 600,835             | 4,307        | 611,753      |
| Income Tax Division.....                            | 1,188            | 159,827             | 1,214        | 159,120      |
| Totals, National Revenue.....                       | 5,454            | 760,662             | 5,521        | 770,873      |
| 25. Pensions and National Health—                   |                  |                     |              |              |
| Pensions.....                                       | 1,785            | 210,889             | 1,799        | 212,909      |
| Canadian Pension Commission.....                    | 227              | 36,718              | 225          | 37,094       |
| Health.....   | 268              | 44,513              | 265          | 48,020       |
| Pensions Appeal Court.....                          | 10               | 3,076               | 12           | 3,257        |
| Veterans' Assistance Commission.....                | —                | —                   | 53           | 6,694        |
| Totals, Pensions and National Health.....           | 2,290            | 295,196             | 2,354        | 307,974      |
| 26. Post Office—                                    |                  |                     |              |              |
| Civil Government.....                               | 867              | 107,280             | 887          | 109,635      |
| Outside Service.....                                | 9,980            | 4,334,392           | 10,762       | 4,620,385    |
| Totals, Post Office.....                            | 10,847           | 4,441,672           | 11,649       | 4,730,020    |
| 27. Privy Council.....                              | 17               | 3,455               | 18           | 3,603        |
| 28. Public Printing and Stationery.....             | 617              | 99,015              | 622          | 104,653      |
| 29. Public Works—                                   |                  |                     |              |              |
| Civil Government.....                               | 246              | 42,196              | 250          | 42,016       |
| Outside Service.....                                | 3,436            | 343,702             | 3,610        | 331,058      |
| Totals, Public Works.....                           | 3,682            | 385,898             | 3,860        | 373,074      |

For footnotes, see end of table, p. 1069.

**16.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ("Non-Enumerated Classes" Included), March, 1936, and March, 1937—concluded.**

| Department.  | March, 1936.  |                  | March, 1937.  |                  |
|--|---------------|------------------|---------------|------------------|
|  | No.           | Expenditure.     | No.           | Expenditure.     |
|  |               | \$               |               | \$               |
| 30. Railways and Canals.....                                   | 1,045         | 200,329          | 1,085         | 282,352          |
| Board of Railway Commissioners.....                            | 90            | 20,393           | —             | —                |
| 31. Royal Canadian Mounted Police.....                         | 114           | 222,915          | 108           | 221,329          |
| 32. Secretary of State (including Patents and Copyrights)..... | 294           | 43,443           | 312           | 45,250           |
| 33. Senate.....  | 139           | 17,471           | 146           | 18,105           |
| 34. Soldier Settlement Board.....                              | 385           | 50,020           | 325           | 46,302           |
| 35. Trade and Commerce.....                                    |               |                  |               |                  |
| Headquarters and Miscellaneous Branches.....                   | 65            | 9,775            | 66            | 10,158           |
| Board of Grain Commissioners.....                              | 601           | 111,998          | 649           | 102,500          |
| Dominion Bureau of Statistics.....                             | 446           | 46,516           | 705           | 65,932           |
| Weights and Measures.....                                      | 123           | 17,509           | 136           | 18,520           |
| Electricity and Gas.....                                       | 98            | 16,061           | 101           | 16,465           |
| Commercial Intelligence Service.....                           | 100           | 45,299           | 97            | 43,793           |
| Motion Picture Bureau.....                                     | 26            | 4,137            | 26            | 4,097            |
| Exhibitions.....   | 15            | 10,299           | 15            | 7,753            |
| Canadian Government Elevators.....                             | 121           | 16,957           | 72            | 13,134           |
| Totals, Trade and Commerce.....                                | 1,685         | 278,491          | 1,867         | 282,352          |
| 36. Transport—   |               |                  |               |                  |
| Marine Services.....   | —             | —                | 3,433         | 360,070          |
| Railways and Canals.....                                       | —             | —                | 1,030         | 173,360          |
| Board of Railway Commissioners.....                            | —             | —                | 86            | 17,219           |
| Totals, Transport.....   | —             | —                | 4,549         | 550,649          |
| <b>Grand Totals.....</b>                                       | <b>41,132</b> | <b>8,745,072</b> | <b>42,836</b> | <b>9,076,651</b> |

<sup>1</sup> The Canadian Radio Broadcasting Commission became the Canadian Broadcasting Corporation on Nov. 2, 1936, and its employees are no longer accounted Civil Servants.

<sup>2</sup> Salaries of A.D.C.'s are included, but not their number.

<sup>3</sup> Salaries of A.D.C.'s are included, but not their number.

<sup>4</sup> Included with Department of Mines and Resources after 1936.

<sup>5</sup> Included with Department of Transport after 1936.

<sup>6</sup> Includes extra staff under the Public Works Construction Act, 1935; the Department of Mines and Resources.

## Section 10.—Supervision of Race Track Betting.

By an amendment to Sec. 235 of the Criminal Code, passed in 1920, the supervision of race track betting, under the pari-mutuel system, was placed in the hands of the Minister of Agriculture. The actual supervision is carried out by officers of the Royal Canadian Mounted Police and operated for the first time during the racing season of 1921. Statistics are available from the year 1924 and are shown in Table 17 for the Dominion as a whole, while Table 18 shows the operations by provinces for the year 1936.

### 17.—Race Track Betting in Canada, fiscal years 1924-36.

| Fiscal Year. | Number of Associations. | Number of Days Racing. | Amounts Wagered. | Pari-Mutuel Receipts Retained. | Prize Money. |
|--------------|-------------------------|------------------------|------------------|--------------------------------|--------------|
|              |                         |                        | \$               | \$                             | \$           |
| 1924.....    | 30                      | 354                    | 52,600,633       | 3,496,891                      | 2,023,665    |
| 1925.....    | 32                      | 344                    | 49,807,765       | 3,359,708                      | 1,925,735    |
| 1926.....    | 32                      | 322                    | 44,346,672       | 3,018,358                      | 1,807,780    |
| 1927.....    | 31                      | 354                    | 47,915,828       | 3,278,179                      | 2,004,587    |
| 1928.....    | 32                      | 350                    | 45,960,928       | 3,154,644                      | 1,973,730    |
| 1929.....    | 30                      | 335                    | 45,580,845       | 3,104,456                      | 1,886,800    |
| 1930.....    | 30                      | 332                    | 36,007,146       | 2,687,059                      | 1,802,095    |
| 1931.....    | 30                      | 326                    | 33,377,786       | 2,379,558                      | 1,564,945    |
| 1932.....    | 29                      | 315                    | 28,695,438       | 2,066,672                      | 1,285,563    |
| 1933.....    | 28                      | 324                    | 25,137,598       | 1,831,411                      | 1,147,871    |
| 1934.....    | 26                      | 295                    | 20,976,498       | 1,548,848                      | 986,128      |
| 1935.....    | 27                      | 321                    | 20,891,069       | 1,554,739                      | 1,065,835    |
| 1936.....    | 27                      | 300                    | 20,951,710       | 2,182,112                      | 1,002,795    |



## 18.—Race Track Betting in Canada, by Provinces, fiscal year ended Mar. 31, 1936.

| Province.             | Number<br>of<br>Associ-<br>ations. | Number<br>of<br>Days<br>Racing. | Amounts<br>Wagered. | Pari-<br>Mutuel<br>Receipts<br>Retained. | Prize<br>Money. |
|-----------------------|------------------------------------|---------------------------------|---------------------|--|-----------------|
|                       |                                    |                                 | \$                  | \$                                       | \$              |
| Nova Scotia.....      | 1                                  | 4                               | 5,792               | 3,350                                    | 1,500           |
| Quebec.....           | 4                                  | 56                              | 1,565,744           | 209,128                                  | 119,000         |
| Ontario.....          | 9                                  | 113                             | 13,319,756          | 1,311,793                                | 528,800         |
| Manitoba.....         | 2                                  | 28                              | 2,025,655           | 209,833                                  | 99,500          |
| Saskatchewan.....     | 2                                  | 12                              | 285,982             | 45,013                                   | 21,750          |
| Alberta.....          | 5                                  | 31                              | 835,354             | 103,518                                  | 60,330          |
| British Columbia..... | 4                                  | 56                              | 2,913,427           | 299,408                                  | 171,315         |
| Totals.....           | 27                                 | 300                             | 20,551,710          | 2,152,112                                | 1,002,795       |

## Section 11.—The Tariff Board.\*

The Tariff Board was constituted by Act of Parliament in 1931 (c. 55, 21-22 Geo. V). It consists of three members, a Chairman, a Vice-Chairman and a member, and a Secretary, all appointed by the Governor in Council.

The constitution and duties of the Board are defined in two parts of the Act of 1931.

Under Part I, the Board makes inquiry into and reports upon any matter on which the Minister of Finance desires information, in relation to any goods which, if brought into Canada or produced in Canada, are subject to or exempt from duties of customs or excise. The investigation into any such matter may include inquiry as to the effect which an increase or decrease of the existing rate of duty upon a given commodity might have upon industry or trade, and the extent to which the consumer is protected from exploitation.

It is also the duty of the Board to inquire into any other matter or thing in relation to the trade or commerce of Canada which the Governor in Council sees fit to refer to the Board for inquiry and report.

The Act provides that reports shall be made to the Minister of Finance, and tabled in the House of Commons. The principal commodities reported on are: wool textiles; boots and shoes; jute yarns and twines; fruits and vegetables; hookless fasteners (zippers); wooden doors; silver-bearing articles (toiletware); dextrines; rabbit skins; brass, copper and nickel-silver commodities; boiler tubes; skelp; coco-mats and mattings; hats and hoods; biscuits; cork boards, slabs and planks; crude petroleum and its derivatives; automotive industry; artificial silk yarns, cotton yarns and fabrics. In the year 1937 reports were made on plastics of all kinds; furniture; steel wool; the automotive industry; certain sporting goods, etc.

Part II of the Act empowers the Board to hear and decide appeals from rulings made by the Department of National Revenue with respect to fair market value of goods for duty purposes, erroneous appraisals, and the rate of duty applicable to any class of goods. Under Order in Council the Board has authority and power, (1) to declare or find with respect to any importation whether any goods are "of a class or kind made or produced in Canada"; (2) to review the value for duty applied by the Customs to new or unused goods under provisions of Sec. 36 of the Customs Act and make its findings with regard thereto; (3) to determine and declare whether any and, if so, what drawback of Customs duty is payable under the provisions of Schedule B of the Customs Tariff. Findings of the Board on Appeals are published in the *Canada Gazette*.

\* Revised by James R. MacGregor, Secretary, Tariff Board.

### Section 12.—Dominion Trade and Industry Commission.\*

The Dominion Trade and Industry Commission was constituted by Act of Parliament in 1935 (c. 59, 25-26 Geo. V). It consists of three Commissioners, one of whom is the Chief Commissioner and another the Assistant Chief Commissioner. The Act provides that for the time being the members of the Tariff Board (see Section 11) shall be the Commissioners, and the Chairman and Vice-Chairman of the Tariff Board shall be the Chief Commissioner and Assistant Chief Commissioner, respectively.

Duties of the Commission consist of investigating and recommending the prosecution of offences against Acts of Parliament relating to commodity standards; preparation of draft specifications for commodity standards; application of the national trademark "Canada Standard" to commodities which conform to specifications established under any Act of Parliament; investigation of complaints respecting unfair trade practices, and recommending the prosecution of offences against any Dominion law prohibiting unfair trade practices; the convening of conferences for the purpose of considering commercial practices prevailing in industry, and determining what practices are unfair or undesirable in the interest of the industry or the public.

### Section 13.—The National Employment Commission.

An account of the establishment of the National Employment Commission is given at p. 1052 of the 1937 Year Book. The Commission presented its final report on Jan. 26, 1938 and was dissolved on Feb. 1, 1938. An account of the work carried out by the Commission will be found at p. 778-779 of this volume.

### Section 14.—Other Miscellaneous Administration.

In previous editions of the Year Book this chapter has been brought to a close with outlines of Dominion Government administration as follows: the International Joint Commission; the Geodetic Survey of Canada; the Topographical Survey; the Dominion Observatories.

The three latter services were, up to the end of 1936, administered by the Department of the Interior but, as will be seen from the outline of Dominion legislation (under the heading "Civil Service") p. 1065, the newly-organized Department of Mines and Resources, which came into effect on Dec. 1, 1936, absorbed the old Departments of Mines, Interior, Indian Affairs, and Immigration. The Geodetic Survey and the Dominion Observatories administrations are continued as Divisions of the Surveys and Engineering Branch of the new Department, but topographical survey work has been re-organized, the mapping work having been combined with the Hydrographic Service as a Division of the Surveys and Engineering Branch, and the topographical survey work taken over by the Bureau of Geology and Topography of the Mines and Geology Branch.

The purpose of establishing the above-mentioned new Departments was to correlate the efforts of the staffs of such older Departments as had, in the course of time, acquired overlapping features, or which could be more economically administered under one head without impairing the usefulness of necessary services.

\* Revised by James R. MacGregor, Secretary, Dominion Trade and Industry Commission.

## CHAPTER XXIX.—SOURCES OF OFFICIAL STATISTICAL AND OTHER INFORMATION RELATIVE TO CANADA.

The chief source of information on the current state of the country is the Dominion Bureau of Statistics, organized as the central statistical bureau for Canada, and described in the first part of this chapter.

The second section of the chapter contains a list of the Acts of Parliament administered by the several Departments of the Dominion Government, and the third section a bibliography of the publications of these Departments. This is followed, in Section 4, by a bibliography of the publications of Provincial Governments.

### Section 1.—The Dominion Bureau of Statistics.\*

The Dominion Bureau of Statistics was set up by statute in 1918 as a central statistical department for Canada (8-9 Geo. V, c. 43).† The Act was a consolidation of all previous statistical legislation and was based on the report of a Commission on Statistics, appointed in 1912, which recommended (a) a series of specific reforms and enlargements in Canadian statistics, and (b) a policy of statistical co-ordination for the Dominion, under central direction. In 1915, following the recommendations in this report, the office of Dominion Statistician was created.

As first established‡ the Bureau included, by transfer or absorption, the following divisions: (1) the Census and Statistics Office (covering the census, and also agriculture, general manufactures, and judicial statistics), (2) Fisheries Statistics, (3) Mining Statistics, (4) Forestry Statistics, (5) Dairying and Fruit Statistics, (6) Water- and Electric-Power Statistics, (7) the Railways and Canals Statistical Branch of the Department of Railways and Canals, (8) the Trade Statistical Branch (Exports and Imports), (9) Grain Trade Statistics, (10) Live-Stock Statistics, (11) Prices Statistics, and (12) Employment Statistics. In addition four new branches were created, dealing respectively with Public Finance, Internal Trade, Vital Statistics, and Education.

Since its organization in 1918, the Bureau has created out of these many heterogeneous units a unified, nation-wide, statistical system in which the correlation of the several subjects and their interpretation from a comprehensive national viewpoint has been the primary objective. By means of Dominion-Provincial statistical conferences held from time to time, a useful degree of co-operation and uniformity of statistical classification and method has been achieved and progress along these lines continues. These main advantages of statistical centralization have not only been substantially attained, but the treatment of statistics, not merely as aggregations of figures, but as primary data from which complex social and economic phenomena may be interpreted, has been emphasized. This view of a true national statistic as revealing the controlling economic forces which operate and their inter-

\* A more complete account of the formation and activities of the Bureau of Statistics will be found on pp. 961-964 of the 1922-23 Year Book.

† Consolidated as the Statistics Act (c. 190, R.S.C., 1927).

‡ See the first Annual Report of the Dominion Statistician, for the fiscal year ended Mar. 31, 1919.

play, and the value of such a statistic in administrative planning along national lines, involves, of course, an added function of the Bureau, *viz.*, its usefulness as a national laboratory for economic and social research. This is a development which, as yet, is in its infancy but the foundation of such a service, comparable with the increasing importance of Canada in the economic and political world, has already been laid.

While primarily serving the Government, the Bureau realizes that in a democratic community every citizen is a part of the Government and should be well informed regarding the social and economic conditions of his country as a whole, as well as respecting the part of it that comes under his own eyes. Accordingly, the Bureau furnishes to all applicants answers to all manner of questions on all sorts of topics, either directly or through the columns of the press. In particular, it supplies to business men of all classes information regarding business conditions, such as the production, imports, exports, prices, stocks, etc., of all kinds of commodities, in order to enable them to direct their operations more effectively to their own greater advantage and to the greater advantage of Canada. Arrangements have been completed whereby special tabulations may be made, or other investigations carried out at a fee based only on the extra clerical costs to the Bureau.

As now organized, the Branches of the Dominion Bureau of Statistics are: I. Administration; II. Demography—Census and Vital Statistics; III. Agricultural Statistics; IV. Fisheries, Furs, Animal and Dairy Products; V. Mining, Metallurgical and Chemical; VI. Forestry and Allied Industries; VII. General Manufactures. VIII. External Trade (Imports and Exports); IX. Internal Trade; X. Transportation and Public Utilities; XI. Financial Statistics; XII. Judicial Statistics; XIII. Education Statistics; XIV. Census of Institutions; XV. General Statistics. An organization chart showing the relationship of the Branches and the divisions of their work was published at pp. 1144-1145 of the 1934-35 Year Book.

**Publications.**—Items in the vote of the Bureau, passed by Parliament each year, provide limited funds for the printing and processing of reports and bulletins. Reports printed from type are set up by the King's Printer, but the Bureau itself operates three contact printing presses and all processed reports and bulletins are completely printed as well as published by the Bureau of Statistics.

The present policy with regard to the distribution of publications is based on sales to the public at actual cost of paper and presswork only; compilation, editing, and other overhead costs are not included. The object is to extend the service to the public as widely as possible and so spread the compilation and overhead which are the big items in total costs. A special subscription rate of \$20 per year is made to firms and individuals listed to receive the 'all publications' service. The charge entitles the payer to receive a copy of each publication as issued, with the exception of news bulletins. Other special rates are set for series of publications in related groups; these are referred to in the respective sections of the list following.

Applications for reports should be sent to the Bureau of Statistics; they should indicate the individual publication or series of reports in which the applicant is interested and include the necessary remittance in the form of a cheque or money order made payable to the Receiver-General of Canada, Ottawa.

## ADMINISTRATION—

Annual Report of the Dominion Statistician. (Included in the Annual Report of the Department of Trade and Commerce, *Price 25 cents.*)

## POPULATION—

## I. CENSUS—

## (A) Report of the Seventh Census of Canada, 1931:—

- Vol. I. General—Administrative Report of the Seventh Census followed by a summary of the leading facts of the Censuses of Population and Agriculture, Institutions, Merchandising and Service Establishments, etc., and cross-analyses relating thereto. The Appendix gives a complete bibliography of census materials and reproduces the more salient figures for specified years, chronologically arranged, back to 1605. The volume also contains a series of life tables for the Dominion and each province. *Price, Cloth \$1.50, Paper \$1.*
- Vol. II. Population by Local Subdivisions—Conjugal condition, racial origin, religion, birthplace, year of immigration, language, literacy, school attendance, etc. *Price, Cloth \$1.50, Paper \$1.*
- Vol. III. Ages of the People—Classified by sex, conjugal condition, racial origin, religion, birthplace, language, literacy, year of immigration, naturalization, etc. *Price, Cloth \$1, Paper 75 cents.*
- Vol. IV. Birthplace, Racial Origin and Year of Immigration of the People—Classified and cross-classified by conjugal condition, naturalization and citizenship, religion, language, literacy, school attendance. *Price, Cloth \$1, Paper 75 cents.*
- Vol. V. Earnings of Wage-Earners, Dwellings, Households, Families, Blind and Deaf-Mutes—Cross-classified by birthplace, conjugal condition, year of immigration, naturalization and citizenship, racial origin, religion, language, literacy, school attendance. *Price, Cloth \$1, Paper 75 cents.*
- Vol. VI. Unemployment—Classified by industry, occupation, cause, age, sex, conjugal condition, period of idleness, birthplace, racial origin, year of immigration. *Price, Cloth \$1, Paper 75 cents.*
- Vol. VII. Occupations and Industries—Cross-classified by birthplace, race, age, sex, etc. *Price, Cloth \$1, Paper 75 cents.*
- Vol. VIII. Agriculture—Agricultural population, farm holdings and land area, tenure, value of farm property and farm products, acreage and yields of crops, live stock, mortgage indebtedness and farm expenses, farm machinery, facilities and roads, co-operative marketing, etc. *Price, Cloth \$1, Paper 75 cents.*
- Vol. IX. Institutions—Hospitals for the Sick—Type, bed capacity, facilities, movement of patient population, personnel, capital investment, maintenance, receipts and expenditures, etc.; Mental Hospitals—Movement of patient population and their psychoses, age, nativity, racial origin, economic condition, conjugal condition, environment, literacy, religion, administration and personnel, etc.; Charitable and Benevolent Institutions—Type, movement of population, finances, inmates, age, sex, administration and personnel, etc.; Penitentiaries and Corrective and Reformatory Institutions—Inmates, offences, sentences, age, birthplace, citizenship, racial origin, previous employment, environment, educational status, conjugal condition, social habits, overseas service, administrative staff, receipts and expenditures. *Price, Cloth \$1, Paper 75 cents.*
- Vols. X and XI. Merchandising and Service Establishments—Retail merchandise trade cross-classified by kind of business, type of operation, size of business, employees, salaries and wages, capital investment, rent and other operating expenses, credit, etc.; Wholesale trade cross-classified by type of establishment, kind of business, operating expenses, etc.; with special reports on retail trade in urban and rural areas, chain stores, food retailing, drug stores, hotels, moving picture theatres, co-operative marketing and purchasing, etc. *Price, Cloth \$1, Paper 75 cents each Volume.*
- Vols. XII and XIII. Census Monographs—Consisting of a series of studies of such outstanding Canadian problems as: Growth of Population in Canada; Age Distribution of the Canadian People; Fertility of the Population; Origin, Language, Birthplace and Nationality of the Canadian People; Illiteracy and Educational Status; The Racial and Urban Composition of the Canadian Population since Confederation; The Canadian Family—Its Composition, Size and Condition from the Earliest Times; Housing and Rentals; Dependency; The Evolution and Present-Day Significance of the Canadian Occupational Structure; Unemployment; The Population Basis of Agriculture; Official Life Tables; Graduated Tables; Probabilities Referring to Occupations, Earnings, etc. (*In course of preparation.*) *Price, Cloth \$1, Paper 75 cents.*

## POPULATION—continued.

## I. CENSUS—continued.

(A) *Report of the Seventh Census of Canada, 1931—concluded.*

## AGRICULTURE.—

- Prince Edward Island—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*  
 Nova Scotia—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*  
 New Brunswick—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*  
 Quebec—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*  
 Ontario—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*  
 Manitoba—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*  
 Saskatchewan—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*  
 Alberta—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*  
 British Columbia—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*

(B) *Bulletins of the Seventh Census of Canada, 1931:—*

- (1) POPULATION.—*Final Bulletins.*—(V) Saskatchewan. (VI) Alberta. (XI) Rural and Urban Population for Canada and Provinces. (XIII) Cities, Towns and Villages in Canada, by Provinces. (XVI) Ages, by Provinces. (XIX) Radio Sets in Canada, 1931. (XXVI) Age Distribution by Single Years of Age for Canada, by Provinces, 1931. (XXVII) Immigrant Population Classified by Sex, Country of Birth, Province of Residence, Years of Arrival in Canada, and Citizenship of the Foreign Born, 1931. (XXVIII) Gainfully Employed Ten Years of Age and Over, Classified According to Occupation and Sex for Cities of 30,000 and Over, 1931. (XXIX) Birthplace of the Population Classified According to Nativity of Parents for Canada and Provinces, 1931. (XXX) Canadians and other Nationals. (XXXI) Gainfully Employed Ten Years of Age and Over for Canada and Provinces, 1931. (XXXII) Literacy, Language Spoken, and Conjugal Condition of the Population Ten Years of Age and Over, 1931. (XXXIII) Earnings Among Wage-Earners for Canada and Provinces, 1931. (XXXIV) Ages of the Gainfully Employed Ten Years of Age and Over, for Canada and Provinces, 1931. (XXXVII) Age Distribution by Five-Year Age Groups for Cities, Towns and Villages of 5,000 Population and Over, 1931. (XXXVIII) Population of the Municipal Wards of Montreal City by Quinquennial Age Groups, Conjugal Condition, Birthplace, Racial Origin, Religion, School Attendance and Literacy, by Sex, 1931. (XXXIX) Houses and Dwellings. (XL) Population of the Municipal Wards of the Cities of Toronto, Vancouver, Winnipeg, Hamilton, Quebec, and Ottawa by Quinquennial Age Groups, Conjugal Condition, Birthplace, Racial Origin, Religion, School Attendance and Literacy, by Sex, Census of 1931. (XLI) Orientals, Ten Years of Age and Over, Gainfully Employed by Race, Occupation and Sex, in British Columbia, 1931. (XLII) Persons Speaking Gaelic. (XLIII) Blind. (XLIV) Deaf Mutes. (XLV) Racial Origins of Gainfully Occupied, Ten Years of Age and Over for Canada and the Provinces. (XLVI) Birthplaces of Gainfully Occupied Ten Years of Age and Over, for Canada and the Provinces, 1931. (XLVII) Conjugal Condition of Gainfully Occupied Females, Fifteen Years of Age and Over, for Canada and the Provinces, 1931. Distribution of Occupations by Industry. Unemployment Among Wage-Earners—(I) Saint John, N.B.; (II) Winnipeg, Man.; (III) Kitchener, Ont.; (IV) Ottawa, Ont.; (V) Vancouver, B.C.; (VI) Hamilton, Ont.; (VII) Calgary, Alta.; (VIII) Toronto, Ont.; (IX) Montreal, Que. Population 1871-1931. Age distribution. Earnings of Wage-earners.
- (2) AGRICULTURE.—*Final Bulletins.*—Animal Products on Farms, by Counties—(VII) Ontario; (VIII) Quebec; (IX) British Columbia. Live Stock on Farms, by Counties—(X) Prince Edward Island; (XI) Nova Scotia; (XII) New Brunswick; (XIII) Manitoba; (XIV) Saskatchewan; (XV) Alberta; (XVI) British Columbia; (XVII) Ontario; (XX) Stock Sold Alive, Stock Slaughtered, Young Animals Raised, 1930, and Pure-Bred Live Stock on Farms, 1931, by Counties or Census Divisions. (XXIV) Forest Products of Farms, by Counties or Census Divisions, 1930. (XXV) Condition of Farm Land, by Counties or Census Divisions, 1931. (XXVI) Area of Field Crops, by Counties or Census Divisions, 1931.

## POPULATION—concluded.

## I. CENSUS—concluded.

(C) *Bulletins of the Quinquennial Census of the Prairie Provinces, 1936:—*

*Preliminary Bulletins.*—(I) Population of Certain Cities, Towns and Villages. (II) Population of Certain Cities, Towns and Villages. (III) Population of Certain Cities, Towns and Villages and Electoral Districts. (IV) Population of Certain Electoral Districts, Towns and Villages. (V) Number of Occupied and of "Vacant" or "Abandoned" Farms in Certain Electoral Districts. (VI) Population of Certain Electoral Districts and Cities, Towns and Villages. (VII) Area under Field Crops in 1936 in Certain Electoral Districts. (VIII) Population of Certain Electoral Districts and Cities, Towns and Villages. (IX) Population of Rural Municipalities in the Provinces of Manitoba, Saskatchewan, and Alberta. (X) Population of Certain Electoral Districts and Cities, Towns and Villages. (XI) Number of Occupied and of "Abandoned" or "Vacant" Farms in Certain Electoral Districts. (XII) Population of Certain Electoral Districts, Rural Municipalities, Cities, Towns and Villages. (XIII) Population of Electoral Districts in the Provinces of Manitoba, Saskatchewan, and Alberta. (XIV) Preliminary Announcement of Unemployment and Employment among Wage-Earners, in Cities and Towns of 5,000 Population and Over. (XV) Area under Field Crops in the Prairie Provinces, 1936 and 1931. (XVI) Number of Live Stock on Farms on June 1, 1936, in the Prairie Provinces. (XVII) Preliminary Announcement of Unemployment and Employment among Wage-Earners in Urban Centres of 1,000 to 5,000 Population. (XVIII) Preliminary Announcement of Unemployment and Employment among Wage-Earners in the provinces of Manitoba, Saskatchewan, and Alberta. (XIX) Number of Farms in the Prairie Provinces by Census Divisions. *Final Bulletins.*—(XX) Population by Townships, Rural and Urban, by Census Divisions, Age, Sex, Conjugal Condition, Birthplace, Racial Origin, Official Language, Immigration, School Attendance, Literacy, for cities of 10,000 population and over, *Price 25 cents.* (XXI) Occupations and Industries of Gainfully Occupied for Cities of 10,000 Population and Over, *Price 25 cents.* (XXII) Preliminary Report on Agriculture for the Provinces of Manitoba, *Price 15 cents.* (XXV) Preliminary Report on Agriculture for the Province of Saskatchewan, *Price 15 cents.* (XXVIII) Preliminary Report on Agriculture for the Province of Alberta, *Price 15 cents.* *Final Bulletins.*—(XXIII) Population Classifications by Provinces, *Price 25 cents.* (XXIV) Unemployment Among Wage-Earners for Cities of 10,000 Population and Over, *Price 25 cents.* (XXVI) Earnings and Employment among Wage-Earners for Cities of 10,000 Population and Over, *Price 25 cents.* (XXVII) Occupations and Industries of Gainfully Occupied for the Provinces of Manitoba, Saskatchewan and Alberta, *Price 25 cents.* (XXIX) Unemployment among Wage-Earners for the Provinces of Manitoba, Saskatchewan and Alberta, *Price 25 cents.* (XXX) Unemployment and Earnings among Wage-Earners on Relief and Not on Relief for Cities of 30,000 Population and Over, *Price 25 cents.* (XXXI) Earnings and Employment among Wage-Earners for the Provinces of Manitoba, Saskatchewan and Alberta, *Price 25 cents.* (XXXII) Earnings of Wage-Earner Heads by Tenure and Size of Family for Cities of 10,000 Population and Over, *Price 25 cents.*

(D) *Reports of the Census of Institutions:—*

- (1) Annual Report on Mental Institutions, 1935, *Price 25 cents.*
- (2) Directory of Hospitals, 1935, *Price 50 cents.*
- (3) Report on Penitentiaries and Reformatories, 1936, *Price 25 cents.*
- (4) Report on Charitable Institutions, 1936, *Price 25 cents.*
- (5) Report on Tuberculosis Institutions, 1936, *Price 25 cents.*

## II. INTERCENSAL ESTIMATES OF POPULATION.

## III. VITAL STATISTICS.

Annual Report on Vital Statistics of Canada by Provinces and Municipalities, *Price \$1*; Preliminary Annual Report on Vital Statistics of Canada, *Price 25 cents*; Preliminary Quarterly Report on Vital Statistics of Canada; Monthly Report of Births, Deaths, and Marriages registered in Cities; Special Report on Contributory Causes of Death, 1926; Order of Birth in the Registration Area of Canada, 1925; Manual of the International List of Causes of Death, Revision of 1929 (limited edition); Special Report on Mortality in Canada from Cerebral Hemorrhage and Certain Diseases of the Heart, Arteries and Kidneys, 1921-32; Special Report on Mortality in Canada According to Place of Residence, 1930-32; Special Report on Mortality from Tuberculosis in Canada According to Place of Residence, 1930-32; Special Report on Births in Canada According to Place of Residence of Mother, 1930-32; Special Report on Mortality in Canada, 1921-32; Handbook on Death Registration and Certification, containing International List of Causes of Death (special distribution); Special Report on Mortality in Canada, 1921-35, *Price 25 cents*; Special Report on Occupational Mortality in Canada, 1931-32, *Price 25 cents*; Special Report on Deaths in Canada, Classified According to Residence of Decedents, 1935 (Parts I and II), *Price, each part, 25 cents.*

## PRODUCTION—

## I. ANNUAL SURVEY OF PRODUCTION.

Including and differentiating gross and net—(1) Primary Production (agriculture, forestry, fisheries, trapping, mining, and electric power), (2) Secondary Production, or General Manufactures, Custom and Repair, and Construction, and (3) Provincial and Per Capita Analyses, Explanation of Method, *Price 25 cents*.

## II. AGRICULTURE.

- (1) *Agricultural Production*—Monthly Bulletin of Agricultural Statistics with Index, *Price \$1 per year*. (The official record of current statistical data relating to agriculture. Contains reports on crop conditions, prices, weather, etc.—estimates of areas, yields, quality, and value of field crops—value of farm lands—wages of farm help—number and values of farm live stock and poultry—dairying—eggs—tobacco—apiculture—maple products—clover and grass seed—miscellaneous crops—stocks of grain—annual summary of value of agricultural production—index numbers of agricultural prices, production, and values—international agricultural statistics.) Table of Contents and Index of Monthly Bulletin of Agricultural Statistics. Reprinted from the Monthly Bulletin of Agricultural Statistics: (a) Canadian Trade in Farm Products, 1926-27; (b) The Fertilizer Trade in Canada; (c) Farm Expenditures in Alberta and Saskatchewan, 1934; (d) Fruit Statistics of Canada, 1926-35. Advance Summaries of Agricultural Statistics. Telegraphic Crop Reports (between June 1 and Sept. 1, weekly for the Prairie Provinces and every two weeks for the rest of Canada). Agricultural Statistics by Counties and Crop Districts. Advance Summaries on Fruit Conditions, Yields, etc., *Price \$3 per year*. Annual Statistics of Fruit, Nursery Stock and Floriculture. Handbook of Instructions to Crop Correspondents, and Summary of Annual Agricultural Statistics. *Mimeographed Reports, Annual*.—Field Crop Acreages and Live Stock Numbers at June 1. Crop Reports—released on dates listed in the Crop-Reporting Program covering: (a) Intentions to Plant Field Crops; (b) Winter-killing and Spring Condition of Fall Wheat, Fall Rye, and Hay and Clover Meadows; (c) Progress of Spring Seeding; (d) Acreage, Condition, Yield, Stocks on Hand, and Value of Field Crops, *Price \$2 per year*. Fruit and Vegetables—condition reports, estimates of production and value, *Price \$1 per year*. (See also Census of Agriculture under "Population".)
- (2) *Grain and Grain Products*—(a) Annual Report on the Grain Trade of Canada, *Price 50 cents*; (b) Preliminary Report on the Grain Trade of Canada, *Price 25 cents*; (c) Monthly Review of the Wheat Situation, *Price \$1 per year*; (d) Canadian Grain Statistics (weekly report on grain supplies and movements), *Price \$2 per year*; (e) Canadian Milling Statistics (monthly), *Price 50 cents per year*; (f) List of Mills with Capacity, *Price 50 cents*; (g) The Grain Situation in Argentina (monthly), *Price \$1 per year*; (h) The Production and Distribution of Canadian Grains and Seeds—(1) Barley, (2) Oats, (3) Rye, (4) Flaxseed; (i) World Trade in Barley; (j) World Shipments of Wheat and Wheat Flour, 1926-27 to 1931-32; (k) World Trade in Wheat, *Price 25 cents*; (l) The Routing of Canadian Grain for Export; (m) Salient Features in the Grain Situation in Canada; (n) Trends in World Wheat Acreage, with graphic appendix.
- (3) *Live-Stock and Animal Products*—(a) Annual Report on Live-stock and Animal Products Statistics, *Price 25 cents*; (b) Monthly Reports on Cold Storage Holdings in Canada (1) Meat and Fish, *Price \$1 per year*, (2) Dairy and Poultry Products, *Price \$1 per year*, (3) Apples, Pears, Small Fruits, and Vegetables, *Price 50 cents per year*; (c) Monthly Reports on Stocks of Butter, Cheese, and Eggs in the Principal Cities of Canada, *Price 50 cents per year*; (d) Monthly Review of Dairy Production, *Price \$1 per year*; (e) Annual Estimates of the Consumption of Meats, Poultry, Butter, Cheese, and Eggs; (f) Annual Report on Dairying Statistics of Canada, *Price 25 cents*; (g) Annual Survey of Live Stock and Poultry at Dec. 1, *Price 25 cents*; (h) Annual Summary of Cold Storage Holdings, *Price 25 cents*; (i) The Dairy Situation in Canada (quarterly), *Price \$1 per year*.
- (4) *Other*—Monthly Report on Raw and Refined Sugar (visible supply, meltings, shipments, exports and imports), *Price \$1 per year*. Annual Summary of Sugar Reports. Annual Report on the Agricultural Situation and Outlook (published in co-operation with the Department of Agriculture) with supplements as follows: (a) The Potato Situation in Eastern Canada, 1935; (b) Production Trends and Policies in Agriculture, 1936; and (c) Charts, 1937. Report of the Conference on Agricultural Statistics, Ottawa, Mar. 30-Apr. 2, 1936.

NOTE.—Subscription price for all publications of the Agricultural Branch, \$10 per year.



## PRODUCTION—continued.

## III. FURS.

Annual Report on Fur Farms, *Price 35 cents*. List of Companies, Firms and Individuals, Engaged in Fur Farming in Canada, *Price 35*. Advance Bulletin of Statistics of the Production of Raw Furs, *Price 10 cents*. Annual Bulletin of the Production of Raw Furs (comprising the pelts taken by trappers and those sold from fur farms), *Price 25 cents*.

## IV. FISHERIES.

Annual Report of Fisheries Statistics, *Price 35 cents*. Advance Bulletins of Fish Caught and Marketed, by Provinces: Prince Edward Island, *Price 10 cents*; Nova Scotia, *Price 15 cents*; New Brunswick, *Price 15 cents*; Quebec, *Price 15 cents*; Ontario, The Prairie Provinces, and Yukon, *Price 15 cents*; British Columbia, *Price 15 cents*; Canada, *Price 25 cents*.

## V. FORESTRY.

Annual Summary of the Value, etc., of Forest Production (includes operations in the woods for sawmills, shingle mills, pulp and paper mills, etc., production of mining timber, production of poles and cross ties, and farm production of firewood, posts, etc.), *Price 15 cents*.

[See also Reports on Manufactures of Forest Products listed under "Manufactures", Section VII, Subsection (5).]

## VI. MINERAL PRODUCTION (MINING AND METALLURGY).

(1) General—(a) Annual Report on the Mineral Production of Canada, *Price 50 cents*; (b) Preliminary Reports (semi-annual) on the Mineral Production of Canada, *Price 25 cents*; (c) Monthly Reports on Leading Minerals—reports on gold, silver, lead, zinc, cobalt, nickel, copper, petroleum, gypsum, coal, cement, lime, clay, salt, asbestos, feldspar, etc., *Yearly subscription 50 cents per report*; (d) Preliminary Estimate of Canada's Mineral Production, *Price 10 cents*.

(2) Coal—(a) Annual Report on Coal Statistics for Canada, *Price 25 cents*; (b) Monthly Summary Report on Coal and Coke Statistics for Canada, *Price 50 cents per year*; (c) Quarterly Report on Coal and Coke Statistics for Canada, *Price 50 cents per year*.

(3) Annual Bulletins on Mining—Metals—The Gold-Mining Industry in Canada (including alluvial gold mining, auriferous quartz mining, copper-gold-silver mining, and tables showing Canadian and world production of gold), *Price 25 cents*. The Silver-Mining Industry in Canada (including silver-cobalt-arsenic mining, silver-lead-zinc mining, and tables showing Canadian and world production of arsenic, cobalt, lead, silver, and zinc), *Price 25 cents*. The Nickel-Copper Mining, Smelting and Refining Industry (including Canadian and world production of nickel), *Price 25 cents*. The Copper-Mining Industry (including Canadian and world production of copper), *Price 10 cents*. Metals of the Platinum Group, *Price 10 cents*. The Production of Miscellaneous Metals (including aluminium, antimony, barium, beryl, bismuth, cadmium, calcium, chromite, lithium, magnesium, manganese, mercury, molybdenite, radium, selenium, tin, titanium, tungsten), *Price 15 cents*. The Non-Ferrous Smelting and Refining Industry, *Price 15 cents*. The complete Mining Series of Reports (with the exception of Coal), *Price \$4*.

Non-Metals—Abrasives, *Price 15 cents*; Asbestos, *Price 10 cents*; Feldspar and Quartz, *Price 10 cents*; Gypsum, *Price 10 cents*; Iron Oxides, *Price 10 cents*; Mica, *Price 10 cents*; Natural Gas, *Price 10 cents*; Petroleum, *Price 15 cents*; Salt, *Price 10 cents*; Talc and Soapstone, *Price 10 cents*; Miscellaneous Non-Metallic Minerals (including actinolite, barytes, bituminous sands, fluor spar, graphite, magnesitic-dolomite, magnesium sulphate, bog manganese, mineral waters, peat, phosphate, silica brick, sodium carbonate, sodium sulphate, sulphur-pyrites), *Price 15 cents*.

Structural Materials—The Cement Industry, *Price 15 cents*; Clay and Clay Products, *Price 15 cents*; Lime, *Price 10 cents*; Sand and Gravel, *Price 10 cents*; Stone, *Price 25 cents*.

[See also Reports on Iron and Steel and Their Products, Manufactures of Non-Ferrous Metals and Chemicals and Allied Products listed under "Manufactures", Section VII, Subsections (6), (7), (8) and (9).]

NOTE.—Subscription price for all Mining, Metallurgical and Chemical reports (including reports under groups (6), (7), (8), and (9), p. 1080), \$10 per year.

## PRODUCTION—continued.

## VII. MANUFACTURES.

- (1) *General*—General Report on the Manufacturing Industries of Canada, *Price 50 cents*. Geographical Distribution of the Manufacturing Industries of Canada, *Price 25 cents*; also Reports for the Provinces and Leading Cities: Quebec, *Price 20 cents*; Ontario, *Price 20 cents*; British Columbia, *Price 15 cents*; Prairie Provinces, *Price 25 cents*; Maritime Provinces, *Price 25 cents*. Alphabetical List of Products (annual report); Quantity of Manufacturing Production in Canada, 1923-29; Consumption of Luxuries (annual report).
- (2) *Manufactures of Vegetable Products*—General Report on Manufactures of Vegetable Products, *Price 50 cents*. Annual bulletins as follows: (a) Coffee, Tea, Spices and Miscellaneous Foods, *Price 25 cents*; (b) Fruit and Vegetable Preparation, including Canning, Evaporating and Preserving, and Pickles, Sauces, Vinegar and Cider, *Price 25 cents*; (c) Flour and Grist Mill Products, *Price 25 cents*; (d) Bread and Other Bakery Products, *Price 25 cents*; (e) Biscuits and Confectionery, including Cocoa and Chocolate, *Price 25 cents*; (f) Macaroni and Vermicelli, *Price 15 cents*; (g) Distilled Liquors, *Price 25 cents*; (h) Breweries, *Price 25 cents*; (i) Wine, *Price 25 cents*; (j) Rubber Industry, *Price 25 cents*; (k) Prepared Breakfast Foods, *Price 15 cents*; (l) Sugar Refineries, *Price 25 cents*; (m) Tobacco Products, *Price 25 cents*; (n) Linseed Oil and Soya Bean Oil, *Price 15 cents*; (o) The Canned Foods Industry, *Price 15 cents*; (p) Ice Cream, *Price 15 cents*; (q) Pack of Fruits and Vegetables, (preliminary), *Price 25 cents*; (r) Stocks of Unmanufactured Tobacco on Hand, (quarterly report), *Price 50 cents*; (s) Stocks of Canned Fruits and Vegetables, (quarterly report), *Price 50 cents*; (t) Aerated and Mineral Waters, *Price 15 cents*.
- (3) *Animal Products and Their Manufactures*—Annual Report as follows: The Dairy Factory Industry, *Price 25 cents*. Annual bulletins: (a) Slaughtering and Meat Packing and Sausage and Sausage Casings, *Price 25 cents*; (b) Leather Tanneries, *Price 25 cents*; (c) Miscellaneous Leather Goods, Leather Belting, Boot and Shoe Findings, Leather, *Price 25 cents*; (d) Leather Boots and Shoes, *Price 25 cents*; (e) Leather Gloves and Mitts, *Price 20 cents*; (f) Fur Goods, Fur Dressing and Dyeing, *Price 25 cents*. Monthly bulletin on Boot and Shoe Production, *Price 50 cents per year*. Monthly bulletin on Concentrated Milk Products, *Price 50 cents per year*.
- [See also Reports on Live Stock, etc., listed under "Agriculture".]
- (4) *Textile and Allied Industries*—General Report on the Textile Industries of Canada, *Price 50 cents*. Annual Bulletins as follows: (a) Cotton Textiles (cloth, yarn, thread and waste), *Price 35 cents*; (b) Woollen Textiles (cloth, yarn, waste, carpets and woollen goods, n.e.s.), *Price 35 cents*; (c) The Silk Industry, *Price 25 cents*; (d) Men's Factory Clothing, *Price 25 cents*; (e) Women's Factory Clothing, *Price 25 cents*; (f) Hats and Caps, *Price 25 cents*; (g) Hosiery and Knitted Goods, *Price 25 cents*; (h) Men's Furnishings, n.e.s., *Price 25 cents*; (i) Oiled Clothing and Waterproofs, *Price 15 cents*; (j) Cordage, Rope and Twine, *Price 15 cents*; (k) Corsets, *Price 15 cents*; (l) Cotton and Jute Bags, *Price 15 cents*; (m) Dyeing and Finishing of Textiles, *Price 15 cents*; (n) Awnings, Tents and Sails, *Price 15 cents*.
- (5) *Manufactures of Forest Products*—Annual Reports, *Price 25 cents each*: (a) The Lumber Industry; (b) The Pulp and Paper Industry; (c) Wood-Using Industries (biennial); (d) Paper-Using Industries (biennial). Annual bulletins: (a) The Lumber Industry, *Price 25 cents*; (b) Lumber Distribution in Canada and the United States (biennial), *Price 25 cents*; (c) The Pulp and Paper Industry, *Price 20 cents*. Annual Preliminary Reports on Wood-Using Industries: (a) Planing Mills, Sash and Door Factories, *Price 20 cents*; (b) Hardwood Flooring, *Price 15 cents*; (c) Furniture, *Price 15 cents*; (d) Boxes, Baskets and Crates, *Price 15 cents*; (e) Carriages, Sleighs and Vehicle Supplies, *Price 15 cents*; (f) Cooperage, *Price 10 cents*; (g) Coffins and Caskets, *Price 10 cents*; (h) Sporting Goods, *Price 10 cents*; (i) Boat Building, *Price 10 cents*; (j) Laths, Trees and Shoe Findings, *Price 10 cents*; (k) Handles, Spools and Wood-turning, *Price 10 cents*; (l) Wooden-ware, *Price 10 cents*; (m) Excelsior, *Price 10 cents*; (n) Charcoal Manufacture, *Price 10 cents*; (o) Beekeepers' and Poultrymen's Supplies, *Price 10 cents*; (p) Miscellaneous Wood-Using Industries, *Price 10 cents*. Annual Preliminary Reports on Paper-Using Industries: (a) The Printing Trades (comprising the following industries: Printing and Publishing; Printing and Bookbinding; Lithographing; Engraving, Stereotyping and Electrotyping; Trade Composition; and Blue Printing), *Price 25 cents*; (b) Paper Boxes and Bags, *Price 15 cents*; (c) Roofing Paper, *Price 10 cents*; (d) Miscellaneous Paper Goods, *Price 10 cents*. Monthly bulletins: (a) Asphalt Roofing Production, *Price 50 cents per year*; (b) Asphalt Roofing Sales, *Price 50 cents per year*; (c) Rigid Insulating Board, *Price 50 cents per year*. Lumber Industry Series, *Price 50 cents*; Wood-Using Industries Series, *Price \$1.50*; Paper Using Industries Series, *Price \$1.75*.

## PRODUCTION—concluded.

## VII. MANUFACTURES—concluded.

- (6) *Iron and Steel and Their Products*—Biennial Report, *Price 50 cents*. Annual bulletins as follows: Preliminary Summary on the Iron and Steel Industry—(a) Primary Iron and Steel, *Price 15 cents*; (b) Castings and Forgings, *Price 15 cents*; (c) Boilers, Tanks and Engines, *Price 10 cents*; (d) Farm Implements and Machinery, *Price 15 cents*; (e) Automobile Parts and Accessories, *Price 15 cents*; (f) Automobile Statistics for Canada, *Price 25 cents*; (g) Railway Rolling-Stock, *Price 10 cents*; (h) Wire and Wire Goods, *Price 15 cents*; (i) Sheet Metal Products, *Price 10 cents*; (j) Hardware, Tools and Cutlery, *Price 10 cents*; (k) Bridge Building and Structural Steel, *Price 10 cents*; (l) Miscellaneous Iron and Steel Products, *Price 10 cents*; (m) Machinery, *Price 15 cents*; (n) Bicycles, *Price 10 cents*; (o) Iron and Steel and Their Products (final summary), *Price 10 cents*. Commodity bulletins on the production of pig iron, steel, washing machines, cream separators, warm air furnaces, galvanized sheets, wire nails, wire rope and cable, steel wire, wire fencing, stoves, etc. Monthly Reports: (a) Pig Iron, Steel, and Ferro-Alloys, *Price \$1 per year*; (b) Automobile Statistics for Canada, *Price \$1 per year*.
- (7) *Manufactures of Non-Ferrous Metals*—Biennial Report, *Price 25 cents*. Annual bulletins as follows: (a) Aluminium Products, *Price 10 cents*; (b) Brass and Copper Products, *Price 15 cents*; (c) White Metal Alloys, *Price 15 cents*; (d) Jewellery and Silverware, *Price 15 cents*; (e) Electrical Apparatus and Supplies, *Price 25 cents*; (f) Miscellaneous Non-Ferrous Metal Products, *Price 10 cents*; (g) Non-Ferrous Smelting and Refining, *Price 15 cents*; (h) Manufactures of the Non-Ferrous Metals (final summary), *Price 10 cents*. Quarterly reports on production and sales of radio sets, *Price 50 cents per year*. Quarterly reports on sales of storage batteries, *Price 50 cents per year*. Commodity bulletins on the production of batteries, silverware, vacuum cleaners, electric motors and generators, electric transformers, incandescent lamps, etc.
- (8) *Manufactures of the Non-Metallic Minerals*—Biennial Report, *Price 25 cents*. Annual bulletins as follows: Preliminary Summary on Manufactures of Non-Metallic Minerals—(a) The Asbestos Mining Industry and the Asbestos Products Industry, *Price 15 cents*; (b) The Cement Industry, *Price 15 cents*; (c) Coke and Gas, *Price 15 cents*; (d) Glass (blown, cut, and ornamental, etc.), *Price 10 cents*; (e) Lime, *Price 10 cents*; (f) Petroleum Products, *Price 25 cents*; (g) Clay and Clay Products, *Price 15 cents*; (h) Salt, *Price 10 cents*; (i) Sand-Lime Brick, *Price 10 cents*; (j) Stone (primary, monumental, and ornamental), *Price 25 cents*; (k) Abrasives, *Price 15 cents*; (l) Miscellaneous Non-Metallic Mineral Products (including carbon electrodes—gypsum products—mica products—non-metallic minerals, n.e.s.), *Price 10 cents*. Non-Metallic Mineral Products (final summary), *Price 10 cents*. Special Report on the Consumption of Coke in Canada, *Price 10 cents*. Monthly Report on Coke Statistics, *Price 50 cents per year*.
- (9) *Chemicals and Allied Products*—Biennial Report, *Price 25 cents*. Annual bulletins as follows: Preliminary Summary on Chemicals and Allied Products—(a) Coal Tar Distillation, *Price 10 cents*; (b) Acids, Alkalies and Salts, *Price 10 cents*; (c) Compressed Gases, *Price 10 cents*; (d) Explosives, Ammunition and Fireworks, *Price 10 cents*; (e) Fertilizers, *Price 10 cents*; (f) Medicinal and Pharmaceutical Preparations, *Price 15 cents*; (g) Paints, Pigments and Varnishes, *Price 15 cents*; (h) Soaps, Cleaning Preparations and Washing Compounds, *Price 15 cents*; (i) Toilet Preparations, *Price 15 cents*; (j) Inks, *Price 10 cents*; (k) Adhesives, *Price 10 cents*; (l) Polishes and Dressings, *Price 10 cents*; (m) Hardwood Distillation, *Price 10 cents*; (n) Miscellaneous Chemical Products (including boiler compounds—cellulose products—pesticides—sweeping compounds—disinfectants—matches—dyes and colours—chemical products, n.e.s.), *Price 10 cents*. Special Report on the Fertilizer Trade in Canada, *Price 10 cents*. Commodity bulletins on Sulphuric Acid, Ammonium Sulphate, etc. Special Report—Directory of Chemical Industries in Canada, as of July 1, 1932, *Price 50 cents*. Special Report on the Consumption of Chemicals in Municipal Waterworks in Canada, 1934 and 1935, *Price 25 cents*.
- (10) *Miscellaneous Manufactures*—General Report, *Price 25 cents*. Annual Bulletins as follows: (a) Brooms, Brushes and Mops, *Price 15 cents*; (b) Musical Instruments (including pianos, organs and phonographs) and Musical Instrument Materials and Parts, *Price 15 cents*; (c) Buttons, *Price 15 cents*; (d) Bed Springs and Mattresses, *Price 15 cents*.

NOTE.—For statistics of water power and central electric stations, see under heading "Public Utilities", p. 1083.

## VIII. CONSTRUCTION.

Building Permits—Monthly and Annual Record, *Price \$1 per year*. Annual Report, The Construction Industry in Canada, *Price 25 cents*.

## EXTERNAL TRADE (IMPORTS AND EXPORTS)—

- (1) Annual Report of the Trade of Canada, for the fiscal year ended Mar. 31 (showing summary historical tables, analyses of current trends, detailed tables by items, group analyses according to component material, origin and degree of manufacture, and purpose, and comparisons of the volume of trade), *Price 85*.
- (2) Condensed Preliminary Report of the Trade of Canada, for the fiscal year ended Mar. 31, *Price 25 cents*.
- (3) Annual Report of the Trade of Canada for the calendar year, *Price 50 cents*. (*Free to subscribers to Quarterly Trade Report.*)
- (4) Review of Canada's Foreign Trade during the calendar year, *Price 25 cents*.
- (5) Quarterly Report of the Trade of Canada (showing statistics of imports and exports by months and cumulative quarters), *Price \$2 per year*.
- (6) Monthly Summary of the Trade of Canada (for latest month and latest 12 months), *Price \$1 per year*.
- (7) Monthly bulletins on Trade Statistics as follows: (a) Abstract of Imports, Exports, and Duty Collected (by latest month, accrued period, and latest 12 months), *Price 75 cents per year*; (b) Summary of Canada's Imports (for latest month), *Price 75 cents per year*; (c) Summary of Canada's Exports (for latest month), *Price 75 cents per year*; (d) Canada's Imports from Principal Countries (for latest month and accrued period), *Price 75 cents per year*; (e) Canada's Domestic Exports to Principal Countries (for latest month and accrued period), *Price 75 cents per year*; (f) Canada's Monthly Trade Trends with Empire Countries (by months and accrued period), *Price 75 cents per year*. The complete series in this section (7) may be obtained for \$3 per year.
- (8) Monthly Commodity Bulletins: (a) Imports and Exports of Asbestos; (b) Imports and Exports of Coffee and Tea; (c) Imports of Farm Implements and Machinery; (d) Exports of Farm Implements and Machinery; (e) Imports and Exports of Fertilizers; (f) Imports and Exports of Footwear (except rubber); (g) Exports of Grain and Flour; (h) Imports and Exports of Hides and Skins; (i) Imports of Lumber; (j) Exports of Lumber; (k) Imports of Meats, Lard and Sausage Casings; (l) Exports of Meats, Lard and Sausage Casings; (m) Imports of Milk, Milk Products and Eggs; (n) Exports of Milk, Milk Products and Eggs; (o) Imports of Non-Ferrous Metals and Smelter Products; (p) Exports of Non-Ferrous Metals and Smelter Products; (q) Imports of Paints and Varnishes; (r) Exports of Paints and Varnishes; (s) Imports of Petroleum and Products; (t) Exports of Petroleum and Products; (u) Imports and Exports of Pipes, Tubes and Fittings; (v) Imports of Pulpwood, Pulp and Paper; (w) Exports of Pulpwood, Pulp and Paper; (z) Imports of Rubber and Products; (y) Exports of Rubber and Products; (z) Imports of Sheet Metal Products; (aa) Imports and Exports of Vegetable Oils; (bb) Imports of Vehicles (of iron); (cc) Imports and Exports of Wire; (dd) Imports and Exports of Soap; (ee) Imports and Exports of Fresh Fruits; (ff) Imports and Exports of Fresh Vegetables; (gg) Imports and Exports of Pickles and Canned Vegetables; (hh) Imports and Exports of Canned and Preserved Fruits; (ii) Imports of Animals, Living; (jj) Exports of Animals, Living; (kk) Imports and Exports of Toilet Preparations. *Price \$1 per year for imports and exports of one commodity.*
- (9) Special Trade Reports: (a) Trade of Canada with Pacific Countries (1932); (b) Canada-Belgium Trade, 1933; (c) Canada's Imports of Commodities not produced in Canada, 1929-1933; (d) Canada-Austria Trade, 1934; (e) Canada-Germany Trade, 1934.

NOTE.—Subscription price for all External Trade Branch publications \$15 per year.

## INTERNAL TRADE—

1. RETAIL AND WHOLESALE TRADE (See Vols. X and XI under *Report of the Seventh Census*, p. 1074):—

(a) Census of Merchandising and Service Establishments, 1931:—

*Final Reports (printed)*—Retail trade for the Dominion and the provinces, showing number of establishments, kinds of business, types of operation, full-time and part-time employees and wages, operating expenses, size of business, credit sales, forms of organization, capital invested, and sales by commodities; details for cities with populations of 30,000 and over by kinds of business, and types of operation, and by kinds of business for counties or census divisions and incorporated places with populations of 1,000 and over. Retail Trade, Canada,

## INTERNAL TRADE—continued.

## 1. RETAIL AND WHOLESALE TRADE—concluded.

(a) Census of Merchandising and Service Establishments, 1931—concluded.

*Final Reports (printed)*—concluded.

*Price 50 cents; Ontario, Price 50 cents; Quebec, Price 50 cents; similar reports for each of the other provinces, Price 35 cents.* Reports on wholesale trade similar in form and scope to the retail series. Wholesale Trade in Canada, *Price 25 cents*; similar reports for each of the five economic divisions of the country, *Price 25 cents.* Census of Canada, 1931, Vol. X—comprises the merchandising statistics contained in the retail series together with an analysis of results and special tables showing commodity sales; Vol. XI—comprises (1) statistics on retail services contained in the retail trade series, (2) all statistics on wholesale trade, (3) special sections dealing with retail chains, hotels, and distribution of sales of manufacturing plants, (4) analysis of results. *Price—Cloth \$1, Paper 75 cents for each volume.*

(b) *Annual Reports (processed)*—Estimates of the total retail and wholesale trade, by provinces and by kinds of business. Retail Trade in Canada, *Price 25 cents.* Separate reports for the five economic divisions, *Price 10 cents each.* Wholesale Trade in Canada and the Provinces, *Price 10 cents.* Miscellaneous Results on Retail Trade (gross margins, stocks, payroll, accounts outstanding), *Price 10 cents.* Similar report on wholesale trade, *Price 10 cents.* Motion Picture Theatres, *Price 25 cents.* Sales of Manufacturers' Outlets, *Price 10 cents.* Complete merchandising series for one year, *Price \$1.*

(c) *Monthly Reports*—Changes in the Value of Wholesale Sales; Changes in the Value of Country General Store Sales; *Price 75 cents per year for each publication.* Changes in the Value of Retail Sales; New Motor Vehicle Sales for Canada and the Provinces; Financing of Automobile Sales; *Price \$1 per year for each publication; the two last-named together \$1.50 per year.*

(d) *Special Reports*—A Decade of Retail Trade, 1923-1933 (estimated sales by provinces and by kind-of-business groups carried back to 1923 and extended to 1933); Comparative figures for chain stores. Monthly Indexes of Retail Sales, 1929-1935 (monthly reports on retail trade summarized, corrections applied to allow for differences in number of business days and for seasonal variations). Weekly Earnings of Employees in Merchandising and Service Establishments, 1936—average weekly earnings for male and female employees shown by provinces and for selected kinds of business. Distribution of employees to show percentages of total number receiving various weekly amounts, *Price 25 cents.* The Marketing Structure of the Wholesale Grocery Trade (special analysis of wholesale grocery trade, together with summary figures on grocery retailing), *Price 25 cents.*

## 2. PRICES STATISTICS.

*Annual Reports*—Report on Prices and Price Indexes in Canada, in the British Empire, and in Foreign Countries (dealing with exchange and currency, security prices—common stocks, preferred stocks, mining stocks—bond yields, U.S. common stocks, prices and index numbers of street car rates, hospital charges, manufactured and fuel gas, electric light rates, telephone rates—and import and export prices and valuations), *Price 25 cents.* Preliminary Summary of Price Movements, 1936.

*Quarterly Reports*—Index Numbers of Wholesale Prices and Cost of Living in Canada, British Empire and Foreign Countries, *Price 25 cents per year.*

*Monthly Reports*—Index Numbers of Wholesale and Retail Prices in Canada—Security Prices—Exchange Rates, *Price \$1 per year.*

*Weekly Reports*—Index Numbers of Wholesale Prices; Index Numbers of Common Stock Prices and Long Term Bond Yields; Index Numbers of Mining Stock Prices, *Price \$1.50 per year.*

*Special Reports*—Urban Earnings and Housing Accommodation in Canada, 1931 and 1936, *Price 25 cents.*

*The complete Prices Series of reports, Price \$2.*

## 3. RECORDS OF BRANCH PLANT DEVELOPMENT IN CANADA.

Lists of New Concerns Locating in Canada in Recent Years. Bulletin on Branch and Subsidiary Industries in Canada, *Price 10 cents.* British and Foreign Direct Investments in Canada.

## INTERNAL TRADE—concluded.

## 4. BALANCE OF INTERNATIONAL PAYMENTS, CAPITAL MOVEMENTS, AND INTERNATIONAL INVESTMENTS.

(a) *Annual Reports*—The Canadian Balance of International Payments, 1926-1936. (Current international transactions in goods, gold and services and movements of capital), *Price 25 cents*. British and Foreign Capital Invested in Canada, and Canadian Capital Invested Abroad 1926-1936, *Price 25 cents*. Estimated Balance of International Payments for Canada, British and Foreign Investments in Canada, and Canadian Investments Abroad. Preliminary Statements for 1937, *Price 15 cents*.

(b) *Monthly Reports*—Sales and Purchases of Securities Between Canada and Other Countries. *Price, single copies 10 cents, \$1 per year*.

NOTE.—Subscription price for all Internal Trade Branch publications, \$5 per year.

## TRANSPORTATION, COMMUNICATIONS AND PUBLIC UTILITIES—

(1) *Railways and Tramways*.—Annual Reports: (a) Railway Statistics, *Price 50 cents*; (b) Electric Railway Statistics, *Price 25 cents*; (c) Location of Railway Mileages, *Price 10 cents*; (d) Summary of Monthly Railway Traffic Report, *Price 25 cents*; (e) Canadian National Railways, 1923-1936, *Price 20 cents*; (f) Canadian Pacific Railway, 1923-1936, *Price 20 cents*. Monthly Reports: (a) Railway Revenues, Expenses, Incomes, and Operating Statistics, *Price 50 cents*; (b) Freight Traffic of Railways, *Price 50 cents*. Weekly Report: Car Loadings of Revenue Freight, *Price \$1.50 per year*. Special Report: Index Numbers of Railway Freight Rates, *Price 25 cents*. Subscription price for all railway reports, \$3 per year.

(2) *Express*.—Annual Report on Express Statistics, *Price 25 cents*.

(3) *Telegraphs*.—Annual Report on Telegraph Statistics, *Price 25 cents*.

(4) *Telephones*.—Annual Report on Telephone Statistics, *Price 25 cents*.

(5) *Water Transportation*.—(a) Annual Report on Canal Statistics, *Price 25 cents*; (b) Monthly Report on Canal Statistics, *Price 50 cents*.

(6) *Electrical Stations*.—(a) Annual Report on Central Electric Stations in Canada, *Price 25 cents*; (b) Report on Index Numbers of Electric Light Rates, *Price 25 cents*; (c) Report on use of Electric Energy in Industries, *Price 25 cents*; (d) Monthly Report on Electric Energy Generated, *Price 50 cents*. Subscription price for all central electric station reports, \$1 per year.

(7) *Motor Vehicles*.—(a) Annual Report on Motor Vehicle Registrations, *Price 10 cents*; (b) Highways—Annual Report on Highway Mileage Open for Traffic, Construction, and Expenditures on Construction and Maintenance, *Price 25 cents*.

(8) *Civil Aviation*.—Annual Report, *Price 25 cents*.

NOTE.—Subscription price for all Transportation, Communications, and Public Utilities Branch publications, \$5 per year.

## FINANCE—

THE PUBLIC DEBT OF CANADA, DOMINION, PROVINCIAL AND MUNICIPAL, *Price 25 cents*.

## PROVINCIAL PUBLIC FINANCE.

(1) *Financial Statistics of Provincial Governments*.—(a) 1921 to 1935, including special Summaries and Analyses (1923, 1924, and 1927-31, out of print), *Price 25 cents*; (b) Bonded Indebtedness of Provinces. Special analysis, 1916 to 1930. (Out of print.)

## MUNICIPAL FINANCE.

(1) *Statistics of Cities and Towns*.—(a) Urban Municipalities Having a Population of 10,000 and Over, 1919 and 1920; (b) 1925 to 1935, *Price 25 cents* (1925 and 1928 out of print); (c) Urban Municipalities Having Populations of 3,000 to 10,000, 1919; (d) Urban Municipalities Having Populations of 1,000 to 3,000, 1920; (e) Urban Municipalities Having Populations of 5,000 and Over, and 1,000 to 5,000, 1922.

(2) *Assessment Valuations. Analysis by Classes of Municipalities*.—(a) 1919 to 1923; (b) 1924 to 1935, *Price 25 cents*.

(3) *Bonded Indebtedness by Classes of Urban and Rural Municipalities*.—(a) 1919 to 1935, *Price 25 cents*. (1919-23 out of print.)

(4) *Municipal Tax Levies and Receipts*.—Historical Analysis, 1913-35, *Price 25 cents*.

## FINANCE—concluded.

## CIVIL SERVICE STATISTICS OF THE DOMINION GOVERNMENT.

- (a) Numbers of Personnel and Salary Expenditure for the Month of January, 1912-1924; (Special Report—out of print); (b) Numbers of Personnel and Salary Expenditures by Months, *Price 25 cents*—(1) 1925-31; (2) 1932-34; (3) 1935-36.

## JUSTICE—

*Criminal Statistics.*—Annual Report, *Price 50 cents*. (Covers convictions, sentences, prison statistics, police statistics, pardons, commutations, and executions.)

## EDUCATION—

*Annual Survey of Education in Canada.*—(Published annually since 1921.) Includes a bibliography of Canadian studies in education (since 1932) and an index of Canadian education periodicals (since 1934). *Price 50 cents*.

*Biennial Survey of Libraries in Canada, 1931, 1933, 1935.*—(Previous to 1931 library statistics were published at irregular intervals, first for the year 1921.) The Survey now includes public, university, college, government and other technical libraries in each edition. Libraries are listed individually with addresses, names of librarians, and certain other information concerning each library. School libraries were reviewed in the Survey for 1935; hospital and other institutional libraries in the Survey for 1931. *Price 25 cents*.

*Report of Dominion-Provincial Conference on School Statistics, 1920, 1936.*—A statement of the recommendations for increased comparability and usefulness in school statistics, resulting from discussion among officials of the provincial Departments of Education and the Dominion Bureau of Statistics. *Free*.

## SPECIAL EDUCATIONAL BULLETINS.—

- (1) *Salaries, Qualifications and Experience of Canadian Teachers.*—A presentation of statistics for six provinces according to the plan recommended by the Dominion-Provincial Conference of 1936. *Price 15 cents*.
- (2) *Supply and Demand in the Professions in Canada.*—The census record of professional occupations is consulted, along with university statistics of recent years, to see to which occupations the universities are graduating more (or fewer) workers than required. A list of schools and faculties training for each profession is appended. *Price 25 cents*.
- (3) *The Use of Films and Slides in Canadian Schools.*—A summary of the information collected concerning more than 90 per cent of Canadian schools. Includes a list of about 70 motion picture sources in Canada, and 300 addresses of persons especially interested in school motion pictures. *Price 25 cents*.
- (4) *The Use of Radios and Phonographs in Canadian Schools.*—A companion bulletin to Number 3. *Price 25 cents*.
- (5) *The Extent of Language Study in High Schools.*—A comparison of the Canadian provinces with the States of the United States. *Price 15 cents*.
- (6) *Directory of Private Schools in Eight Provinces.*—Includes the addresses of independent elementary, secondary and commercial schools in all provinces except Quebec (for which a similar list is published by the province). Indicates for each school its control, and whether its pupils are elementary or secondary, boys or girls. A page is included to indicate what other school directories are available in Canada. *Price 25 cents*.
- (7) *List of Public Secondary Schools in Canada.*—Lists the larger secondary schools of each province alphabetically according to post office address—about 1,150 academic, 80 technical, and 100 commercial high schools. Agricultural schools and schools of fine art are also included. *Price 50 cents*.

NOTE.—Subscription price for all Education Branch publications, \$1 per year.

## GENERAL—

- (1) *National Wealth and Income*.—Estimates of the National Wealth of Canada, by Provinces, Industries, etc., *Price 25 cents*; Income Assessed for Income War Tax, *Price 15 cents*.
- (2) *Employment*.—Monthly and Annual Reports on Employment (with Index Numbers of Employment by Economic Areas, Cities and Industries), *Price \$1 per year*.
- (3) *Commercial Failures*.—Monthly and Annual Reports, *Price 50 cents per year*.
- (4) *Bank Debits*.—Monthly and Annual Reports of Bank Debits to Individual Accounts at the Clearing-House Centres of Canada and the Equation of Exchange, *Price 50 cents per year*.
- (5) *Business Statistics*.—The Monthly Review of Business Statistics, *Price \$1 per year*.—A statistical summary with charts and text, of current economic conditions in Canada. Special Supplements, *Price 25 cents*.—Twelve Years of the Economic Statistics of Canada, 1919-30; Monthly Indexes of the Physical Volume of Business in Canada, 1919-32; Original Monthly Statistics of Chief Economic Importance, 1919-32. Recent Economic Tendencies in Canada 1919-1934, *Price 25 cents*. Economic Fluctuations in Canada During the Post-War Period, *Price 25 cents*. Business Conditions in Canada in Elapsed Months of Current Year (monthly), *Price \$1 per year*.
- (6) *Divorce*.—Annual Report, *Price 10 cents*.
- (7) *Liquor Control*.—Annual Report on the Control and Sale of Liquor, *Price 25 cents*.
- (8) *Tourist Trade*.—Annual Report, *Price 25 cents*.
- (9) *The Maritime Provinces in Their Relation to the National Economy of Canada*.—A statistical study of their social and economic condition since Confederation, *Price 50 cents*.
- (10) *The Prairie Provinces in Their Relation to the National Economy of Canada*.—A statistical study of their social and economic condition in the twentieth century, *Price 50 cents*.
- (11) *The Canada Year Book*.—The official statistical annual of the physiography, resources, history, institutions, and social and economic conditions of the Dominion, with a statistical summary of the progress of Canada, maps, diagrams, etc., *Price \$1.50*.

Contents: I. Physical Characteristics of Canada (geographical features; geological formation; seismology; flora; fauna, natural resources; climate and meteorology). II. History and Chronology. III. Constitution and Government (constitution and general government of Canada; provincial and local government in Canada; parliamentary representation in Canada). IV. Population (growth and distribution). V. Vital Statistics. VI. Immigration. VII. Survey of Production. VIII. Agriculture. IX. Forestry. X. Fur Resources and Fur Production. XI. Fisheries. XII. Mines and Minerals. XIII. Water Power. XIV. Manufactures. XV. Construction. XVI. External Trade. XVII. Internal Trade. XVIII. Transportation and Communications (government control over transportation and communications; steam railways; electric railways; express companies; road transportation; waterways; air navigation; wire communications; wireless communications; the post office; the press). XIX. Labour and Wages. XX. Prices. XXI. Public Finance (Dominion public finance; provincial public finance; municipal public finance; national wealth and income). XXII. Currency and Banking; Miscellaneous Commercial Finance. XXIII. Insurance (and Government annuities). XXIV. Commercial Failures. XXV. Education. XXVI. Public Health and Related Institutions. XXVII. Judicial and Penitentiary Statistics. XXVIII. Miscellaneous Administration (public lands; national defence; public works; etc.). XXIX. Sources of Official Statistical and Other Information Relative to Canada. XXX. The Annual Register (Dominion legislation; principal events of the year; extracts from the *Canada Gazette*, re official appointments, commissions, etc.). Appendix.

(Issues of the *Canada Year Book* for 1920 (English only), 1921, 1924, 1925, 1926 (English only), 1929, 1930, 1931, and 1936, are available.)



## GENERAL—concluded.

- (12) *Canada*.—The Official Handbook of Present Conditions and Recent Progress (published annually), Price 25 cents.
- (13) *The Daily News Bulletin*.—A mimeographed report summarizing the chief items of statistical importance in news-letter form, and listing the reports issued each day by the Bureau of Statistics, Price \$1.50 per year.
- (14) *The Weekly News Bulletin*.—A mimeographed report summarizing the chief items of statistical importance in news-letter form, and listing the reports issued each week by the Bureau of Statistics, Price \$1 per year.
- (15) *A Fact a Day about Canada*.—A monthly compilation of daily facts, particularly useful in school work, Price 25 cents a year.

NOTE.—The complete service of all publications issued by the Bureau (with the exception of news bulletins) may be obtained for a special rate of \$20 per year.

## Section 2.—Acts Administered by Dominion Departments.

## List of the Principal Acts of Parliament Administered by Departments of the Government of the Dominion of Canada, as Compiled from Information Supplied by the respective Departments.

(Numbers within parentheses, unless otherwise indicated, denote chapters of the Revised Statutes of Canada, 1927—R.S.C., 1927.)

NOTE.—Copies of individual Acts of Parliament may be obtained from the King's Printer at prices of from 10 cents to \$1 per copy according to number of pages.

**Agriculture.**—Department of Agriculture (4); Experimental Farm Stations (61); Dairy Industry (45); Cold Storage (25); Seeds (185); Feeding Stuffs (67); Live Stock Pedigree (121); Live Stock and Live Stock Products (120); Animal Contagious Diseases (6); Meat and Canned Foods (77); Destructive Insect and Pest (47); Fertilizers (69); Root Vegetables (181); Section 235, Criminal Code (Race Track Betting) (36); Inspection and Sale (100); Maple Sugar Industry (1930, c. 30); Agricultural Pests Control (5); Natural Products Marketing (1934, c. 57; 1935, c. 64); Hay and Straw Inspection (1932-33, c. 26); Prairie Farm Rehabilitation (1935, c. 23); Fruit, Vegetables and Honey (1935, c. 62).

**Auditor General.**—Consolidated Revenue and Audit (1931, c. 27).

**Civil Service Commission.**—Civil Service (22), as amended (1932, c. 40).

**External Affairs.**—The functions and duties of this Department are defined by the Department of External Affairs Act (65).

**Finance.**—Appropriation; Bank (1934, c. 24); Bank of Canada (1934, c. 43 and 1936, c. 22); Bankruptcy (11) and (1931, cc. 17 and 18, and 1932, c. 30); Bills of Exchange (16) and (1934, c. 17); Board of Audit (10); Canadian Farm Loan (66) and (1934, c. 46 and 1935, c. 16); Canadian Fisherman's Loan (1935, c. 52); Canadian National Railways Refunding (1935, c. 3); Canadian National Railways Financing and Guarantee, (1937, c. 6); Civil Service Superannuation (24); Consolidated Revenue and Audit (1931, c. 27); Currency (40); Dept. of Finance and Treasury Board (71) and (1931, c. 48); Exchange Fund (1935, c. 60); Farmers' Creditors Arrangement (1934, c. 53 and 1935, cc. 20 and 61); Federal District Commission (1927, c. 55; 1928, c. 26); Dominion Housing (1935, c. 58) Home Improvement Loans Guarantee (1937, c. 11); Interest (102); Old Age Pensions (156) (1931, c. 42; 1937, c. 13); Penny Bank (13); Provincial Subsidies (192); Quebec Savings Banks (14) (1934, c. 39); Special War Revenue (179) (1928, c. 50; 1934, c. 42)—(in part); Gold Export (1932, c. 33; 1935, c. 21); Tariff Board (1931, c. 55); Winding-Up (213). Not regularly administered by the Department but under the jurisdiction of the Minister of Finance: Escheats (58); Money Lenders (135); Pawnbrokers (152); Satisfied Securities (184).

**Fisheries.**—Fisheries (1932, c. 42; 1934, c. 6; 1935, c. 5); Fish Inspection (72); Meat and Canned Foods (77) (1934, c. 35; 1935, c. 31, so far as it relates to fish and shellfish); Deep-Sea Fisheries (74); Northern Pacific Halibut Fishery (Convention) (1937, c. 36); Pelagic Sealing (153); Customs and Fisheries Protection (43) so far as it relates to fisheries; Navigable Waters Protection (140, in part); Act respecting Sockeye Salmon Fisheries Convention (1930, c. 10); The Fisheries Research Board Act (1937, c. 31) is also administered by the Minister of Fisheries.

**Insurance.**—Department of Insurance (1932, c. 45); Canadian and British Insurance Companies (1932, c. 46; 1932-33, c. 32; 1934, cc. 27, 45; 1936, c. 18; 1937, c. 5); Foreign Insurance Companies (1932, c. 47; 1934, c. 36); Loan Companies (28) (1934, c. 56); Trust Companies (29) (1931, c. 57); Civil Service Insurance (23).

**Justice.**—Department of Justice (106); Solicitor-General's (107); Northwest Territories (142); Yukon (215); Royal Canadian Mounted Police (160); Judges (105); Supreme Court (35); Exchequer Court (34); Admiralty (33); Petition of Right (158); Criminal Code (36); Penitentiary (154); Prisons and Reformatories (163); Identification of Criminals (38); Ticket of Leave (197); Fugitive Offenders (81); Extradition (37); Juvenile Delinquents (108). The following Acts, while not regularly administered by the Department, are under the jurisdiction of the Minister of Justice: Canada Evidence (59); Marriage and Divorce (127); Tobacco Restraint (199); Debts due the Crown (1927, c. 51; 1932, c. 18); Juvenile Delinquents (1929, c. 46); Administration of Justice in the Yukon (1920, c. 62); Divorce (Ontario, 1930, c. 14); Divorce Jurisdiction (1930, c. 15).

**King's Printer and Controller of Stationery.**—Public Printing and Stationery (162); The Publication of Statutes (2).

**Labour.**—Labour Department (111); Conciliation and Labour (110); Industrial Disputes Investigation (112); Fair Wages Resolution of the House of Commons, 1900; Fair Wages and Hours of Labour (1935, c. 39); Employment Offices Co-ordination (57); Technical Education (103) (1934, c. 9); Vocational Education (1931, c. 59); Government Annuities (7) (1931, c. 33); Combines Investigation (26) as amended (1935, c. 54, and 1937, c. 23); White Phosphorous Matches (128); Unemployment Relief (1930, c. 1); Unemployment and Farm Relief (1931, c. 58) and Unemployment and Farm Relief Continuance (1932, c. 13); Relief (1932, c. 36); Relief (1932-33, c. 18); Relief (1934, c. 15); Relief (1935, c. 13); Unemployment Relief and Assistance (1936, cc. 15, 46); Unemployment and Agricultural Assistance (1937, c. 44).

**Mines and Resources.**—Lake of the Woods Control Board (1921, c. 10); Explosives (62); Forest Reserves and Parks (78); Geology and Mines (83); Seed Grain (87); Seed Grain Sureties (88); The Immigration Act (93); The Chinese Immigration Act (95); Indian Act (98); Irrigation (104); Dominion Lands (113); Public Lands Grants (114); Ordnance and Admiralty Lands (115); Railway Belt (116); Dominion Lands Survey (117); Lands Titles (118); Manitoba Supplementary Provisions (124); Migratory Birds Convention (130); Northwest Game (141); Northwest Territories (142); Reclamation (175); Saskatchewan and Alberta Roads (180); Soldier Settlement (188); Dominion Water Power (210); Railway Belt Water (211); Yukon (215); Yukon Placer Mining (216); Yukon Quartz Mining (217); St. Regis Islands (1927, c. 37); An Act respecting certain debts due the Crown (1927, c. 51); Domestic Fuel (1927, c. 52); Lac Seul Conservation (1928, c. 32); An Act respecting Water Power in Alberta, Saskatchewan, and Manitoba, (1929, c. 61); Alberta Natural Resources (1930, c. 3); Manitoba Natural Resources (1930, c. 29); National Parks (1930, c. 33); Railway Belt and Peace River Block (1930, c. 37); Saskatchewan Natural Resources (1930, c. 41); Refunds (Natural Resources) (1932, c. 35).

**National Defence.**—Department of National Defence (136); Naval Service (139); Naval Discipline; Militia (132); Militia Pension (133); Royal Military College (1928, c. 7); Ss. 85 and 86 Criminal Code; Army; Regimental Debts; Aeronautics (3); Air Force; Visiting Forces (British Commonwealth), 1933 (1932-33, c. 21).

**National Revenue.**—Customs Tariff (44); Customs (42); Canada Shipping (in part) (186); Animal Contagious Diseases (in part) (6); Destructive Insect and Pest (in part) (47); Export (63); Copyright (in part) (32); Petroleum and Naphtha (159); Excise (60); Special War Revenue, 1915 (179); Income War Tax, 1917 (97); Agricultural Pests Control (in part) (5); Customs and Fisheries Protection (in part) (43); Explosives (in part) (62); Fertilizers (in part) (69); Food and Drugs (in part) (76); Fruit, Vegetables, and Honey, (in part) (1935, c. 62); Inspection and Sale (in part) (100); Meat and Canned Foods (in part) (77); Opium and Narcotic Drug (in part) (144); Precious Metals Marking (in part) (84); Patent and Proprietary Medicine (in part) (151); Quarantine (in part) (168); Seeds (in part) (185); Weights and Measures (in part) (212).

**Pensions and National Health.**—*Pensions:* Department of Pensions and National Health (Part I) (1928, c. 39); War Veterans' Allowance (1930, c. 48, and amendments); Veteran's Assistance Commission (1936, c. 47); Pension (157 and amendments); Returned Soldiers' Insurance (1920, c. 54, and amendments). The two latter Acts are adjudicated upon by the Canadian Pension Commission. *National Health:* Department of Pensions and National Health (Part II) (1928, c. 39); Quarantine (168); Public Works Health (91); Leprosy (119); Canada Shipping (Sick and Distressed Mariners) (1934, c. 44); Proprietary or Patent Medicine (151); Opium and Narcotic Drug (1929, c. 49 and amendments); Food and Drugs (including Honey) (76 and amendments).

**Post Office.**—Post Office (161); Special War Revenue (in part) (179).

**Public Archives.**—Public Archives (8).

**Public Works.**—Expropriation (64); Ferries (68); Government Harbours, Piers and Breakwaters (Section 5) (89); Navigable Waters Protection (Part I) (140); Public Works (166); Government Works Toll (167); Railway (Section 248) (170); Dry Dock Subsidies (191); Telegraphs (194); National Art Gallery (1913, c. 33); Act Regulating Vehicular Traffic on Dominion Property (1930, c. 47).

**Secretary of State.**—Companies (1934, c. 33) as amended; Naturalization (138); Patents (1935, c. 32); Copyright (32) as amended; Unfair Competition (1932, c. 38); Canada Temperance (196); Boards of Trade (19) as amended; Ticket of Leave (197) as amended; Trade Unions (202); Companies' Creditors Arrangement (1932-33, c. 36); Canadian Nationals (21) Department of State (189); Translation Bureau (1934, c. 25); Treaties of Peace; Timber Marking (198) (1930, c. 45); Trade Mark and Design (201) (1928, c. 10).

**Trade and Commerce.**—Canada Grain (1930, c. 5; 1932-33, cc. 9, 24; 1934, c. 26); Electricity and Fluid Exportation (54); Electricity Inspection (55); Electric Units (56); Gas Inspection (82); Inland Water Freight Rates (208); Precious Metals Marking (84) (1928, c. 40; 1929, c. 53); Statistics (190); Weights and Measures Inspection (212); Act to place Canadian Coal used in the Manufacture of Iron or Steel on a Basis of Equality with Imported Coal (1930, c. 6); Water Meters (209); Research Council (177); Canadian Wheat Board (1935, c. 53); Dominion Trade and Industry Commission (1935, c. 59).

**Transport.**—Canada Shipping, 1934 (1934, c. 44); Government Harbours and Piers (89); Live Stock Shipping (122); Maritime Conventions (126); Navigable Waters Protection (Part 2) (140); Government Vessels Discipline (203); The Water-Carriage of Goods, 1936 (1936, c. 49); United States Wreckers (214); Belleville Harbour Commission (1899, c. 35); Hamilton Harbour Commission (1912, c. 98); North Fraser Harbour Commission (1913, c. 162); New Westminster Harbour Commission (1913, c. 158); Trenton, Ontario, Harbour Commission (1922, c. 50); Dominion Harbour Commission, 1911 (1911, c. 26); Winnipeg and St. Boniface Harbour Commission (1912, c. 55); National Harbours Board, 1936 (1936, c. 42); Canadian Broadcasting, 1936 (1936, c. 24); Department of Transport (171), as amended (1936, c. 34); Government Railways (173); Intercolonial and Prince Edward Island Railways Employees' Provident Fund (1907, c. 22); National Transcontinental Railway (1903, c. 71); Canadian National Railways (172); Government Employees' Compensation (30); Canadian National Steamships, 1927 (1927, c. 20); Maritime Freight Rates (79); Canadian National-Canadian Pacific, 1933 (1933, c. 33) as amended (1936, c. 25); Railway (170); Trans-Canada Air Lines, 1937 (1937, c. 43); Radiotelegraph (195); Aeronautics (3).

An Act Respecting the Beauharnois Light, Heat and Power Co. (1931, c. 19); An Act to declare certain works of the Beauharnois Light, Heat and Power Company to be for the general advantage of Canada (1931, c. 20).

### Section 3.—Publications of Dominion Departments.

**List of Principal Publications of the Departments of the Government of the Dominion of Canada as Compiled from Information Supplied by the respective Departments.**

*NOTE.*—A catalogue of the official publications of the Parliament and Government of Canada, stating prices, is issued regularly once a year, with supplements when required; copies may be obtained from the King's Printer, Ottawa.

**Agriculture.**—Annual Reports of the Minister, the Veterinary Director General, and progress reports of the Dominion Agrostologist, 1934-36, Dominion Apiarist, 1931-33, Dominion Bacteriologist, 1934-36, Dominion Botanist, 1931-34, Dominion Cerealist, 1934-37, Dominion Chemist, 1934-36, Dominion Field Husbandman, 1931-35, Dominion Horticulturist 1931-33, Dominion Poultry Husbandman, 1931-33, Economic Fibre Production, 1934-36, Experimental Fox Ranch, Summerside, 1931-34, Illustration Stations, 1931-33. Divisions of the Experimental Farms Branch. Progress Reports covering the work conducted on the Experimental Farms and Stations located at Agassiz, B.C., 1931-35, Brandon, Man., 1931-36, Beaverlodge, Alta., 1931-36, Cap Rouge, Que., 1933-36, Charlottetown, P.E.I., 1932-36, Farnham, Que., 1931-35, Fredericton, N.B., 1931-36, Harrow and Delhi, Ont., 1932-36, Indian Head and Sutherland, Sask., 1932-36, Indian Head, Sask., 1932-36, Kapuskasing, Ont., 1931-36, Kentville, N.S., 1931-36, Lacombe, Alta., 1932-36, L'Assomption, Que., 1930-36, Lemnoxville, Que., 1931-36, Lethbridge, Alta., 1931-36, Manyberries, Alta., 1927-36, Nappan, N.S., 1932-36, Rosthern, Sask., 1931-36, Saanichton, B.C., 1932-36, Scott, Sask., 1931-36, Ste Anne de la Pocatière, Que., 1931-36, Summerland, B.C., 1932-36, Summerside Fox Ranch, P.E.I., 1931-34, Swift Current, Sask., 1931-36, Windermere, B.C., 1931-36. Bulletins and circulars of the Experimental Farms Branch on a great variety of agricultural subjects, including publications of the following Divisions: Field Husbandry; Animal Husbandry; Horticulture; Cereal; Chemistry; Forage Plants; Botanical; Poultry; Tobacco; Economic Fibre; Bacteriology; Bees; and Illustration Stations. Bulletins of the Dairy and Cold Storage Branch relating to the dairying and cold storage industries in Canada, the making of butter and cheese, dairying experiments, co-operation, etc. Reports, bulletins, circulars,

etc., of the Live Stock Branch on cattle, sheep, swine, and poultry, marketing of eggs, wool, etc. Bulletins of the Health of Animals Branch, with regulations as to: contagious abortion; rabies; sheep scab; actinomycosis; anthrax; glanders; hog cholera; tuberculosis; foot and mouth disease; quarantine; and meat inspection. Bulletins and reports of the Seed Branch as to seed-testing, the production and use of seed grains, the Seed Control Act, the Feeding Stuffs Act and the Fertilizers Act. Bulletins and circulars of the Entomological Branch and instructions to importers of nursery stock. Fruit Branch reports relating to the marketing of fruits and vegetables and their preservation, the Fruit and Honey Act and the Maple Sugar Industry Act.

A pamphlet entitled "Departmental Directory and List of Publications" contains a list of the publications of the Department, numbering more than 300. These publications include, in addition to the reports, bulletins, and circulars on field crops, live stock, dairying, orchard and garden, animal, insect, and plant diseases, bee-keeping, poultry, and miscellaneous topics. With few exceptions, the publications of the Department are free on application to its Publicity and Extension Branch.

#### Auditor General.—Annual Report.

**Board of Railway Commissioners for Canada.**—Annual Report. Pamphlet containing Judgments, Orders, Regulations, and Rulings, issued fortnightly.

**Civil Service Commission.**—Annual Report. Regulations of the Civil Service Commission. The Classification of the Civil Service of Canada. How Appointments are made in the Public Service. Examinations for Clerks, Stenographers, and Typists. Examinations for Custom Service. Examinations for Postal Service. Examinations for Junior Trade Commissioners. Positions exempted from the Civil Service Act.

**External Affairs.**—Annual Report. Annual Treaty Series. British and Foreign Government Representatives in Canada. Report of the Canadian Delegates to the Assembly of the League of Nations.

**Finance.**—Annual Report on the Public Accounts of the Dominion of Canada. Monthly Statements of the Chartered Banks of Canada. Estimates. Particulars of Dominion of Canada Loans Outstanding. Reprint of the Budget Speech of the Minister of Finance. Report on the Administration of Old Age Pensions in Canada. Report on Dominion Subsidies and Grants to Provinces of Canada.

#### Fisheries.—(Publications marked \* are available in both English and French editions.)

\*Annual Report, including Fish Culture Report. Annual Statistical Report (contains both English and French sections). Fish Culture Report. Popular Account of a Number of Canadian Fishes—A. Halkett. \*Canada's Fisheries. Map of the Atlantic Coast Provinces showing the Inshore and Deep-Sea Fishing Grounds. Statistics of the Haddock Fishery in North American Waters—A. W. H. Needler. Statistics of the Catch of Cod off the East Coast of North America, 1926—O. E. Sette. Statistics of the Mackerel Fishery off the East Coast of North America, 1894 to 1930—O. E. Sette and A. W. H. Needler. Discoloration, Smut or Blackening of Canned Lobsters—Harrison and Hood. Historical Account of the Lobster-Canning Industry—R. H. Williams. \*Fish Canning in Canada (non-technical). \*Fisheries News Bulletin (monthly). \*The Salmon Fishery of British Columbia. Report on Fisheries Investigations in Hudson Bay, 1930. \*Summary of the Report by Messrs. Cockfield, Brown and Company, Limited, on the Marketing of Canadian Fish and Fish Products. \*Oyster Farming on the Atlantic Coast of Canada. Hardening Mud Bottoms for Oyster Culture (mimeographed). Factors in the Shipment of Live Lobsters from Eastern Nova Scotia. Investigations into the Natural History of the Herring—Hjort. \*The Life of the Atlantic Salmon. \*Proceedings No. 1 of the North American Council on Fishery Investigations, 1921-30, and \*Proceedings No. 2, 1931-33. \*Report of the Royal Commission Investigating the Fisheries of the Maritime Provinces and the Magdalen Islands, 1927. \*The Storage of Oysters—A. W. H. Needler. Check List of the Fishes of the Dominion of Canada and Newfoundland, illustrated (\$2)—A. Halkett. \*Any Day a Fish Day (fish cooking hints and recipes). \*Memoranda (mimeographed) dealing with some methods of fish processing.

*Note.*—Publications of the Department of Fisheries are distributed at the discretion of the Department and applicants for any papers should indicate the purposes for which they are desired. In some cases charges may be made.

**Insurance.**—Quarterly Statement showing List of Registered Insurance Companies. Annual Abstract of Statements of Registered Insurance Companies (subject to correction); Annual Reports of the Insurance Department, Vol. I (Fire and Miscellaneous), Vol. II (Life Companies and Fraternal Benefit Societies). Annual List of Securities held by Insurance, Trust and Loan Companies, with Department's Valuation thereof. Annual Abstract of Statements of Loan, Small Loan and Trust Companies (subject to correction). Annual Report of Loan, Small Loan and Trust Companies. Classification of Fire Insurance Risks. Table of Bond Values.

**Justice.**—Annual Report of the Superintendent of Penitentiaries.

**King's Printer and Controller of Stationery.**—The *Canada Gazette*, published weekly, with occasional supplement and extras; subscription, in *Canada and United States*, \$8 per annum payable in advance, single copies 20 cents each, other countries \$10 per annum and 25 cents per single copy. Judgments of the Board of Railway Commissioners, semi-monthly, \$3 per annum, single copies, 20 cents. *Canada Law Reports*, published monthly, yearly subscription, \$6. Revised Statutes of Canada, 1927 (5 vols.), \$10. Annual Statutes, 1928-37, \$5 each. Acts, Public and Private, with Amendments to date, 10 cents to \$1 per copy. Canadian Postal Guide, \$1 including supplements, additional 25 cents. Parliamentary Debates, "Hansard", issued daily during session, French and English, \$3 per session each for *House of Commons and Senate Debates*; single copies, 5 cents.

**NOTE.**—Prices of bluebooks are in nearly every case printed upon the front cover and are based practically on cost. They may be ordered direct from the King's Printer, Ottawa. A catalogue of official publications of the Parliament and Government of Canada is issued regularly once a year with supplements when required and copies may be obtained from the King's Printer, Ottawa.

**Labour.**—Monthly.—The *Labour Gazette* (published in English and French) at a subscription price of 20 cents per annum, postage prepaid, to subscribers in *Canada, the United States of America, and Mexico*, and of \$1 per annum to subscribers in all other countries. Annual.—Report of the Department of Labour (including: Reports of Proceedings under the Industrial Disputes Investigation Act, Conciliation and Labour Act, Employment Offices Co-ordination Act, Technical Education Act, Government Annuities Act, Fair Wages and Hours of Labour Act, and the Relief Legislation). Labour Legislation in Canada as existing on Dec. 31, 1928 (a supplementary report thereto on Labour Legislation is published annually in February or March). Labour Organization in Canada. Organization in Industry, Commerce, and the Professions in Canada. Wages and Hours of Labour in Canada. Prices in Canada and other Countries. Strikes and Lockouts in Canada and other Countries. Interim Report of the National Employment Commission. Final Report of the National Employment Commission. *General Reports.*—Judicial Proceedings respecting Constitutional Validity of the Industrial Disputes Investigation Act, 1907, and Amendments of 1910, 1918, 1920, and 1925. The Employment of Children and Young Persons in Canada. Trade Union Law in Canada. *Reports of Investigations under the Combines Investigation Act.*—(1) Investigation into Alleged Combine in the Distribution of Fruits and Vegetables in Western Canada, 1925; (2) Investigation into Alleged Combine limiting Competition in the Marketing of New Brunswick Potatoes, 1925; (3) Investigation into Alleged Combine in the Manufacture and Sale of Bread in the City of Montreal, 1926; (4) Investigation into Alleged Combine in the Distribution of Fruits and Vegetables produced in Ontario, 1926; (5) Investigation by Registrar into the Proprietary Articles Trade Association, 1927; (7) Report of the Commissioner on the Amalgamated Builders' Council, 1929; (8) Report of Commissioner on the Electrical Estimators' Association, 1930; (9) Report of Registrar into Alleged Combine in the Bread-Baking Industry in Canada, 1931; (10) Report of Commissioner on Alleged Combine in the Motion Picture Industry in Canada, 1931; (11) Report of Registrar on Tobacco Manufacturers and Other Buyers of Raw Leaf Tobacco in Ontario, 1933; (12) Report of Registrar on the Importation and Distribution of British Anthracite Coal in Canada, 1933. *Bulletins in Industrial Relations Series.*—(1) Joint Councils in Industry; (2) Report of a Conference on Industrial Relations, 1921; (3) Joint Conference of the Building and Construction Industries in Canada, 1921; (5) Canada and the International Labour Conference; (7) Canadian Railway Board of Adjustment, No. 1, Second Report; (8) National Conference Regarding Winter Employment in Canada, 1924; (9) Canadian Railway Board of Adjustment, No. 1, Third Report; (10) Canadian Railway Board of Adjustment, No. 1, Fourth Report; (11) Government Intervention in Labour Disputes in Canada; (12) Canadian Railway Board of Adjustment, No. 1, Fifth Report; (13) Canadian Railway Board of Adjustment, No. 1, Sixth Report.

**Mines and Resources.**—

**DEPARTMENTAL.**—Annual Report of the Department of Mines and Resources for fiscal years.

(Applications for publications, other than the Annual Report, should be addressed to the Directors of the branches concerned).

**Mines and Geology Branch.**—THE BUREAU OF GEOLOGY AND TOPOGRAPHY.—(*Memoirs descriptive of the geology of areas examined in detail*); Economic Geology Series, (containing a summary of information on economic subjects from published reports, which is supplemented in some cases by field studies); preliminary reports and maps on field studies; small and large scale geological and topographical maps on areas examined.

**THE BUREAU OF MINES.**—Half-yearly reports of Investigations in Ore Dressing and Metallurgy; Annual Review (by calendar years) of the Canadian Mineral Industry; Separate reviews of the various minerals; Monographs on mineral technology; the Annual Report of the Explosives Division.

**THE NATIONAL MUSEUM OF CANADA.**—Annual Reports for fiscal years; museum bulletins dealing with anthropology, ornithology, zoology, and botany.

**GEOGRAPHIC BOARD OF CANADA.**—Reports containing all decisions of the Board, with reference to place names and their meanings. (*No reports have been published for several years.*)

**Lands, Parks and Forests Branch.**—Annual Reports of Branch; descriptive pamphlets, bulletins, folders, etc., relating to the Northwest Territories and Yukon, Dominion Forest Service, National Parks (including historic sites), and the administration of the Migratory Birds Convention Act.

**Surveys and Engineering Branch.**—Publications dealing with the work of the Dominion Observatories, Ottawa; Dominion Astrophysical Observatory, Victoria; Dominion Water and Power Bureau; Geodetic Service of Canada; Hydrographic and Map Service; International Boundary Commission.

**Immigration Branch.**—Annual Reports.

**Indian Affairs Branch.**—Annual Reports for fiscal years. Publications include: Schedule of Indian Reserves, 1928, Price \$1. Indian Treaties and Surrenders, Vols. I, II and III, Price \$15. Census of Indians in Canada, 1934.

**National Defence.**—Annual Report; List of Officers, Defence Forces of Canada, Naval, Military and Air Services; Canadian Navy List; Naval General Orders; General Orders, Militia and Air Services; Militia Orders; Air Regulations.

**National Research Council.**—*Annual Reports.*—Reports of the National Research Council for the years 1917-18 to 1935-36. *Technical Reports.*—(For Nos. 1 to 21 see p. 1042 of the 1927-28 Year Book; Nos. 3, 4, 6, 8 and 12 are now out of print.) No. 22, An Experimental Study of Sieving, by J. B. Porter; No. 23, The Storage of Apples in Air-cooled Warehouses in Nova Scotia, by S. G. Lipsett, covering investigation by the Associate Committee on Fruit Storage; No. 24, The Drying of Wheat, covering an investigation by the Associate Committee on Grain Research; No. 25, The Drying of Wheat (Second Report), by E. Stansfield and W. H. Cook, covering an investigation under the Associate Committee on Grain Research; No. 26, Weed Survey of the Prairie Provinces, by J. M. Manson, prepared under the auspices of the Associate Committee on Weed Control; No. 27, Weeds and Their Control, by G. P. McRostie, L. E. Kirk, G. Godel, W. G. Smith and J. M. Manson; No. 28, The Comparative Feeding Values for Live Stock of Barley, Oats, Wheat, Rye, and Corn, by E. W. Crampton; No. 29, The Comparative Feeding Values for Poultry of Barley, Oats, Wheat, Rye, and Corn, by E. W. Crampton. The series of Technical Reports has been discontinued. Future publications will appear as bulletins. *Bulletins.*—(For Nos. 1 to 12 see p. 1042 of the 1927-28 Year Book; Nos. 3, 4, 6, 7, 9 and 11 are now out of print.) No. 13, Interim Report on Protein Content as a Factor in Grading Wheat, prepared by the Associate Committee on Grain Research; No. 14, Report on Inquiry in Europe Regarding the Feasibility of Using Protein Content as a Factor in Grading and Marketing Canadian Wheat, by R. Newton; No. 15, Review of Literature dealing with Health Hazards in Spray Painting, submitted by the Associate Committee on Spray Painting; No. 16, Health Hazards in the Radium Industry, by John D. Leitch; No. 17, Radium Dosage, by G. C. Laurence; No. 18, Chemical Weed Killers, by Dr. W. H. Cook and A. C. Halferdahl; No. 19, Peaux et Cuirs, by W. E. Graham. A bulletin entitled "The Use of Wax in the Plucking of Poultry" by Dr. N. H. Grace has been published jointly by the National Research Council and the Dominion Department of Agriculture. In addition to the foregoing list of printed reports and bulletins issued by the Council, 53 reports have been mimeographed and 263 typewritten. (*Specially prepared and intended only for limited distribution.*) *Periodical.*—Canadian Journal of Research, at present issued in two parts, devoted, respectively, to (a) physical and chemical sciences and (b) botanical and zoological sciences.

**NOTE.**—The above list includes the regular publications of the Research Council. Many special papers and publications are also issued. For further information re these, application should be made to the Director of Research Information.

**National Revenue.**—Annual Report, containing statements relative to Imports, Exports, Excise, and Income. Annual Report of Shipping. National Revenue Review (monthly).

**Pensions and National Health.**—(1) Sanitation—Sewage Treatment for Isolated Houses and Small Institutions where Municipal Sewage System is not available; (2) The Canadian Mother's Book; (17) Wells; (18) Home Treatment, Rural Water Supplies; (19) Athletes' Foot; (22) A Survey of Vitamins; (24) Information for Men—Syphilis and Gonorrhea; (25) Information for Young Women about Sex Hygiene; (26) Information for Parents—Teaching Sexual Hygiene to Children; (27) Prevention of Blindness in Babies; (29a) Goitre—Facts for the General Public; (30) How to Build Sound Teeth; (31) What You Should Know about Tuberculosis; (32) Smallpox and Vaccination; (34) The Rat Menace; (31) Infantile Paralysis.

**Post Office.**—Annual Report of the Postmaster General. Official Postal Guide. Regulations as to Rural Mail Delivery. Booklet of Postal Information.

**Public Archives.**—*Annual Reports.*<sup>1</sup>—1914-15 (60 cents); 1921 (30 cents); 1923 (55 cents); 1926 (10 cents); 1928 (25 cents); 1929 (50 cents); 1930 (50 cents); 1931 (\$1); 1932 (\$1); 1933 (\$1); 1934 (10 cents); 1935 (\$1); 1936 (\$1).

*Numbered Publications.*—No. 9, Early Canadian Northwest Legislation—Oliver (2 Vols.) (1914-15), \$2; No. 12, Reports on the Laws of Quebec, 1767-70—Kennedy and Lanctôt (1931), \$1; No. 13, Vol. I, Catalogue of Pamphlets,<sup>2</sup> 1493-1877—Casey (1931), \$1; Vol. II, Catalogue of Pamphlets,<sup>2</sup> 1878-1931—Casey (1932), \$1.

*Special Publications.*—(h) Documents—Constitutional History of Canada, 1759-91—Shortt and Doughty, 2 ed. (2 Vols.), (1918), \$2; (i) Catalogue of Pictures, etc.,<sup>3</sup> Part I, Sec. 1—Kenney (1925), \$2.50; (j) Documents—Canadian Currency, Exchange, etc., during the French Period—Shortt (2 Vols.), (1925-26), \$3; (l) The Kelsey Papers<sup>4</sup> (Hudson Bay Co. Journals, 1683-1722)—Doughty and Martin (1929), \$2; (m) Documents—Currency in Nova Scotia<sup>5</sup> 1675-1758—Shortt, Johnston, Lanctôt (1932), \$2; (n) Documents—Constitutional History of Canada, 1819-28—Doughty and Story (1935), \$2.

<sup>1</sup> Contain texts, calendars, and catalogues of documents as well as reports on the administrative work of the Divisions. <sup>2</sup> Title page and introduction in English and French, same volume; titles of pamphlets as in original; index in English.

<sup>3</sup> Title, preface, and introduction in English and French in same volume; notes in English; titles of pictures exact. <sup>4</sup> Complete volumes, including index, in English and French in same volume. <sup>5</sup> Title and introduction in English and French in same volume; notes and index in English; texts of journals as in original (English) exact. <sup>6</sup> Title and foreword in English and French, otherwise in English only.

#### Public Works.—Annual Report.

**Secretary of State.**—Annual Report. The Arms of Canada. The Canadian Patent Office Record, Annual Report of the Commissioner of Patents.

**Trade and Commerce.**—\*Annual Report of the Dept. of Trade and Commerce, Price 25 cents; \*Annual Report of the Board of Grain Commissioners for Canada, Price 25 cents; \*Annual Report of Electricity and Gas, Price 25 cents; Annual Reports of Dominion Grain Research Laboratory; \*List of Licensed Elevators, etc., Price 50 cents; Motion Pictures (catalogue of), Price 25 cents.

*NOTE.*—Requests for those of the above publications marked with an asterisk should be addressed to the King's Printer; the remaining publications may be obtained from the Deputy Minister, Department of Trade and Commerce.

**Commercial Intelligence Service.**—Commercial Intelligence Journal.—Published weekly in English and French, containing reports of Trade Commissioners and other commercial information. Annual subscription, Canada, \$1, outside Canada, \$3.50.

*NOTE.*—Publications of the Commercial Intelligence Service are compiled with a view to furnishing Canadian exporters with information respecting the possibilities for the sale of Canadian goods abroad, the nature of the competition to be encountered, Customs requirements, etc., and are not intended for general distribution. The publications available include leaflets giving invoice requirements and a series on Points for Exporters, both covering countries included in the territories assigned to Trade Commissioners. From time to time special reports are issued separately, which subscribers to the Commercial Intelligence Journal are entitled to receive free of charge. In all other cases their distribution is controlled by the King's Printer, who fixes a price therefor.

**Dominion Bureau of Statistics.**—(For the publications of the Dominion Bureau of Statistics see pp. 1075 to 1086).

**Transport.**—Canal Services.—Annual Report of the Department of Transport, Price 50 cents. Canals of Canada, Price 10 cents. The Trent Canal System, Price 10 cents. Canal Rules and Regulations, Price 10 cents. Churchill and the Hudson Bay, Price 10 cents. Welland Ship Canal, 1934, Price 10 cents.

(Obtainable from the Assistant Deputy Minister and Secretary, Department of Transport, Ottawa).—The Quebec Bridge, 2 Vols., Price \$5. The Welland Ship Canal, 1913-33, Price \$10. St. Lawrence Waterway Project, Report of Joint Board of Engineers, with plates, Price \$5. Report of Conference of Canadian Engineers on the International Rapids Section, Price \$3.50. Report of Joint Board of Engineers (reconvened), Price \$2.50.

**Marine Services.**—Annual Report, Department of Marine (now Department of Transport), Price 25 cents. International Convention Respecting Load Lines, etc., Price 50 cents. International Convention for the Safety of Life at Sea, Price 25 cents. List of Canadian Shipping, Price 50 cents. Load Line Regulations, 1932, Price 10 cents. Regulations for the Examination of Seamen and Others for Certificates of Efficiency of Life-boatmen, Price 10 cents. List of Lights, etc., in Canada: (a) Pacific Coast, Price 15 cents; (b) Atlantic Coast, Price 25 cents; (c) Inland Waters, Price 10 cents.

(Obtainable from the King's Printer, Ottawa).—Regulations, Government Wharves in Canada (French and English), *Price 10 cents*. Rules and Regulations Relating to the Examination of Masters and Mates of Foreign Sea-Going Ships (French and English), *Price 25 cents*. Rules and Regulations Relating to the Examination of Masters and Mates of Coasting and Inland Vessels (French and English), *Price 25 cents*. Rules of the Road, International (French and English), *Price 10 cents*. Rules of the Road, Great Lakes (French and English), *Price 10 cents*. Tide Tables, St. Lawrence Ship Channel (French and English), *Price 25 cents*. Regulations for Shipping Grain Cargoes, *Price 10 cents*. Expedition to Hudson Bay, N.B. McLean, Director in Charge, 1927-28, *Price 50 cents*. Inspection of Boilers and Machinery of Steamships (French and English), *Price 10 cents*. Rules for Life-Saving Appliances (French and English), *Price 10 cents*. Rules for Inspection of Hulls and Equipment (English only), *Price 10 cents*. Rules for Motor Engineers' Certificates (English only), *Price 10 cents*. Rules for Examination of Engineers on Steamships (French and English), *Price 10 cents*. Rules for Fire Extinguishers on Steamships (English only), *Price 10 cents*. Rules for Harbour Masters (English only), *Price 10 cents*.

(Obtainable from the King's Printer, Government Printing Bureau, Ottawa.) International Tele-Communication Convention of Madrid, 1932, together with Communication Regulations annexed thereto, *Price 25 cents*. Radiotelegraphy Requirements for Ships registered in Canada and engaged on international voyages in accordance with the Safety of Life at Sea and Loadline Conventions Act, 1931, and the Regulations issued thereunder, *Price 10 cents*. Bulletin No. 2 (1932) Radio Inductive Interference, *Price 35 cents*. Supplement "A" (1934) to Bulletin No. 2, *Price 15 cents*. Navigation Conditions on the Hudson Bay Route from the Atlantic Seaboard to Fort Churchill, seasons of navigation 1929-35, *Price 10 cents*. Hudson Bay Report, 1927, *Price 25 cents*.

*Air Services.*—(Obtainable from the Chief of Air Services, Department of Transport, Ottawa). Air Regulations, Canada, *Free*. Map Showing Radio Stations Operated as Aids to Navigation, 1935, *Price 25 cents*. British Postmaster General's Handbook for Wireless Telegraph Operators, *Price 25 cents*. Official List of Radio Stations in Canada, *Price 25 cents*. Kilocycle-Metre Conversion Chart, *Price 10 cents*. Radiotelegraph Act and Regulations issued thereunder, *Price 10 cents*. Pamphlet containing Extracts from the Radiotelegraph Act and Regulations issued thereunder with reference to Amateur Experimental Radio Stations, *Free*. Notices to Mariners re; Weather, Ice, and Other Reports Transmitted by Radio-Telegraph, *Free*. Pamphlets containing Examination Procedure for Certificates of Proficiency in Radio for Commercial Operators, *Free*.

(Obtainable from the Meteorological Office, 315 Bloor Street West, Toronto (5), Ontario).—Monthly Record of Meteorological Observations in Canada and Newfoundland, *single copies, Price 10 cents, yearly subscription \$1*. Monthly Weather Map, *single copies, Price 10 cents, yearly subscription \$1*. Daily Weather Map—Toronto edition, *yearly subscription, Price \$4*. Annual Reports (1895-1915), *Price \$1*.

(Obtainable from the Meteorological Office, 1178 Grain Exchange Building, Winnipeg, Manitoba). Daily Weather Map—Winnipeg edition (includes weekly bulletin during agricultural season), *yearly subscription, Price \$4*.

Canadian Travel Bureau.—Canada Your Friendly Neighbor Invites You; How to Enter Canada; Canada (recreational folder); Sport Fishing in Canada; Canada's Game Fields; Canoe Trips in Canada; Canoe Trips to Hudson Bay; Canada and United States Road Map, General, Eastern, Central and Western sheets.

## Section 4.—Publications of Provincial Governments.

### PRINCE EDWARD ISLAND

Journal of the Legislative Assembly. Statutes. Royal Gazette. Annual Reports of the Provincial Auditor on Public Accounts, Departments of Public Works and Highways, Education, Agriculture, Falconwood Hospital (for the Insane) and Provincial Infirmary, Vital Statistics and Public Health.

### NOVA SCOTIA.

Royal Gazette. Statutes, Journal and Proceedings of the House of Assembly. Journal of Education. Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction. *Annual Reports.*—Public Accounts; Public Health (including Vital Statistics, Humane Institutions, Penal Institutions, Child Welfare, Nova Scotia Training School for Mental Defectives, Victoria General Hospital, Nova Scotia Hospital, Nova Scotia Sanatorium, Mothers' Allowances, Old Age Pensions); Education; Fire Marshal; Mines; Provincial Museum and Science Library; Public Archives; Legislative Library; Provincial Secretary (including Rural Telephone Companies, Board of Censors); Department of Agriculture; Department of Highways; Department of Lands and Forests; Department of Labour including Minimum Wage Board, Employment Service Offices, Inspection of Factories, Unemployment Relief; Statistics of Incorporated Cities, Towns and Municipalities; Printing; Transient Poor; Public Utilities Board; Workmen's Compensation Board; the



Power Commission; Liquor Control Commission; Nova Scotia Housing Commission; Royal Canadian Mounted Police (Nova Scotia section). *Special Reports*.—Milk and Cream Inquiry; Franchise Inquiry; Investigation into workings of Compensation Board; Submission by the Government of Nova Scotia to the Royal Commission on Dominion-Provincial Financial Relation.

### NEW BRUNSWICK.

Royal Gazette. Statutes. Annual Reports of the Comptroller General, of the Board of Health, of the Department of Education and Agriculture (including Horticulture). Annual Reports on Public Works, Crown Lands, the Hospital for the Insane; Report of the Jordan Memorial Tuberculosis Sanatorium at River Glade; Report of Women's Institutes; Report of the Workmen's Compensation Board; Report of Public Utilities Commission; Report of New Brunswick Hydro-Electric Power Commission; Boys' Industrial Home, Saint John; Report; New Brunswick Liquor Control Board Report; Old Age Pensions Board Report; New Brunswick Fire Prevention Board Report; Motor Carrier Board Report; Department of Federal and Municipal Relations Report; and Report of Fair Wage Board.

### QUEBEC.

*NOTE.*—The titles of publications available in the English language are printed in English.

**Attorney General.**—Annual List of Public Officers of the Province of Quebec.

**Tourist Bureau.**—(Publications marked (1) are bilingual; (2) Separate French and English editions; (3) English only.)

(1) Official Highway and Tourist Map (yearly); (2) Tours in Quebec (80 pp. guide, illustrated); (3) The Gaspé Peninsula (32 pp. de luxe booklet); (2) Gaspé Peninsula (260 pp.—Complete guide—illustrated); (2) Along Quebec Highways (900 pp.—illustrated—Price \$2); (3) The St. Maurice Valley (24 pp. illustrated); Québec et ses Régions de Tourisme (24 pp.—illustrated booklet); (3) Hunting and Fishing in Quebec.

**Municipal Affairs, Trade and Commerce.**—Annual Report of the Minister of Municipal Affairs; List of Municipal Corporations (annual); Statistical Year Book; Education Statistics; Financial Statistics of School Corporations; Municipal Statistics (annual); Meteorological Bulletin (monthly); Butter and Cheese Production (monthly); Agricultural Statistics reports; Co-operative People's Banks and Agricultural and Co-operative Societies.

**Health and Provincial Secretary.**—Annual Report of the Secretary and Registrar; Annual Report of the Department of Health; the Quebec Official Gazette, bilingual (weekly); The Statutes of the Province (annual); Revised Statutes of the Province (1925); Rapport de l'Archiviste (annual); Monuments commémoratifs de la province de Québec—P.-G. Roy; Report of the Director of Public Charities.

**Treasury.**—Annual Statement of Public Accounts; Annual Estimates; Annual Budget Speech; Annual Report on Insurance Companies; Annual Report on Mutual Benefit Associations; Annual Report on Trust Companies.

**Bureau of Revenue.**—Annual Report of the Quebec Liquor Commission; Annual Report of Motor Vehicle Registrations; Statistics of Automobile Accidents.

**Lands and Forests.**—Annual Report of the Minister; Circular No. 1, La rouille végétale du pin blanc—G.-C. Piché; Nomenclature of the Geographical Names in the Province of Quebec, Quebec Geographical Commission; Dictionnaire des Lacs et Rivières; Annual Report of the Quebec Streams Commission; Notes on the Forests of Quebec—G.-C. Piché; Rapport du Service de Protection; Tableau des forces hydrauliques concédées de 1867 à 1923 (Supplément 1923 au 7 avril 1930); Forests and Waterfalls; Quebec, Natural Resources.

**Agriculture.**—*Annual Reports.*—Department of Agriculture; Competition for Agricultural Merit; Dairymen's Association; Pomological Society; Society for Protection of Plants. *Bulletins.*—(55) Poultry Raising in Towns and Villages; (40) How to plant your Fruit trees; (44) Vegetable Culture; (78) Farm Gas Engines; (89) The Drainage of Farm Lands; (90) Experiments with Grain Crops; (92) The Corn Borer; (95) Farm Account Book; (100) Soils Drainage; (114) La taille du pommier; (115) Vegetable Garden; (116) Swine Feeding; (117) Contagious Abortion; (118) Guide de la protection des cultures; (122) Culture du tabac; (123) Cueillette et emballage des pommes; (124) Arrosage du verger commercial (French and English); (125) Culture de la tomate, du piment et des aubergines; (127) Plantation d'un verger commercial; (128) Greenhouses, Hotbeds and Shelters; (129) Les cours d'eau municipaux; (130) Comment lutter contre le ver blanc; (131) Le pain de ménage; (132) La culture des fraises; (134) L'industrie du sucre d'érable dans la province de Québec. (135) Les arrosages du verger; (136) Mangeons plus de légumes; (137) Polyarthrite du poulain. *Circulars.*—(42) Sélection des troupeaux de volailles; (125) Guide des cercles de fermières; (65) Common Weeds and their Control; (66) Alfalfa Growing in Quebec. *Miscellaneous.*—(293) The Maple, Pride of Quebec.

**Highways.**—Annual Report of the Minister of Highways (bilingual); An Act Respecting the Roads Department (1934), (separate French and English editions).

**Mines and Fisheries.**—Extracts from Reports on the District of Ungava, by T. C. Denis (1929); Report on the Copper Deposits of the Eastern Townships, by J. Austin Bancroft (1916); L'industrie de l'amianté dans la province de Québec (1917); Geological Sketch and Economic Minerals of the Province of Quebec (1924); Annual Reports on Mining Operations in the Province of Quebec; Annual Reports of the Quebec Bureau of Mines, years 1929 to 1936; Fisherman's Paradise; The Laurentide National Park; Elevage du rat musqué; Fur Farming in the Province of Quebec, 1921.

**Colonization.**—Annual Report of the Minister; Le Guide du Colon, 1932; Quebec Ready Reference.

**Labour.**—Minister's Report; Workmen's Compensation Act; Annual Report of the Workmen's Compensation Commission; Report of the Quebec Social Insurance Commission.

**Public Works.**—Minister's Report; Statistics of Fire Losses in the Province.

**Public Instruction.**—Code scolaire (1927); The Education Act (1911); Regulations of the Catholic Committee (1936); Regulations of the Protestant Committee (1921); Memoranda of Instructions to Teachers for Intermediate and High Schools (1934); Annual Report; Financial Statement of the Superintendent of Public Instruction (annual); Mon premier livre (1st and 2nd parts) (1900), a new edition of which is printed every year; l'Enseignement primaire; Educational Record; Yearly circulars containing Instructions to School Boards and School Inspectors; Course of English and French for English Catholic Schools (1926); Manual respecting the course of study in the Protestant Elementary Schools; List of authorized text books.

**Legislative Council.**—Agenda Paper of the Legislative Council; Votes and Proceedings of the Legislative Council; Journals of the Legislative Council; Rules and Regulations of the Legislative Council.

**Legislative Assembly.**—Agenda Paper of the Legislative Assembly; Votes and Proceedings of the Legislative Assembly; Journals of the Legislative Assembly; Sessional Papers, Departmental Reports and Returns to Orders and Addresses of the Legislative Assembly; Report of the Clerk of the Crown in Chancery on Elections (published after every general election); Report of the Librarian of the Legislature; Annotated Rules and Standing Orders of the Legislative Assembly of Quebec; Private Bills in the Legislative Assembly of Quebec (a manual containing the rules relative to); Government and Legislature; List of the Chairmen and Members of the Committees of the Legislative Assembly.

## ONTARIO.

**Agriculture.**—Annual Reports.—Minister of Agriculture; Agricultural College and Experimental Farm; Agricultural and Experimental Union; Stallion Enrolment Board; Agricultural Statistics; Vegetable Growers' Association; Entomological Society; Agricultural Societies; Horticultural Societies; Annual Report of Ontario Veterinary College. *Bulletins.*—**FRUITS.**—(335) The Strawberry in Ontario (rev. 1936); (342) Fire Blight (1929); (354) The Pear (1930); (355) The Raspberry and Blackberry (rev. 1936); (356) Insects Attacking Fruit Trees (1930); (383) Peach Yellows and Little Peach; (389) V. Peaches. **GENERAL FARMING.**—(218) Birds of Ontario in Relation to Agriculture, *Price 25 cents*; (277) Motor Transportation in Rural Ontario (1920); (296) Sweet Clover (rev. 1928); (326) Farm Barns (1927); (331) Public Speaking and Debate (1933); (348) Amateur Dramatics (1929); (349) Grain Smuts; (360) Farm Underdrainage (1931); (364) Manures and Fertilizers (1931); (370) Testing Milk, Cream, and Dairy By-Products on the Farm and in the Factory; (371) Buttermaking on the Farm (1936); (372) Soft Cheese Making and Farm Dairy Cheddar Cheese (1936); (374) Use More Ontario Honey (1933); (385) Cheese Mites and Their Control (1937); (327) Knots and Splines; Rope on the Farm (rev. 1937). **LIVESTOCK.**—(304) Infectious Abortion of Cattle (rev. 1933); (337) Parasites Injurious to Sheep (1928); (338) Hints on Judging (1931); (350) The Warble Flies (1934); (367) Pork on the Farm (1932); (373) Dairy Cattle (1933); (378) Bot Flies and Their Control (1934); (380) Parasites Injurious to Swine (rev. 1936); (387) Swine Diseases and Their Prevention; Swine Feeding. **POULTRY.**—(305) Diseases of Poultry (1932); (363) Parasites Injurious to Poultry (1931); (379) Farm Poultry (rev. 1935). **VEGETABLES.**—(358) The European Corn Borer (1931); (375) Ontario Grown Leaf Lettuce (1933); (386) Vegetable Diseases; (388) Vegetable Gardening; (390) Potatoes. **BEES.**—(384) Bee Diseases (1933). *Circulars.*—(8) Back-Yard Pig Feeding; (10) Varieties of Farm Crops; (15) Livestock Shipping Association; (16) Home Pasteurizing of Milk; (38) Cream before Pasteurization as a Factor in Butter-making; (39) Beef Rings; (41) Sweet Clover; (51) Perennial Sow Thistle; (52) Liver Disease of Horses; (54) Dodder; (55) Home Mixing of Fertilizers; Navel Ills of Foals. *Specials.*—An Economic Analysis of Cheese Factory Operations in Ontario; Co-operative Marketing; Destruction of Wolves; Farm Account Book,

*Price 25 cents; Fertilizer Recommendations; Fruits of Ontario, Price 50 cents; Probable Causes and the Remedies for Defects in Second Grade Cream; The Value of Birds to Man; Tobacco Soils in Norfolk County. Acts.—Ditches and Water Course Act; Weed Control Act.*

**Attorney General.**—Reports of Inspectors; Legal Officers; Registry Offices; Insurance; Loan and Trust Corporations; Division Courts; Annual Report of Commissioner of Provincial Police; Powers and Duties of Justices of the Peace in Ontario (handbook).

**Education.**—Annual Report of the Minister of Education; School Acts; Regulations and Courses of Study: (1) Public and Separate Schools, (2) Continuation Schools, (3) High Schools and Collegiate Institutes; Courses of Study and Examinations in Schools Attended by French-speaking Pupils; General Announcement of Summer Courses; Text Book Regulations, including list of text books authorized and their prices; The list of school manuals with their prices; Summer Schools for training of Teachers; Regulations and Courses of Study of the University of Ottawa Normal School; Syllabus of Normal School Courses and Regulations for First Class and Kindergarten-Primary Certificates; List of Teaching Days of High, Continuation, Public and Separate Schools; Recommendations and Regulations for Vocational Schools, etc.; Recommendations and Regulations for Agriculture and Household Science Departments; High School Entrance Examination Regulations; Annual Departmental Middle and Upper School Examinations; Announcement re the Carter Scholarships; The School Attendance Acts and the Recommendations and Regulations and the Part Time Courses; The Consolidation of Rural Schools; Regulations for Consolidated Schools; Accommodation, Equipment and Grants for Auxiliary Training Classes; Literature Selections for Departmental Examinations; Regulations, Medical and Dental Inspection, Public and Separate Schools; Schools and Teachers for the Province of Ontario, 1936.

**Game and Fisheries.**—Annual Report, Department of Game and Fisheries; The Game and Fisheries Act and Regulations; Summary of the Game and Fisheries Act and Regulations; Report of the Special Fish Committee, 1928-30; Report of the Special Game Committee, 1931-33; The Small Mouthed Black Bass and its Conservation; The Maskinonge and its Conservation; The Speckled Trout and its Conservation; Monthly Bulletin of the Department.

**Health.**—*Acts.*—The Public Health Act and the Vaccination Act; The Venereal Diseases Prevention Act; The Cemetery Act; The Public Hospitals Act; The Private Hospitals Act; The Sanatoria for Consumptives Act; The Maternity Boarding House Act; The Mental Hospitals Act, 1935; The Private Sanitarium Act; The Psychiatric Hospitals Act; Registration of Nurses Act; An Act Respecting the Fumigation of Premises; Milk Control Act, 1934. *Regulations.*—Regulations for the Control of Communicable Diseases; Regulations Respecting Venereal Diseases; Regulations Respecting the Manufacture of Non-Intoxicating Beverages, Distilled and Mineral Water, and the Manufacture of Syrups, Wines and Brewed Beer; Regulations for the Sanitary Control of Lumber and Mining Camps; Regulations Governing the Construction and Management of Swimming Pools; Regulations re Cross Connection of Water Supplies; Regulations pursuant to the Mental Hospitals Act, 1935; Regulations pursuant to the Public Hospitals Act; Regulations regarding Private Hospitals; Rules and Regulations relating to the Registration of Nurses; Regulations Respecting X-ray Examination, and Tuberculin Test for Nurses in Sanatoria and Public Hospitals; Regulations for the Use of Hydrocyanic Acid or Cyanide Compounds for Fumigation; Regulations relating to Convalescent Hospitals. *Publications.*—Annual Report upon the Public Hospitals, Private Hospitals, Hospitals for Incurables, Convalescent Hospitals, and Sanatoria for Consumptives; Annual Report of the Department of Health; Annual Report upon the Ontario Hospitals for the Mentally Ill, Mentally Sub-normal, and Epileptic. (*Pamphlets upon various subjects relating to Health may be obtained from the Department of Health, Parliament Buildings, Toronto.*)

**Highways.**—Annual Report; Annual Proceedings, Ontario Good Roads Association; Highway Traffic Act and Regulations (1937); General Specifications for Highway Bridges, Ontario, 1935; The Planting and Care of Roadside Trees; Public Commercial Vehicles Act, 1931, and Amendment, 1934; Public Vehicle Act and Regulations, 1930, and Amendment, 1935; Highway Improvement Act, 1935; Official Government Road Maps of Ontario; Weekly Bulletin on Road Conditions, *Free on application*; and County Maps, *Price 10 cents for each county.*

**Labour.**—*Legislation.*—Department of Labour Act; Factory, Shop and Office Building Act; Steam Boiler Act; Canadian Interprovincial Regulations for the Construction and Inspection of Boilers, Tanks and Appurtenances; Operating Engineers Act and Regulations Governing the Issuance of Certificates; Employment Agencies Act and Regulations Governing Employment Agencies; Apprenticeship Act and General Regulations Governing the Training of Apprentices in Designated Trades and Trade Regulations concerning each trade designated; Regulations Respecting the Protection of Persons Working in Compressed Air; Regulations Respecting the Protection of Persons Working in Tunnels or Open Caissons; Minimum Wage Act; Minimum Wage Orders; Industrial Standards Act and Schedules of Wages and Hours approved by Order in Council. *Reports.*—Annual Report of the Department of Labour, including the reports of the Ontario Government Offices of the Employ-

ment Service of Canada; Factory Inspection Branch; Boiler Inspection Branch; Board of Examiners of Operating Engineers, Apprenticeship Board, and the Minimum Wage Board. *Text Books*.—Why Certificates for Stationary and Hoisting Engineers; Boilers; Engines; Turbines, Condensers, Pumps; Refrigeration and Air Compression; Combustion; Beginners' Book on Power Plant Operation; Steam Plant Accessories.

**Lands and Forests.**—Annual Report; Pamphlet on Summer Resort Lands; Woodlots of Ontario; Forest Trees for Distribution; Forest Tree Planting; Settlers' Lands; Gathering Pine Cones; List of Townships; Forest Resources of Ontario.

**Mines.**—The Mining Act, R.S.O., 1937, revised. Handbook—Ontario's Mines and Mineral Resources, (sixth edition, 1936), Vol. XLVI, Part I, 1937; Report of the Mineral Production of Ontario in 1935; Report of Royal Ontario Nickel Commission, 1917, *Price \$5*; Report of Ontario Iron Ore Committee, 1923, *Price \$2*; Volume XXX, Part II, Ontario Gold Deposits; Volume XXXIII, Part II, 1924, Porcupine Gold Area, *Price \$2*; Final Report of Joint Peat Committee, 1925, *Price \$1*; Volume XXXVII, Part II, 1928, Kirkland Lake Gold Area, *Price \$2*; Bulletin No. 25, List of Publications (third edition), giving all reports issued up to March, 1932, with supplement to end of 1933; Bulletins Nos. 80 and 93, Money and the World Crisis; Prospector's Guide to Ontario Mining Fields (fourth edition, 1930).

**Premier.**—Reports of the Liquor Control Board of Ontario and the Temiskaming and Northern Ontario Railway Commission; Tourists' Handbook; Report of the Niagara Parks Commission; Ontario Research Foundation Report; Hydro-Electric Power Commission's Report.

**Provincial Secretary.**—*Annual Reports*.—Ontario Board of Parole; Prisons and Reformatories; Annual Report of the Secretary and Registrar of the Province of Ontario (this report is presented to the Legislative Assembly each year, but has not been printed for several years); The Companies Act, including the Extra-Provincial Corporations Act; The Mortmain and Charitable Uses Act; The Companies Information Act and the Corporation Securities Registration Act; The Marriage Act; The Vital Statistics Act; Physicians' Pocket Reference to the International List of Causes of Death; Annual Report of Births, Marriages and Deaths.

*NOTE.*—The Physicians' Pocket Reference to the International List of Causes of Death is published by the Dominion Bureau of Statistics, but copies are kept in this Branch for purposes of distribution.

**Public Works.**—Annual Report of the Minister, with reports of the Deputy Minister, Architect, Engineer, Secretary, and Accountant.

**Treasury.**—Annual Statements; Estimates of Expenditure; Public Accounts; Budget Address of Treasurer delivered in the Legislative Assembly; Auditors' Report; Report of the Board of Censors of Motion Pictures.

## MANITOBA.

**Agriculture.**—*Booklets*.—Annual Crop and Live Stock Reports. *Bulletins and Circulars*.—Alfalfa and Sweet Clover Growing in Manitoba; Sweet Clover; The Trench Silo; Making Silage in Manitoba; The Canada Thistle; Leafy Spurge; Hoary Cress or Perennial Peppergrass; Noxious Weeds Act; Great Ragweed; Annual Forage Crops for Manitoba; Dog Mustard; Stinkweed and Common Wild Mustard; The Russian Thistle; The Gopher Pest in Manitoba; An Agricultural Program for Southwestern Manitoba; Crop History and Crop Outlook in the Malita Area; Sow Thistle Control; Control of Wild Oats; Preparing Grain for Exhibition Purposes; The Root Crop in Manitoba; Forage Crop Calendar; How to Kill Couch Grass; Growing Better Potatoes; Milk and Cream Tests; Producing the Best Cream; Farm Butter-Making; Cheese-Making on the Farm; The Cream Separator on the Farm; Hatching, Brooding, Rearing and Feeding Chicks; Poultry Houses for Manitoba; Turkey Raising in Manitoba; Sheep in Manitoba; Manitoba Rations for Animals and Poultry; Have You Dehorned your Market Cattle; Producing Onions in Manitoba; Asparagus Growing in Manitoba; Annual Flowers for Outdoor Sowing; Growing Sweet Corn; Growing and Using Tomatoes; Manitoba Fruit List; Growing Raspberries in Manitoba; Growing and Using Gooseberries; Growing Strawberries in Manitoba; Making and Caring for Lawns; Use of Bulbs for Winter Bloom; The Peony; The Gladiolus; Shrubs for Manitoba; Varieties of Vegetables for Manitoba Gardens; Vegetable Insects and their Control; Growing Better Rhubarb; The Beef Ring; Debates and Public Meetings; Help for the Home Dressmaker; Fitting and Alteration of Dress Patterns; First Lessons in Sewing; The Preparation of Whitewash; Canning, Pickling and Preserving; Facts about Manitoba.

**Education.**—Annual Report; Program of Studies, Elementary and Senior; Public School Act; Regulations; Beautification of School Grounds.

**Municipal Commissioner.**—Statistical information respecting the Municipalities of the Province, and list of names and addresses of Administrative and Health Officials of each Municipality; Manitoba Tax Commission.

**Public Works.**—Annual Report, included in Sessional Papers; Report of Insurance.

**Attorney General.**—Annual Report; Government Liquor Commission; Workmen's Compensation Board; Annual Report of Manitoba Telephone System.

**Provincial Treasurer.**—Public Accounts; Estimates; Budget Speech; Report of Manitoba Farm Loan Association.

**Provincial Secretary.**—Manitoba Gazette; Journals and Sessional Papers; Statutes of the Province.

**Mines and Natural Resources.**—Annual Report; Manitoba Mines and Minerals, 1928; A Guide for Prospectors; Tourist Guide; Fishing is Good in Manitoba; Mining Maps; Sectional Land Maps; Shelterbelts and the Farm Woodlot (1938).

**Health and Public Welfare.**—Annual Report; Manitoba Mother; Monthly Pre-natal and Post-natal Letters; Manitoba Baby; Manitoba Child; Child Study Material for Small Community Groups; Patterns for Infants' Layettes, *Price 10 cents*; Regulations re Boarding Homes for Children, Maternity Homes, and Day Nurseries; Quarantine Regulations; The Common Cold; Measles; Scarlet Fever; Diphtheria; Diphtheria Immunization; Whooping Cough; Trachoma; Typhoid Fever; Health Training Material for Teachers.

Publications issued by the Dominion Department of Pensions and National Health, The Canadian Council on Child Welfare, The Canadian National Institute for the Blind, also used in educational service.

## SASKATCHEWAN.

**Agriculture.**—Annual Report of the Department of Agriculture; Annual Reports of Branches, etc.: Dairy, Live Stock, Field Crops, Statistics, Co-Operation and Markets, Bee Division, Report of Extension Department of College of Agriculture; Commission Reports; Live-Stock Marketing; Bulletins and leaflets on Live Stock, Field Crops, Dairying, Tillage Methods, etc.

**Other Publications.**—*Annual Reports.*—Bureau of Labour and Public Welfare; Department of Education; Department of Highways and Transportation; Department of Municipal Affairs; Department of Provincial Secretary; Department of Public Works; Department of Public Health; Department of Telephones; Department of Natural Resources; Local Government Board; Public Accounts; Cancer Commission; Mental Hospital; The Saskatchewan Gazette. *By Bureau of Publications.*—Weekly News Bulletin; Pamphlets relating to tourist attractions, highways, natural resources, industries, etc., of Saskatchewan.

## ALBERTA.

**Agriculture.**—Annual Report; Calendar of the Schools of Agriculture; Destruction of Gophers; Alberta Weed Bulletin; Field Crops Hand Book; Turkey Production; Poultry Literature; Bee Culture; Planning and Beautifying the Home Grounds; Flowers Beautify Home Grounds; Sheep in Alberta; Drying Fruits and Vegetables; Laundry Bulletin.

**Attorney General.**—Annual Report on Dependent and Delinquent Children.

**Education.**—Annual Report; Program of Studies for the Elementary School; Promotion Tests for Grade VIII; Departmental Examinations for Grades IX-XII; Pamphlets on Picture Study, Architecture and Sculpture; Summer School Announcement; Normal School Announcement; Program of Studies for Technical High Schools (revised 1932, and under revision 1937); Regulations of the Department of Education governing the course of study in Grades VII, VIII and IX; High School Correspondence Courses; Suggested Time-table for One-Room Schools; Instructions Concerning the Teaching of French in the Elementary Schools; Supplement to the Program of Studies for the Elementary School—Selections for Reading; Suggestions for Seat Work in Junior Grades; Five-Figure Logarithmic Tables; Regulations of the Department of Education Relating to the Program of Studies and Annual Examinations for High Schools; Price List and Requisition Form—School-Book Branch; What Is and What Might Be in Rural Education in Alberta; Regulations of the Department of Education Relating to the Program of Studies and Annual Examinations for Commercial Schools (revised 1932, and under revision 1937); Bulletins and Regulations covering School Buildings in Rural and Village School Districts; Series of Plans and Specifications for Teachers' Residences; Series of Plans for One- and Two-Roomed Schools, with Specifications; Annual Announcement of the Provincial Institute of Technology and Art; Courses of Study for Technical High Schools; School Act; Physical Education for Rural Schools; Physical Education for Secondary Schools; Report of Legislative Committee on Rural Education; Rural Education in Alberta; High School Civics; Instructions re Conduct of Examinations; Special Instructions to Presiding Examiners; Special Instructions to Presiding Examiners re Commercial Examinations.

**King's Printer.**—Alberta Gazette, Price \$2 per year.

**Lands and Mines.**—Annual Report; Annual Report of the Chief Inspector of Mines; Alberta Oil and Gas Development, 1937; Handbook for information of public containing information on the following: the Survey System, Homestead Entries, Grazing on Provincial Lands, Hay Permits, Cultivation Permits, Irrigation, Leasing for Recreation Grounds or Exhibition Sites, Timber Licences and Permits, Timber Permit Berths, Fire-Killed Permit Berths, Damaged Timber Berths, Liability of Persons cutting Timber without Authority, Permit Dues, Telegraph and Telephone Poles, Mining Timber Dues, Persons Exempted from Timber Dues, Timber for Homesteads, Fur-Farming Leases, Issue of Permits to Mine Coal, Coal-Mining Leases, Petroleum and Natural Gas Regulations, Carbon-Black Permits, Placer Mining, Quartz Mining, Permits to remove Sand, Stone and Gravel from Beds, Rivers and Lakes, Dredging Leases, Disposal of Bar-Diggings, Alkali-Mining Regulations, Potash Regulations, Regulations for disposal of Bituminous Sand Deposits, Regulations for Leasing of Lands containing Limestone, Granite, Slate, Marble, Gypsum, Marl, Gravel, Sand, Clay, Volcanic Ash or any Building Stone, Forest Reserve Regulations, Fishing Regulations, Schedule of Fees.

**Municipal Affairs.**—Annual Report of Department; List of Alberta Municipalities.

**Public Health.**—Annual Report of Department; Annual Report on Vital Statistics. Bulletins issued by the Department on various health subjects. Pamphlets regarding infectious diseases—Diphtheria, Scarlet Fever, Measles, Whooping Cough, Smallpox, Influenza, Poliomyelitis; Alberta Mothers' Book; Mouth Health; What you should know about Cancer (book); General Information regarding Tonsils; Health Rules for School Children; Goitre; Systems of State Medicine (book); Final Report of Commission on State Health Insurance; Facts about Flies; In Times Like These (booklet on nutrition); History and Organization of Department and Boards of Health; Hospitals and Sanatoria; Protecting the Community's Food Supply; Protecting the Community's Milk Supply; Sanitary Disposal of Garbage and Wastes in the Community; Diseases Communicated by Intestinal Discharges; District Health Units; Combating Early Syphilis.

**Public Works.**—Annual Report.

**Publicity.**—Statistics of Progress, 1906-28; Alberta tourist literature.

**Treasury.**—Budget Speech containing extracts from Public Accounts and other financial statements; Public Accounts; Estimates of Revenue and Expenditure.

**Other Publications.**—Annual Reports are also issued by the following Departments and Branches: Railways and Telephones, Provincial Secretary (Insurance Branch), Board of Public Utilities, Labour Bureau.

## BRITISH COLUMBIA.

**Agriculture.**—*Dairying.*—(5) Varying Butter-Fat Test; (71) Butter-Making on the Farm; (3) Cottage Cheese; (2) Farm Cheese; (1) Starters for Farm Cheese-making; (12) Rules Governing Cow-testing Associations in B.C.; (4) Clotted Cream; (17) The Story of Feed Unit; (20) First List of Dairy Sires; (22) Second List of Dairy Sires; (25) Third List of Dairy Sires; (27) Fourth List of Dairy Sires; (29) Fifth List of Dairy Sires; (32) Sixth List of Dairy Sires; (24) First Studies in Mendelism; (6) Care of Milk and Cream; (28) Certified Milk and Butter-Fat Records, 1934; (1) Ropy Milk in B.C.; (13) A Farm Dairy Sterilizer; (9) Dairy Farm Sterilizing Equipment. *Diseases and Pests.*—(45) Anthracnose; (39) Apple Aphides; (44) Apple-Seab; (34) Woolly Aphid of the Apple; (38) The Lesser Appleworm; (32) Cabbage-Root Maggot; (37) The Imported Cabbage-Worm; (2) Colorado Potato-Beetle in B.C.; (35) Currant Gall-Mite; (73) Diseases of Cultivated Plants; (66) Fire-Blight; (63) Locust-Control; (61) Making Lime-Sulphur at Home; (36) The Onion-Thrips; (41) The Oyster-Shell Scale; (31) Peach-Twig Borer; (72) Pests of Cultivated Plants; Field Crop and Garden Spray Calendar; Fruit Spray Calendar; (40) Soap Solutions for Spraying; (71) Dust Sprays; (33) Strawberry-Root Weevil. *Field Crops.*—(6) The Jerusalem Artichoke; (10) Cereal Smuts; (8) Field Corn; (12) Crop Rotation; (14) Farm Drainage; (3) Kale and Rape Crops; (15) Potato Diseases; (86) The Potato in B.C.; (7) Root-Seed Production; (88) Roots and Root-Growing; (11) Soil Fertility (13) Soiling and Annual Hay Crops; (5) Soils, Peat and Muck; (106) Weeds and their Control; (4) Noxious Weeds. *Fruits and Vegetable Growing.*—(57) Blackberry Culture; (69) Cantaloupe-Growing in B.C. Dry Belt; (70) Celery Culture; (56) Currant and Gooseberry Culture; (43) Gardening on a City Lot; (54) Loganberry Culture; (51) Orchard Cover Crops; (53) Selection of Orchard Sites and Soils; (62) Planting Plans and Distances; (60) Pruning Fruit-Trees; (55) Raspberry Culture; (67) Rhubarb Culture; (58) Strawberry Culture; (65) Tomato-Growing in B.C.; (42) Top-working of Fruit-Trees and Propagation; (64) Varieties of Fruit recommended for Planting in B.C. *Live Stock.*—(67) Care and Feeding of Dairy Cattle; (53) Feeding Farm Live Stock in B.C.; (64) Goat-Raising in B.C.; (60) Swine-Raising in B.C.; (99) Care and

Management of Sheep. *Poultry*.—(27) Breeding-Stock Hints; (32) Fattening Young Ducks; (15) Profitable Ducks; (25) Hints on Egg Hatching; (35) The Use of Feathers; (12) Management of Geese; (36) The Green Feed Deficiency in Fowls; (33) Management and Rearing of Guinea-Fowls; (39) Natural and Artificial Incubation and Brooding; (63) Poultry-House Construction; (11) Poultry-Keeping on a City Lot; (34) Care of Poultry Manure; (49) Market Poultry; (26) Practical Poultry-Raising; (19) Poultry Rations for Chicks and Layers; (80) Fur-Bearing and Market Rabbits; (28) Rabbit Recipes; (30) Sod-House Construction; (4) Management of Turkeys. *Miscellaneous*.—(92) Bee Culture in B.C.; (52) Better Farming Suggestions; (85) Clearing Bush Lands in B.C.; (50) Exhibition Standards of Perfection; Farm Account Book; (45) Judging Home Economics and Women's Work; List of Publications; (83) Preservation of Food; (86) Silos and Silage. *Reports*.—Agricultural Statistics; Climate of B.C.; Department of Agriculture Reports.

**King's Printer.**—British Columbia Gazette.

**Lands.**—*Forest Branch*.—*Circulars*: How to Obtain a Timber Sale; The Forest Resources of British Columbia; Grazing Regulations.

**Mines.**—Comprehensive annual reports, special bulletins, preliminary reports, etc.

**Bureau of Provincial Information.**—The Manual of British Columbia; British Columbia Invites You; Alluring British Columbia; Picturesque Highways of British Columbia; Rod and Rifle in British Columbia; British Columbia, Canada; Synopsis of Hunting and Fishing Regulations. *Lands Series of Bulletins*.—(1) How to Pre-empt; (2) Some Questions and Answers regarding British Columbia; (3) British Columbia—Northern and Central Interior; (5) British Columbia—Southern Interior; (6) British Columbia Coast, Lower Mainland; (7) British Columbia Coast, Toba Inlet to Queen Charlotte Strait; (8) British Columbia Coast, Queen Charlotte Strait to Milbanke Sound; (9) British Columbia Coast, Milbanke Sound to Portland Canal; (10) Crown Lands, Purchase and Lease; (11) Cariboo Land Recording Division; (12) Kamloops and Nicola Land Recording Division; (13) Similkameen Land Recording Division; (14) Vancouver Island; (15) Queen Charlotte Islands; (16) Cranbrook and Fernie Land Recording Divisions; (17) Yale Land Recording Division; (18) Osoyoos Land Recording Division; (20) Nelson and Slooten Land Recording Division; (21) Revelstoke and Golden Land Recording Division; (23) Skeena Land Recording Division; (23) Stikine and Atlin Land Recording Division; (24) Hazelton Land Recording Division; (25) Peace River District; (26) Omineca District, Nation Lakes, etc.; (27) New Westminster Land Recording Division; (28) Francois-Ootso Lakes; (29) Endako and Nechako Rivers; (30) Stuart and Babine Lakes; (31) Vicinity of the Pacific Great Eastern Railway (Squamish to Clinton); (32) Vicinity of the Pacific Great Eastern Railway (Clinton to 52nd Parallel); (33) Central Lillooet Division; (34) The Chilcotin Plateau; (35) Fort George Land Recording Division, Central and Western Portions; (36) South Fork of the Fraser and Canoe River Valleys; Mount Robson Park; Strathcona Park, Vancouver Island.

## Section 5.—Reports of Dominion and Provincial Royal Commissions, Together with a Selection of Reports of British Royal Commissions having a Bearing on Canada.

### DOMINION ROYAL COMMISSIONS.

**NOTE.**—Reports of important Royal Commissions back to 1884 have been included, but only those reports where a price is quoted are in print; these may be obtained from the King's Printer, Ottawa.

Royal Commission on the Arrangements re the Finances Advanced for the Construction of a Railway to the Pacific: Report (in Journals of the House of Commons, Appendix 1, 1873), 227 p. Report of the Canadian Pacific Railway Royal Commission, 1882, Ottawa, S. Stephenson and Co. 3 v., V. 1 and 2 Evidence, V. 3 Conclusions. Royal Commission on Immigration, 1884. Royal Commission on Railways: Report with appendices, 1888, 41 p. Royal Commission on the Relations of Capital and Labor in Canada: Evidence, Quebec, Ontario, Nova Scotia, New Brunswick, 1889, 4 v. Royal Commission in Reference to Certain Charges made against Hon. Sir P. A. Caron: Report, 1893, 602 p. Royal Commission on the Shipment and Transportation of Grain: Report, Sessional Papers, 81A, 1900. Royal Commission on Chinese and Japanese Immigration: Report, 1902. Royal Commission on Transportation: Report, 1903, 67 p. (Sup. to Report of Minister of Public Works). Royal Commission on Industrial Disputes in the Province of British Columbia: Report and minutes of evidence, 2 pts., 1903-04. Royal Commission on the Alleged Employment of Aliens in Connection with the Surveys of the Proposed Grand Trunk Pacific Railway, 1905. Royal Commission on the Grain Trade of Canada: Sessional Papers, 59, 1906. Royal Commission on a Dispute Respecting Hours of Employment Between the Bell Telephone Company of

Canada, Ltd., and Operators at Toronto, Ont., 1907, 102 p. Royal Commission on (Life) Insurance: Evidence, 4 v.: Report, 1907, 204 p. Royal Commission Quebec Bridge Inquiry: Report, 1908, 2 v. 206+p.: List of plans accompanying the report, 1-37. Royal Commission to Inquire into Industrial Disputes in the Cotton Factories of Quebec: Report, 1909, 32 p. Royal Commission of Inquiry in the Matter of the Farmers Bank of Canada: Proceedings, 1913, 717 p. Royal Commission on Industrial Training and Technical Education: Commissioners Report, 1913, 4 v. (32). Royal Commission on Penitentiaries: Report, 1914, 44 p. (10 cents). Royal Commission re Parliament Buildings' Fire at Ottawa, Feb. 3, 1916 (10 cents). Royal Commission to Inquire into Railways and Transportation in Canada, 1917 (Drayton-Acworth Comm.) (15 cents). Royal Commission re the O'Connor Report on Cold Storage in Canada, 1917 (Can. an. rev. 1917, p. 445-451). Royal Commission of Inquiry into the Civic Strike in Winnipeg: Chief Justice T. G. Mathers and F. G. Tipping, Commissioners, 1918 (Statement issued by Department of Labour, June 19). Royal Commission of Inquiry into the Ship-Yards Trouble in Vancouver: W. E. Burns, E. A. James, and James McVety, Commissioners, 1918 (Statement issued by Department of Labour, June 19). Royal Commission on Industrial Relations: Report together with a minority report, 1919, 26 p. (20 cents). Royal Commission on Racing Inquiry: Report of J. G. Rutherford, C. M. G., Commissioner, 1920 (10 cents). Royal Commission on Lake Grain Rates: Report of S. J. McLean, T. L. Tremblay, Levi Thompson, W. T. R. Preston, 1923 (10 cents). Royal Commission on Pensions and Re-Establishment, 1923: First interim report, 1923 (10 cents): Second interim report, 1924 (25 cents): Final report, 1924 (61). Royal Commission on Pulpwood: Report, Ottawa, July, 1924, 298 p. (31). Royal Grain Inquiry Commission: Interim report, 1924, 32 p. Royal Grain Inquiry Commission: Report, 1925, 217 p. (81). Royal Commission on Maritime Claims: Report, 1926, 45 p. (25 cents). Royal Commission Investigating the Fisheries of the Maritime Provinces and the Magdalen Islands, 1928, 125 p. (50 cents). Royal Commission on Customs and Excise: Interim reports 1-10, 119 p.: Final report, 1928, 24 p. (25 cents). Royal Commission on Reconveyance of Land to British Columbia pursuant to Order in Council of Mar. 8, 1927, 1928, 57 p. (25 cents). Royal Commission Appointed to Inquire into Pilotage in British Columbia Waters, 1929, 10 p. (10 cents). Royal Commission on the Transfer of the Natural Resources of Manitoba: Report of W. F. A. Turgeon, T. A. Crerar, C. M. Bowman, and Oliver Master, 1929, 46 p. (25 cents). Royal Commission on Technical and Professional Services: Report, February, 1930, 60 p. (Beatty Comm.) (15 cents). Royal Commission to Inquire into Trading in Grain Futures: Report, 1931, 90 p., chart (Stamp Comm.) (25 cents). Royal Commission to Inquire into Railways and Transportation in Canada, 1931-32, 115 p., maps, chart (Duff Comm.) (75 cents). Royal Commission on Banking and Currency in Canada, 1933, 119 p. (Macmillan Report) (50 cents). Royal Commission on Price Spreads: Report, 304-506 p., 1935 (Stevens Comm.) (82). Royal Commission on the Natural Resources of Alberta, 1935, 42 p. (A. K. Dysart, Chairman) (25 cents). Royal Commission on the Natural Resources of Saskatchewan, 1935, 68 p. (A. K. Dysart, Chairman) (25 cents). Royal Commission on Financial Arrangements between the Dominion and the Maritime Provinces: Report, 24 p., 1935 (Sir Thomas White, Comm.) (10 cents). Royal Commission to Investigate Radio Broadcasting and Reception Conditions in Canada: Sir John Aird, Chairman, 1929 (25 cents). Royal Commission on Anthracite Coal: H. M. Tory, Commissioner, Feb. 3, 1937, 120 p. (25 cents). Royal Commission on the Textile Industry: W. F. A. Turgeon, Commissioner, 1938, 308p. (English and French editions), (75 cents). Royal Grain Inquiry Commission, W. F. A. Turgeon, Commissioner, 1938, 264 p. (31).

### PROVINCIAL ROYAL COMMISSIONS.

**Prince Edward Island.**—Report of the Royal Commission on Education, 1930, 55 p. H. F. McPhee, Brief for the Province of Prince Edward Island for Readjustment of Financial Arrangements with the Dominion Government and Full Implementation of the Report of the Royal Commission on Maritime Claims, August, 1934, 30 p. The Case of Prince Edward Island: Submission Presented to the Royal Commission on Dominion-Provincial Relations by the Government of Prince Edward Island, Charlottetown, Irwin Pr. Co., 1938, 4+66 p.

**Nova Scotia.**—Report of Commission appointed under Chapter 10, Acts 1907, Entitled "An Act Respecting Old Age Pensions and Miners' Relief Societies", 1908. Royal Commission re Expenditures in Connection with the Construction of Certain Federal Aid Roads by the Provincial Highway Board: Report, 1921, 20 p. Report of the Royal Commission Respecting the Coal Mines of the Province, 1925, 59 p., chart. Report of Provincial Royal Commission on Coal Mining Industry in Nova Scotia, 1926, 31 p. Province of Nova Scotia: a Submission of Its Claims with Respect to Maritime Disabilities Within Confederation as Presented to the Royal Commission, Halifax, N.S., July 21, 1926, 178 + 4 p. Royal Commission on Ratings of the Lunenburg Fishing Fleet and Lumber Industries as Applied by the Workmen's Compensation Board, Nova Scotia: Report and findings, 42 p., 1927. Royal Commission on the Mentally Deficient Persons in Nova Scotia, 1927: Report, 4 p., 1928. Report of the Royal Commission Investigating the Apple Industry of the Province of Nova Scotia, 1930, 71 p. Report of the Royal Commission Respecting the Coal Mines of Nova Scotia, 1932, 32 p., charts. Report of the Royal Commission Concerning Jails, 1933, 115 p. Royal Commission of Economic Inquiry: a Submission on Dominion-Provincial



Relations and the Fiscal Disabilities of Nova Scotia Within the Canadian Federation, 1934, 263 p.; Report, 238 p., bibl., appendices, 133 p. Report of the Royal Commission on Transportation, 1936, 21 p. Submission on Behalf of the Union of Nova Scotia Municipalities, to the Royal Commission on Dominion-Provincial Relations, February, 1938, 37 p. Submission by the Government of the Province of Nova Scotia to the Royal Commission on Dominion-Provincial Relations, 1938, 141 p., appendices, 22 p.

**New Brunswick.**—Royal Commission Concerning St. John and Quebec Railway Company Charges: Report (N.B. p. a. sup. appx., p. 116-147, 1915). Report of the Royal Commission in Respect to the Lumber Industry, 1927, 15 p. Report of the Royal Commission to Investigate Working of Compensation Act in Respect to Lumber Industry, 1927, 10 p. The W. H. Harrison, Special Brief for New Brunswick, for Readjustments of Financial Arrangements with Dominion Government, and Further Implementation of the Recommendations of the Royal Commission on Maritime Claims, 1934, 27 p.

**Quebec.**—Royal Commission (appointed to hold an investigation into the administrative details of the constitution, working and sale of the Quebec, Montreal, Ottawa and Occidental Railway, as well as the final settlement of accounts and other facts relating to the railway), Hon. A. B. Routhier, Chairman, 1885 (Dom. an. reg., 1885, p. 182). Royal Commission on Lunatic Asylums of the Province of Quebec: Report, 1888, 182 p.

**Ontario.**—Royal Commission on Certain Charges Against the Warden of the Central Prison: Report and Evidence of Wardens of Prisons in the United States and Canada, 1883, 181-63 p. Report of the Royal Commission on the Mineral Resources of Ontario and Measures for their Development, 1890. Report of the Royal Commission on Forest Reservation and National Park, and Papers and Reports upon Forestry, Forest Schools . . . 1893. Return of Royal Commissions since Confederation, together with the dates, subjects, etc., 1894, 7 p. Royal Commission on the Financial Position of the Province of Ontario: Report, 1901, 29p. Report of the Royal Commission on the Gamble Charges, Toronto, 1903, 952 + 98 + 48 p. Royal Commission on Railway Taxation: H. J. Pettypiece, Chairman, Archibald Blue and Professor Adam Shortt, Commissioners: Report, 1905 (Can. an. rev., 1905, p. 291-3; 1906, p. 343). Royal Commission on the University of Toronto: Report, 1906, 60+268 p. In the Matter of a Royal Commission to Inquire into the Administration, Management and Welfare of the Ontario School for the Blind: Report and recommendations by Norman Blain Gash, 1917, 35 p. Royal Ontario Nickel Commission: Report and appendix, 1917. Royal Commission on University Finances: Report, 1921, 160 p. Royal Commission on Automobile Insurance Premium Rates: Interim Report on Compulsory Insurance and Safety Responsibility Laws, 1930, 85 p. Royal Commission on Public Welfare: Report, 1930, 111 p. Royal Commission to Investigate the Advisability of Amending the Workmen's Compensation Act: Hon. W. E. Middleton, Commissioner (Can. an. rev., 1930-31 p. 143—No mention of report being issued; only of Judge's ruling). Royal Commission Appointed to Inquire into Certain Matters Concerning the Hydro-Electric Power Commission of Ontario: Report, 1932, 11 p. Royal Commission on the Use of Radium and X-rays in the Treatment of the Sick, 1932, 171 p. Royal Commission of Inquiry into "the circumstances surrounding the arrest and sentencing to five years in the Kingston Penitentiary of Albert Dorland in April, 1930, for carrying offensive weapons in the course of an alleged attempt to hold up the Royal Bank of Canada Branch at Church and Wellesley Streets, Toronto", Aug. 2, 1933: Hon. A. C. Kingstone, Commissioner. Royal Commission of Inquiry into Alleged Cruelty and Unsatisfactory Management at the Children's Shelter at Windsor, Ontario: M. A. Sorsoleil, Commissioner, 1933-34, (Can. an. rev., 1934, p. 173-4). Royal Commission to Inquire into the Conduct, Management and Administration of the Children's Aid Society of York County: Judge James Parker, Commissioner: Report presented 1934 (Can. an. rev., 1934, p. 173-4). Royal Commission to Inquire into the Purchase by the Henry Government in March, 1933, of the subsidiary company of the Abitibi Power and Paper Company and the Ownership at the time of some of the Company's Bonds both by the Hon. George S. Heary and the Rt. Hon. Arthur Meighen... July 12, 1934, (Can. an. rev., 1934, p. 188). Royal Commission to Investigate Charges Against Certain Members of the Toronto Police Force, 1935-36.

**Manitoba.**—Royal Commission on the Financial Affairs of the Province: Report (Man. p. a. 21, p. 389-538, 1900). Royal Commission upon the University of Manitoba: Report (Man. p. a. p. 397-492, 1910). Royal Commission on Technical Education and Industrial Training: Report (Man. p. a. p. 281-356, 1912). Royal Commission Appointed to Investigate the Charges Made in the Statement of C. P. Fullerton, K.C.: Report, 1916, 17 p. Royal Commission on the New Parliament Buildings: Report, 1916, 85 p. Royal Commission on all Expenditure for Road Work during the Year 1914: Report, 1917, 60 p. Royal Commission on all matters Pertaining to the Manitoba Agricultural College: Interim report (Man. p. a. No. 17, p. 1161-1205, 1917). Royal Commission on Education: Reports on the College of Agriculture and the University of Manitoba Submitted by the Royal Commission and the Carnegie Foundation for the Advancement of Teaching, 1924. Royal Commission Appointed to Inquire into the Administration of the Child Welfare Division of the Department of Health and Public Welfare, 1929, 54 p., chart. Royal Commission re Allegations as to the Seven Sisters Falls Power Site Agreement: Chief Justice D. A. Macdonald,

Mr. Justice A. K. Dysart, Mr. Justice J. F. Kilgour, 1929 (Pub. in Man. Free Press, May 1 and 7, 1929). Royal Commission Regarding the Blind in Manitoba and Saskatchewan: Dr. Olin H. Burritt, Commissioner, (Tabled in the Legislature Mar. 6, 1931), 45 p. Royal Commission on Manitoba Pool Elevators: E. K. Williams, Commissioner, Report, June 19, 1931 (Can. an. rev., 1930-31, p. 235-6). Royal Commission Appointed to Inquire into the [misappropriation] of funds belonging to the University of Manitoba and to Heber Archibald, . . ., 1932. Manitoba's Case: A submission presented to the Royal Commission on Dominion-Provincial relations by the Government of the Province of Manitoba, 1937: 9 parts—(1) Introduction, 6 p.; (2) The constitutional relations of the Dominion and the provinces, 43 p.; (3) The effects of federal monetary policy on western Canadian economy, 47 p.; (4) The effects of federal tariff policy on Western Canadian economy, 40 p.; (5) The effects of declining income, 32 p.; (6) The financial problems of municipalities and school districts, 26 p.; (7) Analysis of Manitoba's treasury problem, 96 p.; (8) Manitoba's case: summary and recommendations, 58 p.; (9) An examination of certain proposals for the readjustment of Dominion-Provincial financial relations, 29 p.

**Saskatchewan.**—Bribery and Liquor Commission: Hon. J. T. Brown and Hon. E. L. Elwood, 1916 (Can. an. rev., 1916, p. 705) (not printed). Highway Frauds Commission: Hon. E. L. Wetmore, W. E. Mason, and H. G. Smith, 1916. Buildings and Telephone Commission: Sir F. W. G. Haultain, Chief Justice, Hon. H. W. Newlands, and Hon. J. H. Lamont, 1916-17. Royal Grain Inquiry Commission: Reports, 1928, 157 p. Saskatchewan Royal Commission on Immigration and Settlement: Report, 1930, 206 p. Royal Commission appointed to investigate into mining conditions in the Province of Saskatchewan, 1932: His Honour E. R. Wylie, Commissioner. Royal Milk Inquiry Commission: Report, 1933, 42 p. mimeo. Submission by the Government of Saskatchewan to the Royal Commission on Dominion-Provincial Relations, 1937, 4+434 p.

**Alberta.**—Royal Commission to Inquire into Alleged Undue Interference with Justice in the Case of Henry Wise Wood, Jr. and O. B. Lassiter (Can. an. rev., 1934, p. 306).

**British Columbia.**—Royal Commission for Instituting Inquiries into the Acquisition of Texada Island: Papers (B.C. pa. p. 181-246, 1875). Kootenay Royal Commission: Proceedings (B.C. pa. p. 141-156, 1879), 1880. Royal Commission on the Conduct of the Affairs of the Municipal Council of Victoria: Report (B.C. pa. p. 481-512, i-cxli, 1892). Royal Commission on the Management of the Provincial Lunatic Asylum at New Westminster: Report (B.C. pa. p. 503-574, 1894). Royal Commission of Inquiry on Timber and Forestry: Final report, 1909-10. Royal Commission on Municipal Government, 1912: Report, 18 p., 1913. Royal Commission on Taxation: Synopsis of report and full report, 1912, 38 p. Royal Commission on Agriculture: W. H. Hayward, Chairman, 1912, Full report, 9+398 p., 1914. Royal Commission on Matters Relating to the Sect of Doukhobors in the Province: Report of William Blakemore, 1913, 66 p. Royal Commission on Milk Supply: Report, 1913, 29 p. Royal Commission on Agriculture: Report, 1914, 9+42 p.: Full report, 1914, 9+398 p. Royal Commission on Labour: Report, 1914, 28 p. Royal Commission on Mental Hygiene: Report and final report, 2 pts., 1927-28. Royal Commission on State Health Insurance and Maternity Benefits: C. F. Davie, Chairman: Progress report, Feb. 11, 1930, 30 p.: Final report, 1932, 63 p. Royal Commission on Chiropractic and Drugless Healing: Denis Murphy, Commissioner, 11 p., 1932. Municipal Taxation Commission: A. M. Harper, Chairman, 4+90 p., mimeo, 1933. British Columbia in the Canadian Confederation: Brief presented to the Royal Commission on Dominion-Provincial Relations by the Government of the Province of British Columbia, 37 p., 1938: Submission Presented to the Royal Commission on Dominion-Provincial Relations by the Government of the Province of British Columbia, 376 p., 1938.

### BRITISH ROYAL COMMISSIONS.

Royal Commission on the Natural Resources, Trade and Legislation of Certain Portions of H. M. Dominions, 1912: Reports and minutes of Evidence, 1st Interim Report, 1912, 3 p.; 5th interim report (Canada), 1917, 6+61 p.; Final report, 1917, 9+199 p.—Minutes of evidence, pt. 1: Migration, 1918, 293 p., pt. 2: Natural Resources, Trade, 1912, 3+432 p.: Minutes of evidence taken in Maritime Canada in 1914, 1915, 5+191 p.: Minutes of evidence taken in Central and Western Canada in 1916; pt. 1, 1917, 12+464 p.; pt. 2, 1917, 7+462 p.

## CHAPTER XXX.—THE ANNUAL REGISTER. 1937-38.

### Section 1.—Dominion Legislation, 1937.

Legislation of the Second Session, Eighteenth Parliament, Jan. 14, 1937, to Apr. 10, 1937.

**Finance and Taxation.**—Three Appropriation Acts were passed during the session, *viz.*, cc. 1, 2 and 45, c. 2 applying to the fiscal year ended Mar. 31, 1937, and cc. 1 and 45 to the fiscal year ended Mar. 31, 1938. C. 1, the Appropriation Act, No. 1, 1937, granted a sum not exceeding \$37,395,179·14 towards defraying the several charges and expenses of the public service, being one-sixth of the amount of each of the several items to be voted set forth in the Main Estimates, together with a sum not exceeding \$16,010,551·17 towards defraying the several charges and expenses of the public service, being one-sixth of the amount of each of the several items to be voted set forth in the Special Supplementary Estimates. C. 2, the Appropriation Act, No. 2, 1937, granted a sum not exceeding \$40,903,880·76 towards defraying the several charges and expenses of the public service set forth in the Schedule to the Act and based on Further Supplementary Estimates 1936-37. By c. 45, the Appropriation Act, No. 3, 1937, were granted: \$186,975,895·69 towards defraying the several charges and expenses of the public service, being five-sixths of the amount of each of the items set forth in Schedule A to this Act; \$80,052,755·83, being five-sixths of the amount set forth in Schedule B to this Act; \$11,339,955·98, being the amount set forth in Schedule C. Under s. 5 of this chapter, the Governor in Council was empowered to raise a loan not in excess of \$200,000,000 for public works and general purposes, principal and interest being chargeable to the Consolidated Revenue Fund.

C. 33 is the Gold Clauses Act, 1937. It enables contractual obligations payable in money of Canada, which give the creditor a right to require payment in gold or gold coin, to be discharged by currency of Canada, dollar for dollar of the face value of the obligation. Such currency shall be legal tender for a debt payable in gold. Where a gold clause obligation governed by Canadian law is payable in money other than money of Canada, tender of the face value in currency which is legal tender for the payment of debts in the country of such money shall entitle the debtor to a discharge of the obligation. Gold clause obligations are declared to be contrary to public policy and are not to be contained in any obligation made from the date of this Act.

**National Revenue.**—C. 19 is an Act to revive the Business Profits War Tax Act, 1916, certain provisions of which, relating to the procedure for appeals from assessments made thereunder, have been amended by repealing the provisions regarding procedure in appeals from assessments and substituting therefor Part VIII of the Income War Tax Act (c. 97, R.S.C. 1927) except s. 58.

Under c. 24, the Customs Act (c. 42, R.S.C. 1927), as subsequently amended, is further amended in several respects. Under s. 1, the scope of the Act is widened to include import and other duties and taxes along with excise duties and taxes as those which may be disregarded in estimating "value for duty" in certain cases. Ss. 2 and 3 amend the legislation with regard to the fixing of values for duty. With regard to the importation of fire arms and munitions of war, s. 122 of the Act is

repealed and new provisions are made under s. 10 of the Statutes for regulating this traffic. S. 8 revises the conditions under which drawbacks may be allowed.

C. 25 amends the Customs Tariff (c. 44, R.S.C. 1927, with later amendments) by the addition of subsections governing the rate of exchange on appreciated currency in computing value for duty of imported goods, and the application of special or dumping duties when such a rate of exchange has been fixed.

The Customs Tariff is also amended by c. 26, which states that the Governor in Council may, in certain cases, order that certain duties and taxes shall be disregarded in estimating market value of goods imported. By ss. 2 and 3 of this chapter, Schedules A and B of the said Act are amended by striking out certain items and substituting Schedules A and B of this legislation.

C. 27 amends the Department of National Revenue Act (c. 137, R.S.C. 1927), by repealing the subsection providing gratuity in lieu of leave on retirement.

A number of amendments are made to the Excise Act, 1934 (c. 52, 1934) by c. 29. The definition of 'officer' is extended to include every person employed for the purpose of the administration or enforcement of this Act, including any member of the R.C.M.P. To s. 43 of the Act, which deals with the ascertaining and paying of duties, is added a subsection dealing with duties imposed on goods bonded in warehouse which have been found to be deficient in quantity, to the effect that certain spirits, under such circumstances, may be subject to an abatement. The subsections providing that priority be given to court proceedings under the Excise Act and that penalties under the Act may be levied by sale of the goods and chattels of the offender are removed from s. 118. A number of other amendments are made to the legislation dealing with distilleries, mainly with respect to penalties for distilling without licences, changes in licence fees or duties, and permits to remove spirits for export. S. 16 amends Part VII of the original Act by specifically defining 'wood alcohol'. The section, also under this Part, relating to the penalties for violation of the provisions of this Act is repealed and a new section substituted as s. 319A.

C. 41 amends the Special War Revenue Act (c. 179, R.S.C. 1927). Under this amendment the term 'partly manufactured goods' is limited to goods which are to be incorporated into and form a constituent or component part of an article. The tax on dressed or dyed furs is raised from 6 to 8 p.c. Schedule III of the Act is amended mainly by the broadening of the definition of 'fire brick' and the addition of photographs, paintings, drawings, etc.; raw and salted hides; and materials used as ingredients in canned fish. Spinal braces and articles for the use of the blind are added to "Goods Enumerated in Customs Tariff Items".

**Agriculture.**—By c. 8, which amends the Dairy Industry Act, Cheddar cheese is exempted from the regulations relating to the weight of packaged cheese. Other amendments under this legislation are of a minor nature.

According to the amendment to the Prairie Farm Rehabilitation Act (c. 23, 1935), enacted by c. 14, the Governor in Council may establish one or more Advisory Committees to take over the duties, with the addition of the development and promotion of land utilization and land settlement, of the former Prairie Farm Rehabilitation Advisory Committee. The stipulations regarding the membership of that Committee do not apply to the new Committees, but the chairman of each is to be appointed by the Minister. The Act authorizes the necessary expenditure for the fiscal years 1938-39 to 1939-40.

C. 30, cited as the Feeding Stuffs Act, 1937, lays down regulations demanding the registration of certain feeding stuffs (given in Schedule A) offered for sale. Registration may be refused by the Minister in cases where the feeding stuff does not conform with stated analysis specifications and if registration is approved no change may be made in composition or ingredients without the consent of the Minister. Feeding stuffs (Schedule A) and by-products (Schedule B) must be labelled in the different ways prescribed. Provision is made for the appointment of the necessary inspectors and analysts, and offences and penalties under the Act are laid down. The Feeding Stuffs Act (c. 67, R.S.C. 1927) is repealed.

A Dominion guarantee of principal and interest of loans made by any chartered bank and guaranteed by the provinces of Manitoba, Saskatchewan, and Alberta, for the purpose of purchasing seed grain and providing other assistance to farmers in connection with seeding operations during the spring of 1937, is provided for by c. 39, the Seed Grain Loans Guarantee Act, 1937. The aggregate principal amount of such loans in Alberta shall not exceed \$1,600,000, in Manitoba \$750,000, and in Saskatchewan \$6,600,000. Guarantees given under this legislation must conform to certain stated terms and meet with the approval of the Governor in Council.

C. 40 is the Seeds Act, 1937, and sets forth regulations regarding the sale of cereal, forage crop, grass, field root, garden or vegetable and other seed under separate categories, the use of established variety names and licences for new names (the Minister of Agriculture has power to refuse or cancel a licence, or change a name). The advertising of seed for sale, the sale of seed for export, the importation of seed, the taking of official samples, etc. is also provided for. Penalties for violation of the provisions of this Act are laid down. This legislation repeals the Seeds Act (c. 185, R.S.C. 1927) as amended in 1928 (c. 47).

**Fisheries.**—The Fisheries Research Board of Canada is created under c. 31. The constitution of the Board is defined. Members serve without salary but expenses and, in certain cases, emoluments are provided for. The Board is given charge of all Dominion fishery research stations and control of investigations in connection with marine and freshwater fisheries, etc., which work was formerly carried on by the Biological Board. Other work may be assigned to the Board by the Minister of Fisheries. The Biological Board Act (c. 18, R.S.C. 1927) is repealed.

C. 36 is cited as the Northern Pacific Halibut Fishery (Convention) Act, 1937. In the Schedule to this Act is set forth the Convention between Canada and the United States of America for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea, signed at Ottawa, Jan. 29, 1937. The Act confirms the Convention and suspends any other inconsistent laws. Powers for carrying out the Convention are vested in the Governor in Council and the apportionment of expenses of the International Fisheries Commission is laid down. A close season is defined for halibut fishing in territorial waters and control measures are set forth. Violations of this Act and penalties therefor are laid down.

**Immigration.**—By c. 34 a number of minor amendments are made to the Immigration Act (c. 93, R.S.C. 1927). A proviso is added to the section on domicile to the effect that persons absent from the Dominion on business as employees of Canadian organizations or of His Majesty's Government in Canada shall not lose their Canadian domicile on such account. Persons in transit through Canada from and to outside points are included in "non-immigrant classes" and persons suffering from trachoma are included in "prohibited classes" of immigrants. Forms C, F, and G in the Schedule are repealed and new forms substituted. A number of minor

amendments are made as a consequence of the administration of the Immigration Act having been transferred to the Department of Mines and Resources.

**Insurance.**—The section of the Canadian and British Insurance Companies Act, 1932, which deals with the registration of provincial companies, is amended by c. 5. It is now provided that the deposit required to be made by certain provincial companies may be less, within limits, than the amount otherwise required under this Act.

**Justice.**—By c. 4 (the British Columbia Divorce Appeals Act), the Court of Appeal of British Columbia shall have jurisdiction to hear and determine appeals from an order, judgment or decree of a court of the province or a judge thereof having jurisdiction in divorce and matrimonial causes.

The Supreme Court Act (c. 35, R.S.C. 1927) is amended by c. 42. To s. 37 dealing with appeals direct to the Supreme Court from courts other than courts of last resort in a province by leave of such courts, by consent of both parties, and where over \$2,000 is involved, the proviso is added that no such leave shall be granted by such court of final resort unless the appeal lies to that court and to the Supreme Court from the judgment pronounced in that appeal.

**Labour.**—The Home Improvement Loans Guarantee Act, 1937 (c. 11 of the Statutes), is an Act to increase employment by encouraging the repair of rural and urban homes. The Government of Canada may guarantee approved lending institutions against losses, which may result from home improvement loans, to the extent of 15 p.c. of the amount of such loans. The amount of loans which may be guaranteed under this Act shall not exceed \$50,000,000 and the total liability of the Government is therefore \$7,500,000. The amount of individual loans shall not exceed \$2,000 except in the case of a multiple family dwelling or a property to be so converted, when it shall not exceed \$1,000 for each family plus \$1,000. Such loans must comply with conditions laid down in the Act and are subject to regulations prescribed by the Governor in Council.

Under c. 23, which is an act to amend the Combines Investigation Act (c. 26, R.S.C. 1927), the definitions of "Commissioner" and "Minister" are amended and the definition of "Special Commissioner" is added. Ss. 5-9 of the Act, which were repealed by c. 54 of the Statutes of 1935, are now replaced by new sections which cover the subjects of administration of the legislation and remuneration of officers in amended form. The Governor in Council may appoint a Commissioner and an Assistant Commissioner, and may also appoint from time to time one or more Special Commissioners whose duty it shall be to conduct an investigation into any alleged combine. The Commissioner may employ such temporary, technical and special assistants as are necessary. Whereas formerly, after a preliminary inquiry, the decision of the Commissioner as to whether further inquiry should be made was final, a report must now be made to the Minister who may instruct further investigation. At the conclusion of an investigation, the Special Commissioner shall make a report to the Commissioner which shall be transmitted to the Minister and within fifteen days be made public unless otherwise decided by the Minister. The authority of the Commission to investigate agreements according to the provisions of the Dominion Trade and Industry Commission Act, 1935, and to report to the Minister of Justice the misuse of a patent with a view to having the patent revoked, is repealed. The Act is extended to provide that orders of the Commissioner or Special Commissioner compelling the attendance of any witness or the production of any book, record, paper, or article, or the examination of any person on oath, or for

certain other purposes, can be enforced only on the certificate of the President of the Exchequer Court or Chief Commissioner of the Dominion Trade and Industry Commission that it is fit and proper that the action mentioned in the application should be taken. It is further provided that where an investigation under the Act is proceeding in any province, and the Commissioner or Special Commissioner is desirous of exercising the power to commit to prison or otherwise penalize any person, application for authority to do so may be made to a judge of the Supreme or Superior Court of the province in which the investigation is being made.

For the purpose of expanding employment in primary and secondary production and at the same time conserving and developing natural resources, accelerating the expansion of trade, industry, and gainful occupation, and thereby lessening the governmental burdens consequent upon unemployment and agricultural distress, the Unemployment and Agricultural Assistance Act, 1937, (c. 44) was enacted. The Act authorizes the execution of such works and undertakings as may be determined, and the employment thereon of competent persons who are in receipt of relief. All contracts for such works carried out under provincial jurisdiction but to which the Dominion Government is contributing shall be approved by the Minister of Labour and supervised by the Dominion Government. The Government may enter into agreements with any of the provinces respecting alleviation of unemployment conditions and of agricultural distress and may, where necessary, grant financial assistance by way of a loan to assist the province to pay its share of expenditures for such purposes. Such agreements may be entered into with corporations or individuals respecting expansion of industrial employment, but no financial assistance shall be granted to any province unless certified statements as the Dominion Government may require are furnished. The Dominion Government may also examine and audit provincial records related to such works if deemed necessary.

**Parliamentary Representation.**—C. 9 amends the Dominion Franchise Act to permit of the annual revision of the lists of electors being omitted for the year 1937.

**Pensions.**—By c. 12, the payments of pensions and compassionate allowances to officers' wives, under the Militia Pension Act, are to be made in equal monthly instalments in arrear, instead of yearly in advance, and, unless otherwise specified, shall continue during the lifetime of the recipient.

C. 13 amends the Old Age Pensions Act (c. 156, R.S.C. 1927). It provides for the payment of a pension to every blind person, 40 years of age or over, who does not receive a pension in respect of blindness under other legislation, and whose income is less than the specified amount for each of the classes enumerated in s. 8A, s-s. 1. The maximum pension is \$240 yearly, but in the case of a blind person who, after the coming into force of this legislation, marries a blind person unable to perform work for which sight is essential the maximum pension is \$120. Maximum pensions are subject to reductions as laid down. Pensions for blind persons are to be made on the same basis as old age pensions, *i.e.*, the Dominion Government will contribute 75 p.c. of the cost if and when the individual provinces undertake to contribute the remainder.

**The Throne.**—By c. 16, the alteration in the law touching the Succession to the Throne, as set forth in the Act of Parliament of the United Kingdom entitled "His Majesty's Declaration of Abdication Act, 1936", is assented to in line with the Statute of Westminster, 1931. The Instrument of Abdication is set out in Schedule 1 to the Act and the request and consent of Canada to the enactment of the said Act in Schedule 2.

**Trade and Commerce.**—C. 15 amends the Precious Metals Marking Act (c. 84, R.S.C. 1927) so far as the latter legislation applies to gold- and silver-plated articles. To the original list of such articles which must have applied to them the authorized trade mark are added "gold plate" and "gold plated", "silver plate" and "silver plated". The penalties outlined in s. 14 of the original legislation are also amplified with regard to the importation of advertising matter wrongly describing such articles.

The Trade Agreement between Canada and the United Kingdom is approved by c. 17. Inconsistent laws are suspended and the United Kingdom Trade Agreement Act, 1932, (c. 2, 1932-33) is repealed. The new Agreement is set out in the seven Schedules to the Act.

C. 18 is a minor amendment to the Weights and Measures Act regarding recovery of penalties.

A Trade Agreement between Canada and Germany, as set out in the Schedule to the Act, is approved by c. 20 of the Statutes.

C. 21 approves a Trade Agreement between Canada and Uruguay, as set out in the Schedule to the Act.

**Transportation.**—*Railway.*—By c. 3, independent auditors for the year 1937 are appointed to make a continuous audit of the accounts of the National Railways notwithstanding the provisions of s. 13 of the Canadian National-Canadian Pacific Act, 1933.

C. 6 is an Act to authorize the provision of moneys to meet certain expenditures made and indebtedness incurred by the Canadian National Railways during the calendar year 1937 and to authorize the guarantee by the Dominion Government of certain securities to be issued by the Canadian National Railways. The Company is given power to issue securities for retiring maturing obligations and payment of sinking funds to the extent of \$7,114,000 and for capital improvements to the extent of \$23,607,700. The form and terms of the guarantee are laid down.

The cancellation of capital stocks and certain indebtedness of the Canadian National Railway System to the Dominion Government and the adjustment of the accounts of the System is provided for by c. 22, the Canadian National Railway Capital Revision Act, 1937. Certain Government claims against the Canadian National Railways are abandoned, and capital stock surrendered. Provision is also made for the adjustment of differences between the Public Accounts and the National Railway System accounts; surpluses and deficits, notwithstanding s. 15 of the Canadian National Railways Act, are now to be included in the surpluses and deficits of the National Railways but the directors of the C.N.R. may cause surplus earnings to be paid over to the Consolidated Revenue Fund. The 'proprietor's equity' must now be shown in the accounts of the National Railway System and included in the net debt of Canada as well as disclosed in the Public Accounts under "Government assistance to railways". A 'Securities Trust' is established to which is transferred indebtedness amounting to \$1,218,642,195·67 as set out in Schedules A1 and A2 which it is to hold as authorized by this Act.

*Other.*—Minor amendments are made to the Government Harbours and Piers Act by c. 10, mainly respecting changes made necessary by the organization of the Department of Transport and the National Harbours Board.

C. 28 provides for the opening of a Department of Transport Stores Account to which shall be charged the value, at cost, of all stores acquired prior to Apr. 1, 1927, and transferred to the Department of Transport, together with all subsequently



acquired stores. The Minister of Finance is authorized to make such advances from the Consolidated Revenue Fund as may be necessary to enable the Minister of Transport to acquire or replenish such materials and equipment as is authorized by statute, but the outstanding balance of such advances shall at no time exceed one million dollars, and the appropriations of the Department for the particular items covered are to be applied against such advances.

The Trans-Canada Air Lines are incorporated under c. 43. The Corporation, under the management of a Board of Directors composed of seven persons, to be elected and appointed as provided, is authorized to establish, operate, and maintain air lines for the purpose of transporting mails, passengers, and goods by air and to enter into contracts for such transportation across Canada and between and within the several provinces. The authorized capital of the Corporation is \$5,000,000 (50,000 shares of \$100 par value). Shares were offered to the Canadian National Railway Company at par and the Company was permitted to sell or dispose of not more than 24,900 shares (except by the approval of Parliament) to persons engaged or interested in aviation and approved by the Minister of Transport. The Minister is empowered to contract with the Corporation for the operation and maintenance of the Trans-Canada Lines and the Postmaster General may enter into a contract with the Corporation for the transport of mails by the Trans-Canada Lines.

**Miscellaneous.**—Amendments are made regarding the organization of the Central Council and the Executive Committee of the Red Cross Society by c. 7.

C. 32 is the Foreign Enlistment Act, 1937. It is an offence against this Act to enlist, or induce another to enlist, in the armed forces of a foreign State at war with a friendly foreign State (except that nationals of countries which are represented in Canada by foreign consular or diplomatic officers may be recruited by the latter under regulations made by the Governor in Council), to take on board a conveyance any person so enlisted, to build, commission, equip, or dispatch ships to be employed by armed forces of any foreign State against a friendly State, to prepare any military, naval, or air expedition to proceed against dominions of any friendly State, or to bring within Canada, in violation of Canadian neutrality, any prize of war. Offences against this Act may be prosecuted as indictable offences in which case fines up to \$2,000 or two years imprisonment or both fine and imprisonment may be imposed. Regulations that the Governor in Council may make under this Act are to be published in the *Canada Gazette*. The Foreign Enlistment Act, 1870, passed by the Parliament of the United Kingdom (c. 90, 33-34 Victoria) is repealed in so far as it is part of the law of Canada.

C. 35, the National Parks Act, 1937, provides for the setting aside, as a National Park, of such lands in New Brunswick as the province and Canada agree upon, subject to the National Parks Act (c. 33, 1930). The Nova Scotia and Prince Edward Island National Parks Act (c. 43, 1936) is amended by s. 3 of this legislation to provide for the withdrawal from the park in Nova Scotia of certain lands in Cape Breton island.

By c. 37, the Agreement of Mar. 30, 1920, with the city of Ottawa is extended for another year as from July 1, 1936.

C. 38 amends the Royal Canadian Mounted Police Act (c. 160, R.S.C. 1927) with respect to the appointment of the R.C.M.P. Reserve, which formerly contained only officers and men who had served in the Force and who were appointed to the Reserve for a term not exceeding one year. The Commissioner may now appoint, for a period of three years, such number of men, as reserve constables, as the Gover-

nor in Council thinks proper. Regulations relating to the conditions of appointment, rank and promotion, resignation, pension, and training, etc., of members of this Reserve are stated. It is provided that time served in the permanent forces of Canada may be included in the term of service of officers and constables of the R.C.M.P. for purposes of pension.

## Section 2.—Provincial Legislation.

The reader is referred to the different provincial authorities for information in this connection. It is felt that whatever is lost to those readers who are interested in having all provincial legislation brought together and listed under one head is more than offset by the information of more general interest which it has been possible to include in the limited space available, but which would otherwise have had to be omitted.

## Section 3.—Principal Events of the Year.

### Subsection 1.—The Economic and Financial Year, 1937.\*

While constructive factors dominated the economic situation during the first eleven months of 1937, a drop of 6.5 points in the index of the physical volume of business gave evidence of the industrial recession which began in December. In comparison with the year 1936, however, there was an increase of 9.4 p.c. in the 1937 index; major economic factors, except capitalized yields of Dominion bonds, all recorded increases. The indexes of the physical volume of business for the three latest completed years are given below, 1926 being taken as the base year.

| Month.        | 1935. | 1936. | 1937. | Month.         | 1935. | 1936. | 1937. |
|---------------|-------|-------|-------|----------------|-------|-------|-------|
| January.....  | 97.5  | 106.2 | 116.9 | July.....      | 103.0 | 110.8 | 120.5 |
| February..... | 100.6 | 104.8 | 118.0 | August.....    | 107.9 | 113.5 | 123.4 |
| March.....    | 94.2  | 104.0 | 118.7 | September..... | 101.9 | 120.0 | 123.8 |
| April.....    | 98.7  | 111.0 | 124.0 | October.....   | 107.2 | 121.5 | 127.4 |
| May.....      | 103.3 | 107.6 | 122.0 | November.....  | 110.0 | 118.0 | 127.9 |
| June.....     | 99.2  | 111.1 | 126.0 | December.....  | 106.2 | 113.4 | 121.4 |

**Agriculture.**—The volume of principal field crops in 1937 was nearly 7 p.c. under that of the preceding year, drought being responsible for low yields in the southern parts of Saskatchewan and Alberta. On the basis of value, the only provinces to record gains in farm revenues were Manitoba, Alberta, and British Columbia. Most of the major field crops registered declines in the volume of production, barley, rye, and mixed grains being exceptions. The acreage sown to potatoes increased by 5.8 p.c., and the total yield by 7.4 p.c., the value being slightly above the five-year average but nearly 40 p.c. under that of 1936, when prices were exceptionally high.

Slaughterings of cattle decreased slightly, but exports of live cattle increased by 13 p.c. Exports of live hogs also increased and pork exports registered an increase of over 25 p.c. The production and export of butter suffered slight declines but cheese exports increased by 8.6 p.c.

The rise in wholesale prices of farm products during 1937 was greater than in any other important commodity group. As a result such prices compared favourably with those of other groups for the first time in eight years.

\* Abbreviated from "Business Conditions in Canada, 1937", prepared by Sydney B. Smith, M.A., Dominion Bureau of Statistics.

**Minerals.**—Canada's mineral production valued at \$456,800,000 in 1937, showed a gain of 26.2 p.c. over 1936, the previous peak year. The increase was due to both greater production and higher prices, copper, lead, and zinc being notable in the latter connection.

Gold production increased by 9.3 p.c., while the value of all metallic minerals was 28.8 p.c. greater than in the preceding year, that of fuels was 9.7 p.c. higher, the increase in the quantity of crude petroleum being noteworthy. Other non-metallic minerals increased by 34.3 p.c., the gains in the quantities of asbestos and gypsum being 36.1 p.c. and 25.0 p.c., respectively. Clay products and other structural materials increased by 32.2 p.c. and 33.7 p.c., respectively.

**Forestry.**—Employment in the three major divisions of this group, *viz.*, logging, sawmilling, and pulp and paper, showed increases of 36.5 p.c., 11.1 p.c., and 12.7 p.c., respectively. The production of newsprint, at 3,600,000 tons, reached a new high point, the increase over 1936 having been 14.4 p.c. Exports of forest products showed a gain of 25 p.c. over the preceding year, planks and boards recorded an increase of 23.3 p.c., while newsprint was 15.4 p.c. greater.

**Electric Power.**—The output of central electric stations in 1937 amounted to 27,575,000,000 k.w.h., an increase of 8.6 p.c. over 1936. This was a new peak of production and the industry is now directing its attention to the need of extending existing plants or undertaking new developments to meet the increasing requirements of its customers.

**Manufacturing.**—The volume of manufacturing production was slightly greater than in 1929 and showed a gain of 8.5 p.c. over 1936. The output of industries engaged in the production of producer goods showed an increase of 13.1 p.c. The output of steel ingots was of 25.6 p.c. greater than in 1936, while the increase in pig iron production amounted to 32.4 p.c. The gain in the index of consumer goods amounted to 6.5 p.c.

**Construction.**—Construction contracts awarded exceeded the total for 1936 by nearly 38 p.c. Residential and industrial construction showed increases of 31 p.c. and 126 p.c., respectively, while business buildings also recorded an increase of 46 p.c.

**External Trade.**—A further gain in merchandise trade was recorded in 1937, exports having increased by 8.4 p.c. and imports by 27.4 p.c. Owing to the high level of exports, the balance of commodity or visible trade was largely in Canada's favour. Among the 'invisible' items in the complete picture of international transactions, mention should be made of the tourist trade, which is estimated to have left net wealth in the country to the extent of about \$170,000,000, an increase of 20.8 p.c. over 1936.

**Transportation.**—Carloadings recorded an increase of 5.7 p.c., although decreases were shown in grain, and coal and coke. Manufactured products were moved in greater volume, and also ore and forestry products. Gross operating revenues of the Canadian railways showed an increase of 6.0 p.c. over the preceding year.

Canal traffic recorded a general advance in 1937, the traffic passing through the St. Lawrence canals during the period of navigation showed an increase of 11 p.c. and reached a new high point of 9,195,439 tons. The traffic through the Canadian and United States locks at Sault Ste. Marie has been exceeded only in four other years, and showed a gain of 26 p.c. over 1936. A new high record was shown for the

Welland canal, the total of 11,747,950 tons being an increase of 12.6 p.c. over 1936. There was a gain of 8.8 p.c. in the tonnage of freight carried through all Canadian canals, as compared with the preceding year.

**Employment and Unemployment.**—The continued gain in employment, as reported by employers, indicated substantial business recovery, fewer persons being shown as employed in governmentally assisted projects. Index numbers of employment, as at the first of each month of 1937, will be found at pp. 768-774 of the present volume.

The number of fully-employable persons on the relief rolls declined about 40 p.c. from the level of the preceding year.

**Prices.**—Wholesale price levels turned downward in April, 1937, after an irregular rise dating from February, 1933. A short-lived midsummer recovery supported mainly by farm products was followed by a steady decline which extended well into 1938. Living costs continued to rise gradually, with foods, rent, and clothing becoming definitely more expensive than in 1936. Security prices experienced appreciable losses dating from the end of March. Common and preferred stocks suffered to a much greater extent than high-grade bonds. As in the case of commodity prices, the 1937 decline in stock markets was the first serious set-back since prices commenced to advance from the depression nadir (June, 1932, for common stocks).

**Banking.**—The advance in current loans of the chartered banks continued steadily throughout 1937, the average of the twelve monthly figures showing a gain of 4.7 p.c. Notice deposits averaged 3.6 p.c. greater than in 1936, while demand deposits increased by 11.8 p.c. Despite the greater amount of money on loan, the banks' holdings of securities increased by 7.2 p.c.

Bank debits showed a decrease from the position of 1936, the average being down 2.1 p.c. On the other hand, notes in the hands of the public increased by 3.3 p.c. at the end of December, 1937, as compared with the same date of the preceding year.

**Public Finance.**—Figures for the elapsed nine months of the Dominion fiscal year showed that, at Dec. 31, 1937, ordinary revenues had increased by over \$61,000,000, or by 18.8 p.c. as compared with the corresponding period ended in December, 1936. Ordinary expenditures increased to a lesser extent, being nearly \$7,000,000, or 2.5 p.c. greater than in the similar period of 1936. Total expenditures amounted to \$362,000,000, an increase of 0.4 p.c. Relief expenditures were down some \$10,000,000, but Government-owned enterprises called for an increase in expenditure of \$5,000,000.

### Subsection 2.—Other Principal Events of the Year.

**Provincial General Elections.**—General elections, not reported in the 1937 Year Book, took place in Ontario on Oct. 6, 1937, when the Liberal Government of Hon. M. F. Hepburn was returned to office, and in Saskatchewan on June 8, 1938, when the Liberal Government of Hon. W. J. Patterson was returned to office.

**Dominion-Provincial Relations.**—On Aug. 14, 1937, a Royal Commission was appointed "to investigate the economic and financial basis of Confederation and of the distribution of legislative powers in the light of the economic and social developments of the last seventy years". The Hon. Newton W. Rowell, Chief Justice of Ontario, was appointed chairman of the Commission, and public sittings were commenced at Winnipeg on Nov. 29, 1937. Subsequently, sittings were

held in all the provinces and briefs received from Provincial Governments and many other bodies. The report of the Committee has not yet been submitted to Parliament.

**The Bank of Canada.**—On June 8, 1938, the Minister of Finance gave notice of a resolution to introduce a bill to completely nationalize the Bank of Canada, by acquiring the 100,000 outstanding Class "A" shares (par value \$50 each) at the price of \$59.20 per share and accrued dividends. The Government has, since 1935, held a majority capital interest through its ownership of 102,000 Class "B" shares. Following the purchase of the Class "A" shares, the capital structure of the Bank is to be reduced to \$5,000,000, consisting of 100,000 shares of \$50 each, issued to the Minister of Finance.

**Diplomatic Appointments.**—Count Robert de Dampierre, who succeeded M. Raymond Brugère as Minister of France to Canada, presented his credentials to His Excellency the Governor General on Dec. 9, 1937.

Baron Shu Tomii, who succeeded Mr. Sotomatsu Kato as Minister of Japan to Canada, presented his credentials to His Excellency the Governor General on May 25, 1938.

**Trade Agreements, etc.**—Reference is made at p. 487 of the present volume to the extension of the British preference to various colonies, and of most-favoured-nation treatment to certain dominions, colonies, protectorates and mandated territories.

Particulars of the latest changes in agreements with the United Kingdom and other parts of the Commonwealth will be found at pp. 488-490, and with foreign countries at pp. 490-497.

**St. Lawrence Waterways Treaty.**—This Treaty, submitted by the United States Government to the Dominion Government on June 1, 1938, combined, in revised form, the St. Lawrence Treaty of 1932 and the Niagara Convention of 1929—both previously rejected by the United States Senate. It is designed to meet objections of Ontario to the development of power on the Canadian side of the international section before there is a market to absorb it; under the revised draught, Ontario would also be permitted to divert water from the Albany River basin to the Great Lakes, and an export market for surplus power would be opened up in the United States. The Treaty is now under consideration by the Dominion and Provincial Governments concerned.

### Subsection 3.—Obituary.

1937.—(See also pp. 1094-1095 of the 1937 Year Book.) June 19, Honoré Mercier, K.C., Châteauguay, Que., Chairman of the Quebec Streams Commission and former Minister of Lands and Forests for Quebec. Hon. Humphrey Mellish, Halifax, N.S., former Justice of the Supreme Court of Nova Scotia. June 23, James A. Sangster, Cornwall, Ont., M.L.A. for Glengarry. Lieut-Col. T. S. Belcher, Vancouver, B.C., former Deputy Commissioner of the R.C.M.P. June 30, Thomas V. Smith, Winnipeg, Man., Sergeant-at-Arms of the Manitoba Legislature. July 1, Robert Telford, Ottawa, Ont., Chief Clerk of Statistics, Department of National Revenue. July 10, Roland G. Orr, Ottawa, Ont., Chief Architect of the Department of Indian Affairs. July 25, Sir Charles Saunders, Toronto, Ont., former Dominion Cerealist, and discoverer of Marquis wheat. Aug. 6, Hon. H. B. Rainville, Atlantic City, N.J., U.S.A., former Speaker of the Quebec Legislative Assembly. Aug. 12, George F. O'Halloran, Ottawa, Ont., former Deputy Minister of Agriculture and Commissioner of Patents. Aug. 22, Col. L. H. Beer, Ottawa, Ont., Chief

Salvage Officer, Government Contracts Supervision Committee. Aug. 23, Hon. James D. Chaplin, P.C., St. Catharines, Ont., former Minister of Trade and Commerce. Aug. 24, David M. Wright, Stratford, Ont., former M.P. for Perth North. Sept. 4, D. A. Cameron, Montreal, Que., M. P. for Cape Breton North. Sept. 6, John Shearer, Ottawa, Ont., former Superintendent of Public Buildings, Dept. of Public Works. Sept. 10, Col. A. O. Lambert, Montreal, Que., former Director of Pay Services, Dept. of National Defence. Sept. 22, William J. Lynch, I.S.O., Ottawa, Ont., former Chief of the Dominion Patent Office. Sept. 28, Hon. Rodolphe Lemieux, P.C., Montreal, Que., Senator for Rougemont and former Postmaster General and Speaker of the House of Commons. Sept. 30, Hon. W. J. Roche, P.C., C.M.G., M.D., LL.D., Ottawa, Ont., former Chairman of the Civil Service Commission and Minister of the Interior. Oct. 6, Hon. James Arthurs, Toronto, Ont., Senator. Oct. 12, Albert Champagne, Ottawa, Ont., former M.P. for Battleford. Oct. 13, Hon. Simon F. Tolmie, P.C., V.S., former Dominion Minister of Agriculture and Premier of B.C. Oct. 15, Capt. L. G. Dixon, Ottawa, Ont., Supervisor of Nautical Services, Dept. of Transport. Oct. 28, Hon. D. A. Macdonald, Winnipeg, Man., Chief Justice of the Manitoba Court of King's Bench. Nov. 1, Malcolm McGugan, Strathroy, Ont., former M.P. for Middlesex South. Nov. 2, Mr. Justice J. B. Archambault, Montreal, Que., Senior Judge of the Circuit Court of the District of Montreal. Nov. 16, Hon. Nemèse Garneau, Quebec, Que., M.L.C. for Shawinigan. Nov. 20, J. A. Verville, St. Flavien, Que., M.P. for Lotbinière. Nov. 21, Dr. M. R. Blake, Winnipeg, Man., former M.P. for Winnipeg North. Nov. 22, Judge Henry Carpenter, Hamilton, Ont., Junior County Judge for Wentworth. Dec. 7, Lawson O. Clifford, Oshawa, Ont., former M.P. for Ontario. Dec. 19, Dr. C. J. Hamilton, Cornwall, Ont., former M.P. for Stormont. Dec. 24, Hon. John Alexander McEvoy, Toronto, Ont., Judge of the High Court of Justice for Ontario. Dec. 27, Sir Douglas Hazen, P.C., Saint John, N.B., retired Chief Justice of New Brunswick and former Premier of New Brunswick and Dominion Cabinet Minister. 1938.—Jan. 4, Rt. Hon. Sir George H. Perley, P.C., G.C.M.G., Ottawa, Ont., M.P. for Argenteuil and former High Commissioner for Canada in the United Kingdom and Minister of Overseas Military Forces. Wm. M. Ryan, Saint John, N.B., M.P. for St. John-Albert. Jan. 5, Hon. Arthur C. Kingstone, Vancouver, B.C., Judge of the Ontario Supreme Court. Jan. 8, Hon. Aimé Bénard, Winnipeg, Man., Senator for St. Boniface. Jan. 11, Archibald J. Macdonald, North Lancaster, Ont., former M.P. for Glengarry. Jan. 13, Hon. Wm. L. Walsh, Victoria, B.C., former Lieutenant-Governor of Alberta. Jan. 18, Alex D. Chaplin, Chatham, Ont., former M.P. for Kent. Jan. 24, Mr. Justice A. E. McPhillips, Victoria, B.C., Judge of the Appeal Court of B.C. and former Attorney-General. Jan. 26, William S. Hall, Edmonton, Alta., M.P. for Edmonton East. Jan. 28, Judge Albert Edward Taylor, Sarnia, Ont., County Judge for Lambton. Jan. 29, Capt. G. E. Robertson, Ottawa, Ont., Supervisor of Pilotage, Dept. of Transport. Feb. 3, Milton D. McVicar, Petrolia, Ont., M.L.A. for Lambton East. Feb. 10, Mr. Justice Auguste Tessier, Quebec, Que., former Judge of the Superior Court and Quebec Cabinet Minister. Dr. Frank P. Patterson, Vancouver, B.C., Leader of the Official Opposition in the British Columbia Legislature. Hon. William F. Roberts, M.D., Saint John, N.B., Minister of Health and Labour in the New Brunswick Government. Feb. 20, William A. Boys, Augusta, Ga., U.S.A., former M.P. for Simcoe. Feb. 22, Col. George P. Murphy, C.M.G., E.D., Ottawa, Ont., former Quartermaster-General of the C.E.F. Feb. 27, Mr. Justice Adolphe Stein, Montreal, Que., Judge of the Superior Court of Quebec and former M.P. for Kamouraska. Mar. 5, Major-General Sir James H. MacBrien, K.C.B., C.M.G., D.S.O., Toronto, Ont., Com-

missioner of the R.C.M.P. and former Chief of the General Staff. Mar. 8, Peter Sinclair, Ottawa, Ont., M.P. for Queens, P.E.I. Mar. 14, Engineer Lieutenant-Commander Charles S. Stephen, Ottawa, Ont., Technical Adviser, Marine Section, R.C.M.P. Mar. 20, Hon. Martin Burrell, P.C., Ottawa, Ont., Parliamentary Librarian. Mar. 23, Hon. Walter Scott, Guelph, Ont., former M.P. for Assiniboia, and first premier of Saskatchewan. Mar. 25, Hon. A. E. Fripp, Ottawa, Ont., Senator for Ottawa. Apr. 7, Hon. Norman Scarth Macdonnell, Toronto, Ont., Justice of Supreme Court of Ontario, Appellate Division. Apr. 14, Levi Thomson, K.C., Regina, Sask., former M.P. for Qu'Appelle. May 3, Major Frederick C. Betts, Mayo, Que., M.P. for London, Ont. May 6, Duke of Devonshire, K.G., G.C.M.G., G.C.V.O., Baslow, Derbyshire, England, Governor General of Canada, 1916-21. June 3, Alexander McKay Edwards, Galt, Ont., M.P. for Waterloo South. Hon. Hugh Ross, Halifax, N.S., Justice of the Supreme Court of Nova Scotia. June 5, Hon. Morrison M. MacBride, Brantford, Ont., Minister of Labour for Ontario. May 29, Thos. F. Sutherland, Toronto, Ont., Deputy Minister of Mines for Ontario. May 31, William Jackson, Port Stanley, Ont., former M.P. for West Elgin.

#### Section 4.—Extracts from the Canada Gazette—Official Appointments, Commissions, etc.\*

**Lieutenant-Governors, 1937.**—Nov. 23, Albert Matthews, Esq., LL.D., Toronto, Ont.: to be Lieutenant-Governor of the Province of Ontario from Nov. 30, 1937.

**Senators, 1938.**—Jan. 20, Norman Platt Lambert, Ottawa, Ont.; Duncan McLean Marshall, Toronto, Ont.

**New Members of the House of Commons, 1937.**—Oct. 18, Matthew MacLean, elected for Cape Breton North-Victoria, N.S. Nov. 1, Angus Neil McCallum, elected for Frontenac-Addington, Ont. Nov. 8, Hon. William Earl Rowe, elected for Dufferin-Simcoe, Ont. Nov. 29, Robert Wellington Mayhew, elected for Victoria, B.C. Dec. 27, Joseph N. Francoeur, elected for Lotbinière, Que. 1938.—Jan. 17, Joseph A. Bonnier, elected for St. Henry, Que. Feb. 21, Allan G. McAvity, elected for St. John-Albert, N.B. Feb. 28, Georges Héon, elected for Argenteuil, Que. Mar. 21, Orris A. Kennedy, elected for Edmonton East, Alta. Apr. 25, James Lester Douglas, elected for Queens, P.E.I.

**Honorary Aides-de-Camp, 1937.**—His Excellency the Governor General has been pleased to make the following appointments, *viz.*: Nov. 13, Lieut.-Col. A. E. Nash, M.C., the Governor General's Horse Guards. 1938.—Apr. 1, Lieut.-Col. P. Flynn, Royal 22e Regiment, *vice* Lieut.-Col. G. E. A. Dupuis, M.C. Apr. 5, Lieut.-Col. W. G. H. Wrytele, M.C., V.D., the Governor General's Foot Guards, *vice* Lieut.-Col. G. G. Chrysler, M.C., V.D.

**Official Appointments, 1937.**—June 24, Hon. John Alexander Mathieson, Chief Justice of Prince Edward Island, appointed Administrator of the Government of the Province of Prince Edward Island from Apr. 10 to June 10, 1937, to continue as Administrator up to and including June 17, 1937. Sir Frederick Banting, Banting Institute, Department of Medical Research, University of Toronto; Professor E. F. Burton, Head of the Department of Physics, University of Toronto; W. R. Campbell, General Manager, Ford Motor Company of Canada, Ltd.; Professor R. H. Clark, Head of the Department of Chemistry, University of British Columbia; Professor E. P. Fetherstonhaugh, Dean of the Faculty of Engineering and Architecture, University of Manitoba: to be Members of the National Research Council for a

\* This list is in continuance of that at pp. 1095-1105 of the 1937 Year Book.

term of three years expiring Mar. 31, 1940, and R. J. Tallon, Secretary-Treasurer, Trades and Labour Congress of Canada, to be a Member of the said Council for a term of two years expiring Mar. 31, 1939. July 21, Constable David Charles Slinn: to be Mining Recorder, Agent of Dominion Lands, and Crown Timber Agent for the Great Bear Lake Mining District with headquarters at Cameron Bay, N.W.T., as from June 26, 1937. July 23, Hon. C. R. Mitchell, Chief Justice of the Trial Division of the Supreme Court of Alberta: to be Administrator of the Government of the Province of Alberta during the absence of the Lieutenant-Governor of the said Province from July 24, 1937, to Aug. 1, 1937. Aug. 11, Hon. James Emile Pierre Prendergast, Chief Justice of Manitoba: to be Administrator of the Government of the Province of Manitoba during the absence of the Lieutenant-Governor of the said Province from Aug. 14 to Sept. 13, 1937, both dates inclusive. Aug. 25, Lewis Warner Patmore, Esq., K.C., Prince Rupert, B.C.: to be one of the Canadian Members of the International Fisheries Commission under the Pacific Halibut Treaty in lieu of George J. Alexander, Esq., resigned. Sept. 22, Robert John Moffat, Esq., Bradwell, Sask.: to be a Director of the Canadian National Railways for a term of three years from Oct. 1, 1937. Oct. 20, Donald MacGillivray, Esq., Port Colborne, Ont.: to be a Member of the Buffalo and Fort Erie Public Bridge Authority, *vice* Hon. J. D. Chaplin, St. Catharines, Ont. Oct. 27, Nathan Louis Nathanson, Toronto, Ont., President, Famous Players Canadian Corporation Ltd.; Alan Butterworth Plaunt, Ottawa, Ont., Journalist; and Brigadier-General Victor Wentworth Odium, Vancouver, B.C., Broker: to be re-appointed as Governors of the Canadian Broadcasting Corporation for a term of three years from Nov. 2, 1937. Oct. 29, Hon. C. A. Dunning, Minister of Finance; Dr. W. C. Clark, Deputy Minister of Finance; Hon. F. R. Davis, Minister of Health, N.S.; E. H. Blois, Director of Old Age Pensions, N.S.; Hon. A. P. Paterson, President, Executive Council, N.B.; W. P. Jones, Director of Old Age Pensions, N.B.; Hon. Mark R. McGuigan, Minister of Education and Public Health, P.E.I.; Otto Campbell, Superintendent of Old Age Pensions, P.E.I.; Hon. W. Tremblay, Minister of Labour, Que.; J. R. Forest, President, Quebec Old Age Pensions Commission, Que.; Hon. Eric Cross, Minister of Public Welfare, Ont.; George Tattle, Vice-Chairman, Old Age Pensions Commission, Ont.; Hon. W. J. Major, Attorney-General, Man.; Major C. K. Newcombe, Chairman, Workmen's Compensation Board, Man.; Hon. Charles M. Dunn, Minister of Highways and Transportation, and in charge of the Old Age Pensions Act, Sask.; W. C. Mills, Commissioner, Old Age Pensions, Sask.; Hon. Solon Low, Provincial Treasurer, Alta.; Dr. V. W. Wright, Chairman, Workmen's Compensation Board, Alta.; Hon. George S. Pearson, Minister of Labour, B.C.; E. S. H. Winn, Chairman, Workmen's Compensation Board, B.C.: to be Members of the Inter-provincial Board pursuant to the Old Age Pensions Act in the place and stead of the members of the Interprovincial Board previously established. Nov. 15, Joseph Sirois, Esq., LL.D., Quebec, Que., Notary Public, Professor of Constitutional and Administrative Law at Laval University: to be a Member of the Commission on Dominion-Provincial Relations in the place of Hon. Mr. Justice Rinfret, resigned. Nov. 26, Gustave Lanctôt, Esq., K.C., D. Litt., LL.D., Ottawa, Ont.: to be Dominion Archivist. Dec. 9, David Livingstone McKeand, Esq., Secretary, Northwest Territories Council: to be a Member of the Geographic Board of Canada. 1938.—Jan. 29, Hon. Horace Harvey, Chief Justice of Alberta: to be Administrator of the Government of the said Province during the absence of the Lieutenant-Governor, from Jan. 29 to Feb. 8, 1938. Feb. 10, George Spence: to be Director of Rehabilitation, effective Mar. 1, 1938; Oswald Freer: to be Superintendent of Land Utilization, effective Jan. 1, 1938; John Vallance: to be Superintendent of Water



Development, *vice* Senior Rehabilitation Officer, effective Feb. 1, 1938; the above to be temporary appointments under the Prairie Farm Rehabilitation Act with headquarters at Regina, Sask. Feb. 26, Gordon Murchison, Esq.: to be Director of Soldier Settlement, from and after Mar. 1, 1938. Mar. 4, Charles H. Read, Esq., Amherst, N.S.: to be a Director of the Canadian National Railway Company in succession to Donald Hugh McDougall for a term to expire on Sept. 30, 1940. Mar. 11, Acting Deputy Commissioner Stuart Taylor Wood: to be Commissioner of the R.C.M.P. from Mar. 6, 1938, *vice* Major-General Sir James H. MacBrien, deceased. Mar. 18, D. D. Ryan, Esq., B.C.L., Junior Departmental Solicitor, Department of the Secretary of State: to be Registrar to exercise the powers conferred, and perform the duties imposed by "The Unfair Competition Act, 1932", effective Apr. 1, 1938. Mar. 23, Col. Stuart Taylor Wood, Commissioner of the R.C.M.P.: to be a Member of the Northwest Territories Council, *vice* Major-General Sir James H. MacBrien, K.C.B., C.M.G., D.S.O., deceased. Mar. 29, Aimé Boucher, Esq., Notary, Pierreville, Yamaska, Que.: to be a member of the Canadian Farm Loan Board for a term of five years from Mar. 25, 1938, *vice* Charles Duquette, deceased. Mar. 30, John MacIntosh, Esq.: to be one of the Harbour Commissioners of the Harbour of Belleville, *vice* Harry C. Earle, Esq., deceased. Mar. 31, Oscar Douglas Skelton, M.A., Ph.D., LL.D., Under-Secretary of State for External Affairs: to be a Member of the Northwest Territories Council. Col. Stuart Taylor Wood, Commissioner of the R.C.M.P.: to be an *ex officio* member of the Advisory Board on Wild Life Protection, *vice* Sir James MacBrien, deceased. May 2, Alexander Johnston, Esq., C.M.G.; Duncan K. MacTavish, Esq., K.C.; and J. A. Ewart, Esq., Ottawa, Ont.: to be members of the Federal District Commission. Col. William Charles Henry Wood, Quebec, Que.; George MacKinnon Wrong, Esq., LL.D., Toronto, Ont.; James Francis Kenney, Esq., M.A., Ph.D., Ottawa, Ont.; Lieut.-Col. Oscar Gilbert, Quebec, Que.; to be Members of the National Battlefields Commission. May 13, Dr. H. E. Bigelow, Professor of Chemistry, Mount Allison University, Sackville, N.B.; Dr. J. B. Collip, Professor of Biochemistry, McGill University, Montreal, Que.; Dean C. J. MacKenzie, Department of Civil Engineering, University of Saskatchewan, Saskatoon, Sask.; M. l'abbé A. Vachon, Dean, Faculty of Science, Laval University, Quebec, Que.: to be Members of the National Research Council for a term of three years, as provided by the Research Council Act, and expiring Mar. 31, 1941. May 24, Hon. William Melville Martin, Acting Chief Justice of Saskatchewan: to be Administrator of the Government of the Province of Saskatchewan, during the absence of the Lieutenant-Governor, from May 24, to June 30, 1938.

**Judicial Appointments, 1937.**—Aug. 25, Wilfrid D. Roach, Esq., K.C., Windsor, Ont.: to be a Judge of the High Court of Justice for Ontario. Maynard B. Archibald, K.C., Esq., Halifax, N.S.: to be a Puisne Judge of the Supreme Court of Nova Scotia. Nov. 23, Ewan A. McPherson, Esq., K.C., Portage la Prairie, Man.: to be Chief Justice of His Majesty's Court of King's Bench for Manitoba. Nov. 26, Dr. James Moore Morrow, Fort Smith, N.W.T.: to be Stipendiary Magistrate for the Northwest Territories, pursuant to the Northwest Territories Act. Nov. 30, Alphonse Decary, Esq., K.C., Montreal, Que.; Alfred Savard, Esq., K.C., Quebec, Que.; Garon Prattie, Esq., K.C., Quebec, Que.: to be Puisne Judges of the Superior Court in and for the Province of Quebec. Paul Mercier, Esq., K.C., Montreal, Que., Member of Parliament for the Electoral District of St. Henry (Montreal) to be Senior Judge (doyen) of the Circuit Court of the District of Montreal, Que. Dec. 10, D. Edgar Shaw, Esq., K.C., Charlottetown, P.E.I.: to be

Judge of the County Court for the county of Prince in the said province. 1938.—Jan. 19, Kenneth M. Martin, Esq., K.C.: to be Judge of the Juvenile Court of the City of Charlottetown, P.E.I. His Honour D. Edgar Shaw, Judge of the County Court of Prince County, P.E.I.: to be Judge of the Juvenile Court of the Town of Summerside, P.E.I. Jan. 25, George A. Urquhart, Esq., K.C., Toronto, Ont.: to be a Judge of the High Court of Justice for Ontario. J. M. Godfrey, Esq., K.C., Toronto, Ont.: to be a Judge of the High Court of Justice for Ontario. E. F. Lazier, Esq., K.C., Hamilton, Ont.: to be Judge of the County Court for the County of Wentworth in the Province of Ontario and a local Judge of the High Court of Justice for Ontario. William F. Schwenger, Esq., K.C., Hamilton, Ont.: to be Junior Judge of the County Court for the County of Wentworth in the Province of Ontario and a Local Judge of the High Court of Justice for Ontario. Jan. 26, Marshall A. Paquet, a Justice of the Peace for King's County, P.E.I.: to be Judge of the Juvenile Court for the Town of Souris in the said Province. Jan. 29, Cornelius H. O'Halloran, Esq., K.C., Victoria, B.C.: to be a Puisne Judge of the Court of Appeal for the Province of British Columbia. Feb. 15, David Whiteside, Esq., K.C., New Westminster, B.C.: to be Judge of the County Court for the County of Westminster in the said province and also a Local Judge of the Supreme Court of British Columbia. May 2, John Gordon Gillanders, Esq., K.C., London, Ont.: to be a Justice of the Court of Appeal for Ontario and *ex officio* a Judge of the High Court of Justice for Ontario. M. A. Miller, Esq., K.C., Guelph, Ont.: to be Judge of the County Court for the County of Lambton, Ont., and also a Local Judge of the High Court of Justice for Ontario during his tenure of the said office. Egerton Lovering, Esq., K.C., Toronto, Ont.: to be Seventh Junior Judge of the County Court of the County of York, Ont.; and also a Local Judge of the High Court of Justice for Ontario so long as he shall hold the said office of Judge. June 1, Earle C. Popham, Esq., K.C., Kenora, Ont., to be Judge of the District Court of the Provisional Judicial District of Kenora, Ont., and also a Local Judge of the High Court of Justice for Ontario during his tenure of the said office, with effect on and after June 1, 1938. Alexander J. McComber, Esq., K.C., Port Arthur, Ont.: to be Judge of the District Court of the Provisional Judicial District of Thunder Bay, Ont., and also a Local Judge of the High Court of Justice for Ontario during his tenure of the said office, with effect on and after June 1, 1938. Arthur H. Dowler, Esq., K.C., Fort William, Ont.: to be Junior Judge of the District Court of the Provisional Judicial District of Thunder Bay, Ont., and also a Local Judge of the High Court of Justice for Ontario during his tenure of the said office, to take effect on and after June 1, 1938.

**Commissioners, 1937.**—July 15, Robert Bouchard, Esq., Barrister, Sherbrooke, Que.: to be a Commissioner under Part I of the Inquiries Act, to investigate charges of political partisanship against Government employees in the Province of Quebec. July 29, John Allan Langdon McIntyre, Esq., Barrister, of the firm of Butler, McIntyre and Butler, Murray Street, Hobart, Tasmania: to be a Commissioner to administer oaths and to take and receive affidavits, declarations and affirmations in Tasmania for use in the Supreme and Exchequer Courts of Canada. Aug. 12, James A. Langley, Esq., Canadian Trade Commissioner at Rotterdam, Netherlands: to be a Commissioner to administer oaths and to take and receive affidavits, declarations, and affirmations in the Netherlands for use in the Supreme and Exchequer Courts of Canada. Aug. 14, Hon. Newton W. Rowell, LL.D., Chief Justice of Ontario; Hon. Thibaudeau Rinfret, Justice of the Supreme Court of Canada; John W. Dafoe, Esq., LL.D., Winnipeg, Man.; Robert Alexander MacKay, Esq., Ph.D., Professor of Government, Dalhousie University, Halifax,

N.S.; and Henry Forbes Angus, Esq., M.A., B.C.L., Professor of Economics, University of British Columbia, Vancouver, B.C.: to be Commissioners, under Part I of the Inquiries Act, to investigate the economic and financial basis of Confederation and of the distribution of legislative powers in the light of the economic and social developments of the past seventy years. Hon. Newton W. Rowell, LL.D., Chief Justice of Ontario, to be Chairman of the said Commission. Aug. 25, Andrew Meikle, Esq., Field Supervisor, Soldier Settlement, Saskatoon, Sask.; Harry Charles Washington, Esq., Field Supervisor, Soldier Settlement, Saskatoon, Sask.: to be Commissioners to take affidavits, oaths, statutory declarations, or solemn affirmations required to be taken or made for the purposes of the Soldier Settlement Act. Sept. 8, His Honour Albert Constantineau, Judge of the County Court for the Counties of Prescott and Russell, Ont.: to be a Commissioner pursuant to the Inquiries Act, to inquire into the dispute between the management of the Quebec Central Railway and the employees. Sept. 22, The Hon. Louis Arthur Audette, former Judge of the Exchequer Court of Canada; Ephraim Herbert Coleman, Esq., K.C., LL.D., Under-Secretary of State; and Oscar Coderre, Esq., LL.B., Chief of the Naturalization Branch, Dept. of the Secretary of State, all of the City of Ottawa, Ont.: to be a Commission under the provisions of the Naturalization and Inquiries Acts to inquire into and report upon all cases referred to the Commission in which may be considered the revocation of naturalization certificates. The Hon. Mr. Audette to be Chairman and Presiding Officer of the Commission. Jacques Casgrain, Esq., Barrister, of the City of Quebec, Que.: to be a Commissioner pursuant to Part I of the Inquiries Act to investigate charges of political partisanship against Government employees in the Province of Quebec. Oct. 6, Lester S. Glass, Esq., Canadian Trade Commissioner at Rio de Janeiro, Brazil: to be a Commissioner to administer oaths and to take and receive affidavits, declarations and affirmations in Brazil for use in the Supreme and Exchequer Courts of Canada. Oct. 20, J. H. English, Esq., Canadian Trade Commissioner at London, Eng.: to be a Commissioner to administer oaths and to take and receive affidavits, declarations and affirmations in the United Kingdom for use in the Supreme and Exchequer Courts of Canada. Oct. 27, C. M. Croft, Esq., Canadian Commercial Secretary, Tokyo, Japan: to be a Commissioner to administer oaths and to take and receive affidavits, declarations and affirmations in Japan for use in the Supreme and Exchequer Courts of Canada. Dec. 1, A. H. H. Des Barres, Esq., Stipendiary Magistrate, Guysborough, N.S.: to be a Commissioner to investigate whether Mr. Otto A. Munroe of Yankee Harbour, Guysborough County, N.S., is entitled to fishing bounty in connection with his fishing operations in the year 1936 and whether the statements made in his claim for the year are correct. Feb. 28, Ludger Langlois, Advocate, Quebec, Que.: to be a Commissioner pursuant to Part I of the Inquiries Act, to investigate such charges of political partisanship against Government employees in the Province of Quebec as may be referred to him. May 11, Hon. Archer Martin, Chief Justice of British Columbia: to be a Commissioner, under Sec. 128 of the British North America Act, to administer the oath of allegiance to Robert Wellington Mayhew, Esq., Member of the House of Commons for the electoral district of Victoria, B.C.

**Day of General Thanksgiving.**—Monday, Oct. 11, 1937, was appointed by proclamation as a “day of general thanksgiving to Almighty God for the bountiful harvests and other blessings with which Canada has been favoured”.

## APPENDIX.

## External Trade of Canada in the fiscal year 1937-38.

Preliminary figures of the external trade of Canada for the fiscal year ended Mar. 31, 1938, show a grand total trade of \$1,883,891,122, as compared with a figure of \$1,746,015,786 in preceding year, or an increase of \$137,875,336. The increase in the imports was \$127,194,352. Domestic exports increased by \$9,046,703 and foreign exports by \$1,530,281. Figures by industrial groups are given in the following table, where the figures of imports and exports may be compared with the totals given for previous years in the tables on pp. 528 and 536-537 of this volume.

## Imports and Exports of Canada, fiscal year ended Mar. 31, 1938.

| Industrial Group.                             | Imports.             |
|---|----------------------|
|   | \$                   |
| Agricultural and vegetable products.....      | 146,335,406          |
| Animals and animal products.....              | 30,899,705           |
| Fibres, textiles, and textile products.....   | 108,632,003          |
| Wood, wood products, and paper.....           | 34,221,181           |
| Iron and its products.....                    | 209,236,711          |
| Non-ferrous metals and their products.....    | 47,063,872           |
| Non-metallic minerals and their products..... | 136,662,502          |
| Chemicals and allied products.....            | 36,890,149           |
| Miscellaneous commodities.....                | 49,328,100           |
| <b>Total Imports.....</b>                     | <b>799,069,818</b>   |
| Total, Dutiable Imports.....                  | 484,165,772          |
| Total, Free Imports.....                      | 364,904,146          |
| Duty Collected.....                           | 103,874,422          |
|   |                      |
| Industrial Group.                             | Exports.             |
|   | \$                   |
| Agricultural and vegetable products.....      | 235,324,412          |
| Animals and animal products.....              | 136,112,957          |
| Fibres, textiles, and textile products.....   | 14,225,183           |
| Wood, wood products, and paper.....           | 253,434,860          |
| Iron and its products.....                    | 69,744,157           |
| Non-ferrous metals and their products.....    | 292,452,554          |
| Non-metallic minerals and their products..... | 29,342,764           |
| Chemicals and allied products.....            | 20,920,267           |
| Miscellaneous commodities.....                | 18,565,455           |
| <b>Total, Domestic Exports.....</b>           | <b>1,070,228,609</b> |
| Total, Foreign Exports.....                   | 14,592,595           |
| <b>Total Exports.....</b>                     | <b>1,084,821,204</b> |
| <b>Grand Total, External Trade.....</b>       | <b>1,883,891,122</b> |

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